



# ANNUAL REPORT 2021-2022



সমানো মন্ত্র: সমিতি: সমান

# University of North Bengal

Raja Rammohunpur  
Dist - Darjeeling  
PIN - 734013



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# ANNUAL REPORT

2021 – 2022



## UNIVERSITY OF NORTH BENGAL

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*“The North Bengal University though situated far away from Calcutta is nevertheless equally dear to the people of the State. It has been especially designed to serve the needs of North Bengal and, therefore, has a vital role to play in the realization of our dreams related to national integration and economic development with social justice. The knowledge disseminated from this University should not be an idle exercise in any hollow intellectualism; it should directly contribute towards solving real economic and social problems that still plague the society and gratify its spiritual needs. The University has direct responsibility in ensuring that the capability it builds up by promoting the development of human resources is ultimately utilized for satisfying the aspirations and desires which are generated. I must congratulate the University for its splendid track record of service in this respect.”*

- Prof. S Nurul Hasan

His Excellency the Governor of West Bengal

&

Hon’ble Chancellor, North Bengal University  
(Convocation speech, 20<sup>th</sup> January, 1987, NBU)



## FOREWORD

The University of North Bengal was established by an Act of the Legislature of West Bengal in 1962 with the mission “to encourage and provide for instruction for teaching, training and research in various branches of learning and course of study; to promote advancement and dissemination of knowledge and learning and to extend higher education to meet the growing needs of society.”



Located in the lap of Himalayas, the University is providing a congenial space of higher education, in particular to the economically backward students, in the form of instruction, teaching, training and research in various branches and to meet the growing needs of this region in order to foster education on the basis of democratic values and ethos. With the passage of time the University has grown steadily, and today it is offering quality education and research through thirty-four Departments. In addition, fifty numbers of affiliated colleges in six districts of the state are extending undergraduate studies to more than one lakh students. Over the time, the University has become the highest temple of learning for the students of this region who are aspiring higher education in the different fields of science and humanities.

Like 2020 – 2021, this year too had faced threats from deadly COVID 19 and the teaching-learning process got impacted. However, despite the hit of pandemic, the University had continued knowledge dissemination through virtual as well as physical mode in compliance with government advisory issued time to time.

I am glad to present the Annual Report of the University of North Bengal for the year 2021 – 2022. This issue of the report portrays achievements of the University in the field of education and research along with services extended by the University in order to maintain conducive environment for the quality education.

I take this opportunity to thank the Office of the Development Officer for the efforts they put in to publish the Annual Report 2021 – 2022 in record time. I would also like to appreciate the efforts of the faculty members, officials, staff, students and researchers of the University for their continued effort to bring glory to the University.

I hope the readers will find the Report both informative and useful.

Best Regards,

A handwritten signature in blue ink, which appears to read "Rathin Bandopadhyay".

Prof. Rathin Bandopadhyay  
Vice-Chancellor



## **From the Desk of the Development Officer**

In modern days the role of University is not limited to dissemination of knowledge; rather it serves as a hub for conducting research besides being a place for socio-economic and cultural development of the region. In all historical epochs the university better than other any social institutions has accumulated and disseminated scientific knowledge, without which a consistent development of society would have been impossible.

The University of North Bengal, being the oldest University in the northern part of West Bengal, is catering the need of higher education for the last six decades. Contributions made over the years has not only brought glory to the University but also contributed for socio-cultural and economic growth of the region.

While the Annual Report maintains records of activities of a particular year, it also helps to assess the growth or shortfall with respect to previous years so that remedial measures may be taken for growth of the University in long run.

The Annual Report 2021 – 2022 showcases major important happenings in the financial year including admission, examination, research and publication. It also portrays services and facilities extended by the University and financial statement of the year.

Based on the information received from the various Departments of the University, my office has tried to capture the academic and research outcomes of the University as well as administrative activities carried out during the year. I extend my sincere thanks to the Heads of all Academic and Administrative Departments of the University for their support. I am also thankful to the Hon'ble Vice-Chancellor for his support and encouragement to complete this report in record time.

Finally, I am thankful to my office colleagues for their tireless efforts for collecting information. Although utmost care has been taken during compilation and editing works, I would like to apologize in advance, if some errors still exist.

I hope that readers would find the Annual Report 2021 – 2022 is informative and would welcome suggestions from the University stakeholders for further improvement of the future reports.

Palash Paul  
Development Officer





## **VICE-CHANCELLORS OF THE UNIVERSITY**

- |  |   |
|--|---|
| <b>1. Professor B.N. Dasgupta</b>          | <b>1<sup>st</sup> June, 1962 to 31<sup>st</sup> May, 1966</b>           |
| <b>2. Professor A. C. Roy</b>              | <b>1<sup>st</sup> June, 1966 to 31<sup>st</sup> May, 1970</b>           |
| <b>3. Professor P. C. Mukherjee</b>        | <b>1<sup>st</sup> June, 1970 to 7<sup>th</sup> November, 1974</b>       |
| <b>4. Professor A. Dutta</b>               | <b>8<sup>th</sup> Nov., 1974 to 18<sup>th</sup> April, 1977</b>         |
| <b>5. Professor P. K. Ghosh</b>            | <b>21<sup>st</sup> Nov., 1977 to 18<sup>th</sup> April, 1982</b>        |
| <b>6. Professor S. N. Sen (Acting)</b>     | <b>19<sup>th</sup> April, 1982 to 9<sup>th</sup> Sept., 1982</b>        |
| <b>7. Professor D. B. Dutta</b>            | <b>15<sup>th</sup> Sept., 1982 to 31<sup>st</sup> August, 1988</b>      |
| <b>8. Professor K.N. Chatterjee</b>        | <b>1<sup>st</sup> Sept., 1988 to 31<sup>st</sup> Dec., 1995</b>         |
| <b>9. Professor R. G. Mukherjee</b>        | <b>1<sup>st</sup> Jan., 1996 to 31<sup>st</sup> Dec., 1999</b>          |
| <b>10. Professor P. K. Saha</b>            | <b>1<sup>st</sup> Jan., 2000 to 31<sup>st</sup> Dec, 2007</b>           |
| <b>11. Professor A. Basumajumdar</b>       | <b>1<sup>st</sup> Jan., 2008 to 31<sup>st</sup> March, 2012</b>         |
| <b>12. Professor Samir Kumar Das</b>       | <b>1<sup>st</sup> April, 2012 to 10<sup>th</sup> February, 2014</b>     |
| <b>13. Professor Somnath Ghosh</b>         | <b>11<sup>th</sup> February, 2014 to 10<sup>th</sup> February, 2018</b> |
| <b>14. Professor Subires Bhattacharyya</b> | <b>22<sup>nd</sup> February, 2018 continue..</b>                        |



## ABBREVIATIONS

ACL	Arts, Commerce and Law
AICTE	All India Council for Technical Education
API	Academic Performance Index
AQAR	Annual Quality Assurance Report
BA	Bachelor of Arts
B. Pharm	Bachelor of Pharmacy
B. Sc.	Bachelor of Science
B. Tech	Bachelor of Technology
BET	Biotechnology Eligibility Test
BLIS	Bachelor of Library and Information Science
BSR	Basic Scientific Research
CACE	Centre for Adult Continuing Education
CAS	Career Advancement Scheme
CBCS	Choice Based Credit System
CIRM	Centre for Information & Resource Management
COVID	Coronavirus Disease
CRSI	Chemical Research Society of India
CSIR	Council of Scientific and Industrial Research
DBT	Department of Biotechnology
DRDO	Defence Research and Development Organisation
DRS	Departmental Research Support
DST	Department of Science & Technology
DSTBT	Department of Science & Technology and Biotechnology
FIST	Fund for Improvement of S&T Infrastructure
FRSC	Fellow of the Royal Society of Chemistry
Gen	General Category
GIS	Geographic information System
GoI	Government of India
GoWB	Government of West Bengal
HRDC	Human Resource Development Centre
ICAR	Indian Council for Agricultural Research

ICMR	Indian Council of Medical Research
ICPR	Indian Council of Philosophical Research
IEC	Information, Education and Communication
IIIT	Indian Institute of Information Technology
IIT	Indian Institute of Technology
INSPIRE	Innovation in Science Pursuit for Inspired Research
IQAC	Internal Quality Assurance Cell
ISBN	International Standard Book Number
ISSN	International Standard Serial Number
JRF	Junior Research Fellowship
LLB	Bachelor of Laws
LLM	Master of Laws
M. Com	Master of Commerce
M. Pharm	Master of Pharmacy
M. Tech	Master of Technology
MA	Master of Arts
MANF	Maulana Azad National Fellowship for Minority Students
MBA	Master of Business Administration
MCA	Master of Computer Applications
MLIS	Master of Library and Information Science
MPhil	Master of Philosophy
MSc	Master of Science
NAAC	National Assessment and Accreditation Council
NBHM	National Board for Higher Mathematics
NBU	University of North Bengal
NET	National Eligibility Test
NFED	National Foundation for Entrepreneurship Development
NFOBC	National Fellowship for Other Backward Classes
NFSC	National Fellowship for Scheduled Caste
NIRF	National Institute Ranking Framework
NSS	National Service Scheme
NTRF	National Tea Research Foundation
OBC	Other Backward Classes

OP	Orientation Program
PG	Post Graduate
PGDBI	Post Graduate Diploma in Bioinformatics
PGDTM	Post Graduate Diploma in Tea Management
PhD	Doctor of Philosophy
PI	Principal Investigator
PURSE	Promotion of University Research and Scientific Excellence
RC	Refresher Course
RGNF	Rajiv Gandhi National Fellowship
RUSA	Rashtriya Uchcharat Shiksha Abhiyan
SACT	State Aided College Teacher
SAP	Special Assistance Program
SC	Scheduled Caste
SEM	Scanning Electron Microscope
SERB	Science & Engineering Research Board
SRF	Senior Research Fellowship
ST	Scheduled Tribe
SVMCM	Swami Vivekananda Merit-cum-Means Scholarship
UG	Under Graduate
UGC	University Grants Commission
UPSC	Union Public Service Commission
USIC	University Science Instrumentation Centre
WBCSC	West Bengal College Service Commission
WBPCB	West Bengal Pollution Control Board
WBPSA	West Bengal Public Service Commission



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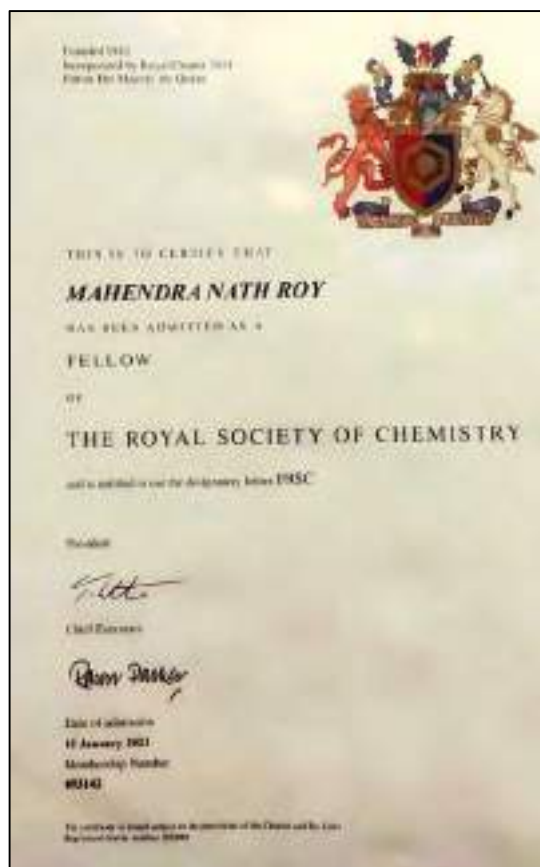
# **HIGHLIGHTS**



## NOTABLE AWARDS



Prof. Ghanshyam Nepal, Department of Nepali receiving prestigious Siksha Ratna Award 2021 from the Govt. of West Bengal



*Prof. Mahendra Nath Roy, Dept. of Chemistry has been admitted as a Fellow of the Royal Society of Chemistry*



## GLIMPSES OF COLLECTIONS AT AKMH MUSEUM



Brahma, Black Stone (C. 12th Century A.D.)



Bala-Gopala, Black Stone (C. 11th Century A.D.)





Ramavataara (Terracotta object)



Copper Coin of Dam ( $\frac{1}{2}$  Tanka), Mughal Empire

King: Jalal-ud-din-Muhammad-Akbar

A.H. - 963-1074 / 1556-1605 A.D.



Decorative Brick (Terracotta object)



Sword (Cavalry)



Silver Coin of Cooch Behar  
King Nara Narayan, 1555-  
1587 A.D.



Saraja



## EXECUTIVE SUMMARY OF THE REPORT

Established in the year 1962, the University of North Bengal is imparting higher education and research to the people of the northern part of West Bengal. In the last six decades, the University is providing quality yet affordable education for inclusive intellectual, economic and socio-cultural growth of the region. Realizing the growing need, the University has made judicious expansion in advanced, non-conventional, applied and job-oriented fields as well as new campus at Jalpaiguri for keeping the quality of education at par with global standards.

Presently the University has thirty-four academic Departments and six research Centers covering all the major courses in Science, Arts, Commerce, Law and Management. A total of seventy one programmes are being run by the University presently covering UG, PG, Ph. D and Diploma courses. The University also extends nine courses through Open and Distance Learning mode. Fifty numbers of colleges from six different districts of North Bengal are presently affiliated under the University and offer almost all undergraduate programmes in science, humanities, commerce and law.

Like the previous year, the financial year 2021 – 22 has seen numbers of COVID 19 waves again impacting the entire education sector in India. However, learning from previous year and prompt in adopting new techniques of knowledge dissemination has enabled the University to continue education and research. The major events of the Annual Report 2021 – 2022 are highlighted below –

- A total of 1758 number of students have taken admission in various Departments of the university in PG level in 2021 - 22, including 485 number of students in Science and 1273 number of students in Arts, Commerce and Law (ACL)
- The total number of students studying in both the semesters of PG is 3152 with male to female ratio of about 37:63. The said ratio for Science and ACL are 46:54 and 33:67 respectively
- Fifty numbers of colleges from six different districts of North Bengal are presently affiliated under the University and offer forty-nine courses.
- The strength of existing students in the affiliated colleges is 1,10,837; 47,254 in first year, 37,319 in second year and 32,459 in the third year. A growth of 5.6% is observed in total number of students with respect to previous year.
- 55 Nos. of Research Scholars have been awarded PhD Degree by the University
- A total of 332 students have enrolled for Ph. D. programs in 27 Departments of the University
- As per available records, 154 students of the University have got placed in various organisations/companies
- Teachers of the University have presented papers and/or delivered invited lectures and / or participated in conference/seminar/webinar in 344 occasions.
- Research scholars have participated in conference/seminar/webinar in 195 occasions

- 618 numbers of research publications in journals/books have been made by the University in 2021 – 22, out of that the Department of Chemistry has alone published 128 research articles
- 61 numbers of research projects have been undertaken by various Departments of the University
- Prof. Ghanshyam Nepal, Department of Nepali has received prestigious Siksha Ratna Award 2021 from the Department of Higher Education, Govt. of West Bengal
- Prof. Mahendra Nath Roy, Dept. of Chemistry has been admitted as a Fellow of the Royal Society of Chemistry
- Department of Lifelong Learning and Extensions has conducted 5 numbers of extension activities wherein a total of about 400 persons participated
- The Centre for Floriculture & Agri-Business Management (COFAM) has provided training to seven entrepreneurs on innovative and non-conventional farming practices
- UGC-HRD, NBU has conducted 4 Nos. of Faculty Induction Programmes, 6 Nos. of Refresher Courses and 4 Nos. of Short-term Courses. A 627 number of participants got benefitted by such programmes.
- CIRM has provided seamless IT, networking and related technical services to continue virtual teaching-learning process
- The Engineering Branch has handled a total of 19 construction/face-lifting projects amounting about Rs. 26.68 crore
- 55 numbers of Research Fellows have joined fellowship through the Office of the Development Officer
- The Health Centre has provided OPD services to 1504 No. of patients and also 446 No. of patients have availed clinical examination services
- The university through Sports Board has participated in 8 Nos. of Inter-University sports events
- The University has started Radio Frequency Identification (RFID) system for issuance and traceability of resources
- 15 Nos. of teachers and 4 Nos. of Officers have been recruited by the University in this year while 7 Nos. of Teachers and 1 No. of Officer got retired. 17 Nos. of Non-teaching staff of the University have also retired in this period
- The Estate Division Branch, Sanitary Section and Watch & Ward have served the University for maintaining cleanliness, hygiene and safety & security of the campus

## **CHAPTER – I**

# **ADMINISTRATIVE PROFILE**



## **A. General Information**

### **About the University**

The University of North Bengal was established by an Act of the Legislature of West Bengal in 1962 with the mission “*to encourage and provide for instruction for teaching, training and research in various branches of learning and course of study; to promote advancement and dissemination of knowledge and learning and to extend higher education to meet the growing needs of society.*”

Situated at the foothills of high Himalaya and in close proximity of vast plains, the University, since its inception in 1962, has been fulfilling the objectives of imparting higher education and research to the people of this economically backward area of the country. With the global advancement and requirements in the arena of higher education and research, the University has shouldered the responsibility of dissemination of knowledge by judicious expansion of its role in advanced, non-conventional, applied and job-oriented fields keeping the quality of education at par with global standards at low cost.

To extend the University services to the people for easy access to higher education, the University has three campuses; main campus, Jalpaiguri campus and Kolkata campus. The main campus of the University at Raja Rammohunpur covers an area of nearly 315.99 acres with lush green nature all around the administrative and academic Departments. The pollution free atmosphere in addition to the state-of-the-art facilities in the University provide one of the best educational infrastructure in this part of the country. Fascinating glimpse of the Kanchenjunga peak from the campus along with in-campus tea gardens and forest are treat to the eyes of the visitors.

The University is the house for thirty-four academic Departments and six research Centers covering all the major courses in Science, Arts, Commerce, Law and Management. A total of ninety-four courses are being offered presently by the University covering UG, PG, M. Phil, Ph. D and Diploma courses. Fifty numbers of colleges from six different districts of North Bengal are presently affiliated under the University and offer forty-nine courses. The University also extends nine courses through Open and Distance Learning mode.

In order to widen the dimension and scope of Higher Education and Research through modern studies and to extend easier access to higher education by the people of Jalpaiguri region, the Jalpaiguri campus of the University was opened in 2013. The Jalpaiguri campus of the University has a sprawling campus spread over 36 acres of land at Jalpaiguri. At present there are three buildings at the Jalpaiguri campus i.e. Science building, Arts building and Technology building. There are four Departments offering post graduate program in Bengali, English, Sanskrit and Geography & Applied Geography.

The University has also a campus in Salt Lake, Kolkata having G-4 buildings and it is the principal liaison office of the Vice-Chancellor. The Kolkata campus has arrangement of Meetings Rooms, Interview Rooms and Conference Rooms along Guest House facilities. In view of the fact that the location of North Bengal University is nearly 600 km off Kolkata, this Guest House cum Administrative campus immensely helps the stakeholders of the



University. As a part of fraternal support services, this campus also supports the newly upcoming universities by lending some parts of the infrastructures of Kolkata office in the interest of higher education of West Bengal in general and North Bengal Region in particular.

## **Distinctiveness**

In the year of inception, University of North Bengal was the only University which affiliated all the colleges in the northern districts of West Bengal, including Jalpaiguri Engineering College and North Bengal Medical College. The colleges of the state of Sikkim were also affiliated to the University of North Bengal. With time, the number of affiliated colleges were gradually reduced with establishment of more universities in North Bengal and Sikkim.

Even though the spread of the University has been shrunk over time, the University still retained its distinctiveness in accommodating the ethno-cultural and geospatial uniqueness of the region. The University has the highest number of Scheduled Tribe (ST) students in the region drawn both from the hills and the plains reflecting wide ethno-cultural diversity. This diversity is encouraged and nurtured through one of a kind Museum, the A.K.M.H. Museum which had a humble beginning in 1965, and can now legitimately take pride in its substantial collection of stone and metal images, terracotta works, coins, manuscripts etc. Major portion of such collections belong to the period between 8<sup>th</sup> Century and 12<sup>th</sup> Century through even older pieces are also in the possession of the Museum. The Museum at present has emerged as one of the favored destinations of scholars, researchers and students, even from foreign countries.

Apart from ethno-cultural distinctiveness, few unique courses are also run by the University for preservation and promotion of regional resources. The Centre for Studies in Local Languages and Cultures of the University has made significant service to the promotion and preservation of cultural heritage of the region. The geospatial uniqueness is captured through the Department of Tea Science offering M. Sc. in Tea Science in collaboration with the Tea Board of India. Darjeeling is globally famous for tea and this Department is the only of its kind in India. The location of this University is in a region which shares borders with Bangladesh, Bhutan and Nepal, and China is not distant. Keeping this geostrategic aspect in attention the Center for Himalayan Studies undertakes research in the eastern Himalayan region and offers programs in Strategic Studies.

## **Vision and Mission**

### **Vision**

- To encourage and provide a congenial space of higher education, in particular to the socially and economically backward students, in the form of instruction, teaching, training and research in various branches of knowledge and to meet the growing needs of this region as the highest temple of learning.
- To commit to foster education on the basis of democratic values and ethos.

- With the passage of time along with its enriched capacity structure as a competitive University of national repute, University of North Bengal envisions a global centered education system with a commitment to be a part of knowledge society and to provide quality based education to all.

### **Mission**

- To establish a large, well-resourced vibrant multi-disciplinary teaching and research institutions by way of collaboration of teachers, research scholars, students, academic administrators and employees.
- To enrich a strong educational communities and to play a catalytic role to provide high quality education in this disadvantageous geography.
- The University envisages a broad based liberal post graduate education with rigorous specialization in chosen disciplines and to provide optimal learning environment students support services.
- To develop capable faculty and students who shall be energized and engaged so that they can become hearts of higher education in the region. The University is committed to make all its stakeholders as drivers of demand driven educational changes in national and international field.
- Finally, the University seeks to inculcate environmental awareness and sense of urgency of conservation of nature creating pollution free green campus by encouraging sustainable practices.

### **Core Values**

The core values of University of North Bengal permeate all that we do and say as an institution and we pledge ourselves to demonstrate them as we work with our learners, researchers & society. These core values define who **WE ARE** as **NBU** ensuring equity, access, transparency, non-discrimination in every field of higher education observing all democratic values.

**Wisdom** – Follow good judgment, clear understanding, and intellectual knowledge in order to achieve the best possible outcome in all situations.

**Excellence** – Commitment to the highest professional standards of quality, integrity, and performance in our programs, services, and operations. Encouraging and promoting excellence through innovation and creativity, rigour and pragmatism is our way to move forward.

**A**ccountability – Accept responsibility for achievement of common goals and objectives of learners through data driven decision-making, assessment of performance, and evaluation of results in a quest for continuous improvement.

**R**espect – Acknowledge the value and dignity of each member of the university family and fulfil the special need of them by supporting and building capacity for excellence that

- recognizes learners as the first priority and providing the environment & support to ensure their academic and personal success
- acknowledges, tangibly, all aspects of university enterprise including teaching and learning, research, scholarship, creative activity and public engagement
- produces and delivers academic programs of national and international caliber
- recognizes the dynamic opportunities presented by a multi-campus institution
- addresses need and opportunities of the people in the catchment area of the university

**E**fficiency - Demonstrate a passion and an excitement for work and believe to be efficient stewards of the resources entrusted to our care to ensure maximum benefit for the university community. We support efficient use of knowledge that is based on individual and collective intelligence, curiosity, ingenuity and creativity.

**N**ational Development - Contributing to national development has always been an implicit goal of the university by engaging the academic community on matters of national significance. The university believes in serving the cause of social integrity, gender equity, increasing access to higher education and cultivate an environment that seeks innovative solutions to challenges through exploration, analysis, and adaptation towards developing a culture of nation building.

**B**iodiversity – Take a lead in advancing solutions for a sustainable future and recognizing the close relationship between people and the Earth, acting in ways to live and work sustainably. We value our role in keeping the campus green and enhancing biodiversity in environmental management, creating new opportunities for wildlife in campus, wherever possible.

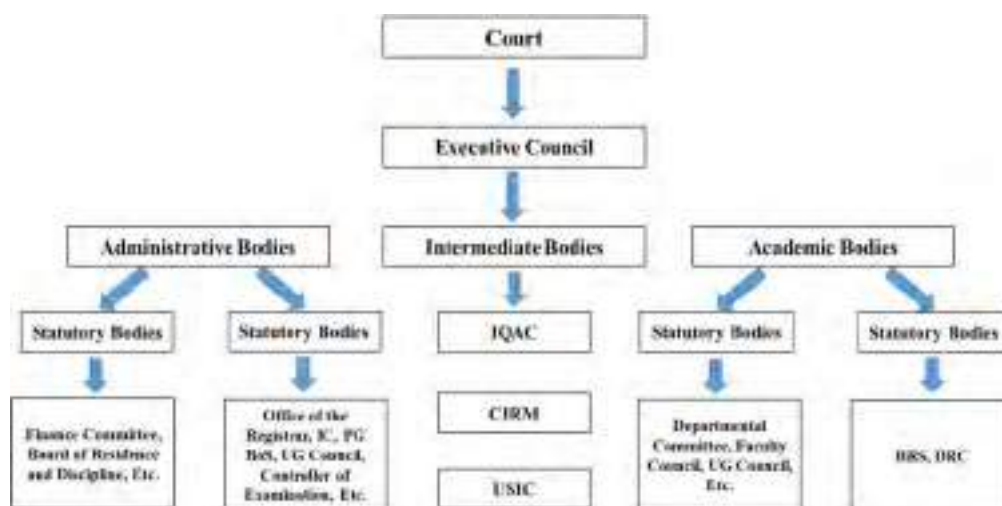
**U**se of Technology - Use emerging technologies that can be standardized and used to simplify the IT architecture and leverage resources to support & encourage most effective teaching-learning processes, to enhance communication ease, and to improve business performances, reduce costs, or prevent obsolescence.

## B. Governance

### Governance Organogram

The University has a participative administrative structure with decentralization and strong leadership geared to accomplish excellence in teaching and learning environment, research and extension, and social outreach. The participatory management structure is reflected in the composition of its statutory bodies, the University Court, Executive Council, Faculty Councils for Science and Arts, Commerce and Law, UG Council, Finance Committee, Departmental Committees, Library Committee, Board of Residence and Discipline, Board of Health and Students' Welfare, the Governing Bodies of affiliated colleges, all of which include representatives of concerned stakeholders. There are functional non-statutory bodies like Board of Research Studies (BRS), Departmental Research Committees (DRC), Internal Quality Assurance Cell (IQAC), and so on. All research proposals approved by the DRCs are registered through the Boards of Research Studies. Direct recruitment of teachers and Career Advancement Scheme (CAS) of teachers, officers and non-teaching staff are overseen by the IQAC, which also is responsible for undertaking quality initiatives for overall academic and administrative excellence of the University.

The statutory bodies are properly linked with one another. The Departmental Committees send members to UG and PG Boards of Studies which formulate curricula and recommend panels of paper setters, examiners, moderators, etc. All curricula formulated by the UG Boards of Studies and PG Boards of Studies are considered and approved by the respective Councils; UG and PG. The minutes and proceedings of the UG and PG Boards of Studies as well as the Boards of Research Studies are considered and approved by the Executive Council. All Diplomas, UG, PG, Ph. D., D. Lit. and D. Sc. are conferred by the highest body of the University, the Court.



***Governance Organogram***

Administrative decentralization and participatory management is incomplete without financial devolution. The finance rules of the University allow financial sanctioning power to all heads of the Department up to Rs. 10,000 per day, and with a committee resolution, Rs.

20,000 per day. All expenditure by a particular body must be according to the annual budgetary allocation, which is formulated on the basis of budget proposals through budget meeting duly approved by the Executive Council and the Court. The annual accounts are audited both internally and by the external statutory audit bodies.

Various bodies and facilities cater to the needs of the University community, teachers, officers, staff, and other stakeholders. There are the University's Sports Board, Health Centre, Watch and Ward Office, Office of the Chief Engineer, Estate Office, and so on, to fulfil various responsibilities towards and social needs of the stakeholders. All these operate following rules framed by the Executive Council and under the direct command and supervision of the Vice-Chancellor.

The Establishment Section of the Office of the Registrar manages students' registration data and facilitates scholarships. The fellowships of the Research Scholars as well as JRF to SRF promotion are dealt by the Office of the Development Officer. The Office of the Registrar is the nodal office of the University for all service records of the employees and the certifying authority for the members of the University community.

The Board of Residence supervises the records of the hostel inmates. Other facilities like ICC, Anti-Ragging Cell and Counselling Centre cater to the security and wellbeing of the learners.

## **Chancellor**

As per Section 8(1) of the North Bengal University Act, the Governor, by virtue of his office, is the Chancellor of the University. Shri Jagdeep Dhankhar, Governor of West Bengal has been holding the Office of the Chancellor of the University since 30<sup>th</sup> July, 2019.

## **Vice-Chancellor:**

Professor (Dr.) Subires Bhattacharyya joined his Office as Vice-Chancellor of University of North Bengal on 22<sup>nd</sup> February, 2018 and is continuing his office.

## **Deans:**

### ***Faculty Council for P.G. Studies in Science***

Prof. (Dr.) Subhas Ch. Roy joined his office as Dean of the Faculty of Science with effect from 23.02.2021 and is continuing his office.

### ***Faculty Council for P.G. Studies in Arts, Commerce & Law***

Prof. Rathin Bandopadhyay has joined his office as Dean of the Faculty of Arts, Commerce & Law with effect from 23.02.2021 and is continuing his office

## C. Apex Bodies and Members

### The Court

The Court is the apex body of the University and has the following powers and functions:

- To review from time to time, the broad policies and programs of the University and to suggest measures for the improvement and development of the University.
- To consider and pass resolutions on the annual report, audit reports and the annual accounts of the University.
- To perform such other functions as may be prescribed by the Statues.

The list of the Court members is given below –

- |         |  |         |   |
|---------|--|---------|---|
| i       | The Chancellor<br>University of North Bengal<br>Raj Bhavan, Kolkata  | ii      | Dr. Subires Bhattacharyya<br>Vice Chancellor<br>University of North Bengal  |
| iii (a) | Prof. Subhash Chandra Roy<br>Dean, Faculty Council for PG Studies in<br>Science<br>Department of Physics<br>University of North Bengal | iii (b) | Prof. Rathin Bandopadhyay<br>Dean, Faculty Council for PG Studies<br>in Arts, Commerce & Law<br>Department of Economics<br>University of North Bengal |

### Nominee of Higher Education Department, WB

- |      |  |     |  |
|------|--|-----|--|
| iv   | Shri Siladitya Basu Ray, WBCS (Exe.)<br>Special Secretary<br>Higher Education Department<br>Bikash Bhavan, Kolkata- 91         | v   | The Principal Secretary<br>Department of Finance<br>Govt. of West Bengal<br>NABANNA, Shibpur<br>Howrah-711102                          |
| vi   | Chairman,<br>West Bengal State Council of Higher<br>Education<br>147-A Rashbehari Avenue, Kolkata - 29                         | vii | President<br>West Bengal Council for Higher<br>Secondary Education<br>Vidyasagar Bhaban, Block-DJ,<br>Sector-II, Salt Lake, Kolkata-91 |
| viii | President<br>West Bengal Board of Madrasah Education<br>Begum Rokaiya Bhaban<br>19, Haji Md. Mahasin Square,<br>Kolkata-700016 | ix  | President<br>West Bengal Board of Secondary<br>Education<br>77/2 Park Street, Kolkata-700016   |
| x    | The Director of Public Instruction   |     |  |

Govt. of West Bengal  
Education Directorate  
Bikash Bhavan, Salt Lake, Kolkata - 91

**Nominee of UGC**

- xi Dr. Mrs. Paula Banerjee  
Department of South & South Asian Studies  
Calcutta University  
Kolkata-700027
- xii Chairman,  
National Council for Teachers' Education  
G-7, Sector-10, Dwarka, Delhi-110075
- xiii Chairman  
West Bengal College Service Commission  
Purta Bhavan, DF Block, 3rd Floor  
Salt Lake City, Kolkata - 700091
- |         |  |         |   |
|---------|--|---------|---|
| xiv (a) | The Head,<br>Department of Anthropology<br>University of North Bengal                      | xiv (b) | The Head,<br>Department of Bengali<br>University of North Bengal                          |
| xiv (c) | The Head,<br>Department of Bio-technology<br>University of North Bengal                    | xiv (d) | The Head,<br>Department of Botany<br>University of North Bengal                           |
| xiv (e) | The Head,<br>Department of Chemistry<br>University of North Bengal                         | xiv (f) | The Head,<br>Department of Commerce<br>University of North Bengal                         |
| xiv (g) | The Head,<br>Department of Computer Science &<br>Application<br>University of North Bengal | xiv (h) | The Head,<br>Department of Economics<br>University of North Bengal                        |
| xiv (i) | The Head,<br>Department of English<br>University of North Bengal                           | xiv (j) | The Head,<br>Department of Geography &<br>Applied Geography<br>University of North Bengal |

xiv (k)	The Head, Department of Hindi University of North Bengal	xiv (l)	The Head, Department of History University of North Bengal
xiv (m)	The Head, Department of Law University of North Bengal	xiv (n)	The Head, Department of Library & Information Science University of North Bengal
xiv (o)	The Head, Department of Life Long Learning & Extension University of North Bengal	xiv (p)	The Head, Department of Management University of North Bengal
xiv (q)	The Head, Department of Mass Communication University of North Bengal	xiv (r)	The Head, Department of Mathematics University of North Bengal
xiv (s)	The Head, Department of Microbiology University of North Bengal	xiv (t)	The Head, Department of Nepali University of North Bengal
xiv (u)	The Head, Department of Philosophy University of North Bengal	xiv (v)	The Head, Department of Physics University of North Bengal
xiv (w)	The Head, Department of Political Science University of North Bengal	xiv (x)	The Head, Department of Sociology University of North Bengal
xiv (y)	The Head, Department of Zoology University of North Bengal	xiv (z)	The Head, Department of Tea Science University of North Bengal
xiv (aa)	The Head, Department of Education University of North Bengal	xiv (ab)	The Head, Department of Food Technology University of North Bengal
xiv (ac)	The Head, Department of Pharma. Tech University of North Bengal	xiv (ad)	The Head, Department of Geology University of North Bengal



xiv (ae) The Head,  
Department of Sanskrit  
University of North Bengal

xiv (af) The Head,  
Department of Bio-informatics  
University of North Bengal

xiv (ag) The Head,  
Department of Women's Studies  
University of North Bengal

#### **Five Senior-most Professor of the University**

xv (a) Prof. Subir Sarkar  
Department of Geography &  
Applied Geography

xv (b) Prof. Bijoy Kr. Sarkar  
Department of History

xv (c) Prof. Gangotri Chakraborty  
Department of Law

xv (d) Prof. Suparna De Sarkar  
Department of Mathematics

xv (e) Prof. Ghanshyam Nepal  
Department of Nepali

#### **Principal of Affiliated Colleges**

xvi (a) Principal  
University B.T. & Evening College  
P.O & Dist - Cooch Behar

xvi (b) Principal  
Indian Institute of Legal Studies  
P.O- Salbari, Dist- Darjeeling

xvi (c) Vacant

xvi (d) Principal  
South Field College  
Dist- Darjeeling

xvi (e) Principal  
APC Roy Govt. College  
Dist- Darjeeling

xvi (f) Principal  
Nakshalbari College  
Dist- Darjeeling

xvi (g) Principal  
P.D. Women's College  
P.O & Dist- Jalpaiguri

xvi (h) Principal  
Siliguri College  
Dist.- Darjeeling

xvi (i) Principal  
A.C. College  
P.O & Dist- Jalpaiguri,

xvi (j) Principal  
Maynaguri College  
Dist – Jalpaiguri

#### **Five Teachers of UG Council**

xvii Vacant

**One Representative of Officer**

xviii Vacant

**Two Representatives of Non-Teaching Employees**

xix Vacant

**Chancellor's Nominee**

xx (a) Prof. Col. Dr. Ranajit Sen,  
58/24, Prince Anwar Shah Road,  
Lake Gardens, Kolkata-700045

xx (b) Prof. Dipak Kr. Kar,  
Vice-Chancellor  
Sidho Kanho Birsha University

xx (c) Prof. Swagata Sen  
Vice-Chancellor  
Gour Banga University  
Dist – Malda

xx (d) Dr. Mrs. Philomena Richards,  
Professor & Head of Department of  
Sociology, Christ Church P.G.  
College, Kanpur -208013, UP

xx (e) Prof. Alok K. Srivastava,  
Department of Chemistry,  
Allahabad University

**Special Invitee**

xxi Vacant

## **The Executive Council (EC)**

The Executive Council (EC) is the principal executive body of the University and has the power of management and administration of the revenue and property of the University and the conduct of all administrative affairs of the University.

The list of members of the Executive Council is –

- |     |  |    |   |
|-----|--|----|---|
| i   | Dr. Subires Bhattacharyya<br>Vice- Chancellor<br>University of North Bengal  | ii | Shri. Siladitya Basu Ray WBCS (Exe.)<br>Special Secretary<br>Higher Education Department<br>Bikash Bhavan, 6 <sup>th</sup> floor<br>Bidhan Nagar, Kolkata- 91 |
| iii | The Principal Secretary<br>Department of Finance<br>Govt. of West Bengal<br>Nabanna, 325, Sarat Chatterjee Road<br>Howrah – 711102 | iv | Chairman,<br>West Bengal State Council of Higher<br>Education<br>147-A Rashbehari Avenue<br>Kolkata - 700029  |
| v   | The Director of Public Instruction<br>Education Directorate<br>Govt. of West Bengal<br>Bikash Bhawan<br>Salt Lake, Kolkata- 91     | vi | Prof. S. C. Roy<br>Dean, Faculty Council for P.G. Studies<br>in Science<br>University of North Bengal   |
| vii | Prof. Rathin Bandopadhyay<br>Dean, Faculty Council for P.G. Studies in<br>Arts, Commerce & Law<br>University of North Bengal       |    |   |

## **Principal of Affiliated College**

- |          |  |          |  |
|----------|--|----------|--|
| viii (a) | Principal<br>University B.T.& Evening College<br>P.O & Dist- Cooch Behar | viii (b) | Principal<br>Indian Institute of Legal Studies<br>P.O- Salbari, Dist- Darjeeling |
| viii (c) | Principal<br>Siliguri College<br>P.O- Siliguri, Dist- Darjeeling         | viii (d) | Principal<br>P.D. Women's College<br>P.O & Dist- Jalpaiguri                      |
| viii (e) | Principal<br>APC Roy Govt. College<br>Himachal Bihar                     | viii (f) | Principal<br>Maynaguri College<br>P.O- Maynaguri                                 |

Matigara, Dist.- Darjeeling

Dist- Jalpaiguri

viii (g) Principal  
Kalimpong College  
P.O & Dist- Kalimpong

**Three Heads of the Department**

ix (a) Head  
Department of Botany  
University of North Bengal

ix (b) Head  
Department of Chemistry  
University of North Bengal

ix (c) Head  
Department of English  
University of North Bengal

**Seven Teachers from the Faculty Council for PG Studies**

x Vacant

**Five teachers of whom at least two shall belong to the rank of Associate Professor**

xi Vacant

**Chancellor's Nominee**

xii (a) Prof. Subha Sankar Sarkar  
Vice- Chancellor  
Netaji Subhas Open University  
Kolkata- 700064

xii (b) Vacant

## **Faculty Council for P.G. Studies in Science**

Faculty Council for P.G. Studies in Science determines the policies related to the academic matters of the University of North Bengal. There are fifteen Academic Departments under this Faculty Council. The Office of the Secretary, Faculty Council for P.G. Studies in Science is responsible for the enrollment of the students in every academic year in the P.G. courses in Science running under this Faculty Council.

### **Office of the Secretary, Faculty Council for P.G. Studies in Science**

The Office of the Secretary, Faculty Council for Post Graduate Studies in Science has its establishment in the Administrative (Annex Building) Building of the University of North Bengal, Raja Rammohunpur Campus. This office executes the decisions or policies of the Faculty Council for Post Graduate Studies in Science. The member of the Faculty Council determine the policies related to the academic matters of the University of North Bengal. The Secretary, Faculty Council for P.G. Studies in Science is holding the charge of this office and four other non-teaching staffs are also rendering their valuable duties towards the execution of the decisions of the Faculty Council and other works. There are fifteen Academic Departments under this Faculty Council.

The Office of the Secretary, Faculty Council for P.G. Studies in Science also takes care of the various works as directed by the Hon'ble Vice-Chancellor and as assigned by the Dean, Faculty Council for P.G. Studies in Science.

### **Duties and Responsibilities**

#### **A. Admission Process**

The Office of the Secretary, Faculty Council for Post Graduate Studies in Science is responsible for the admission to the P.G. Programmes running in all the fifteen Departments/Centre under the Faculty Council. The admission process in the University of North Bengal has been done through complete online system. This office conducts the admission process following the guidelines determined by the Core P.G. Admission Committee as per the rules of the Govt. of West Bengal and the directive of the Department of Higher Education, Govt. of West Bengal. The whole admission processes starting from inviting applications through University website and leading newspapers up to the completion of admission of the candidates in different courses [strictly on the merit basis] is executed under the supervision of the office of the Secretary, Faculty Council for P.G. Studies in Science.

#### **B. Faculty Council Meetings**

The Office of the Secretary, Faculty Council for Post Graduate Studies in Science convenes meetings of the Faculty Council as per the direction of the Hon'ble Vice-Chancellor, keeps the minutes thereof and communicates the recommendations to the appropriate authorities.

### C. P.G. Board of Studies

The Secretary, Faculty Council for P.G. Studies in Science convenes meeting of P.G. Board of Studies/Expert Committees as per the requirements of the Department concerned.

### D. Free Studentship

University of North Bengal offers Semester-wise Full and Half Free studentship to the fifteen percent of total students of the Department concerned in terms of financial assistance in order to facilitate their higher studies through the Office of the Secretary, Faculty Council for Post Graduate Studies in Science.

#### Details of Officer:

Name	Designation	Qualification	Email
Dr. Joydeep Biswas	Principal Secretary	Ph.D	secretary_sc@nbu.ac.in

The Members of the Faculty Council for P.G. Studies in Science for 2021 -22 are –

Dr. Subires Bhattacharyya, Hon'ble Vice-Chancellor, NBU	Chairman
Prof. Subhash Ch. Roy, Dean, Faculty Council for P.G. Studies in Science, NBU	Vice-Chairman
Prof. Nimai Chandra Saha, Vice-Chancellor, B.U.	Nominee of the Hon'ble VC, NBU
Head, Department of Physics, NBU	Member
Head, Department of Chemistry, NBU	Member
Head, Department of Mathematics, NBU	Member
Head, Department of Geography & Applied Geography, NBU	Member
Head, Department of Computer Science & Application, NBU	Member
Head, Department of Botany, NBU	Member
Head, Department of Zoology, NBU	Member
Head, Department of Microbiology, NBU	Member
Head, Department of Biotechnology, NBU	Member
Head, Department of Anthropology, NBU	Member
Head, Department of Geology, NBU	Member
Head, Department of Tea Science, NBU	Member
Head, Department of Food Technology, NBU	Member
Head, Department of Pharmaceutical Technology, NBU	Member
Head, Department of Bioinformatics, NBU	Member
Prof Bikash Ch. Paul, Department of Physics, NBU	Member
Prof. Amitabha Mukhopadhyay, Department of Physics, NBU	Member
Prof. Pradip Kr. Mandal, Department of Physics, NBU	Member
Prof. Malay Kr. Das, Department of Physics, NBU	Member
Prof. Sripada Haldar, Department of Physics	Member

Prof. Suman Chatterjee, Department of Physics	Member
Prof. Mahendra Nath Roy, Department of Chemistry, NBU (on lien)	Member
Prof. Pranab Ghosh, Department of Chemistry, NBU	Member
Prof. Anirban Misra, Department of Chemistry, NBU	Member
Prof. Biswajit Sinha, Department of Chemistry, NBU	Member
Prof. Bhaskar Biswas, Department of Chemistry, NBU	Member
Prof. Sajal Das, Department of Chemistry	Member
Prof. Suparna De Sarkar, Department of Mathematics, NBU	Member
Prof. Manoranjan Singha, Department of Mathematics, NBU	Member
Prof. Subir Sarkar, Department of Geography & Applied Geography, NBU (Retired on 31.01.2022)	Member
Prof. Sushma Rohatgi, Department of Geography & Applied Geography, NBU (Retired on 31.03.2022)	Member
Prof. Deepak Kr. Mandal, Department of Geography & Applied Geography, NBU	Member
Prof. Ranjan Roy, Department of Geography & Applied Geography, NBU	Member
Prof. Aniruddha Saha, Department of Botany, NBU	Member
Prof. Arnab Sen, Department of Botany, NBU	Member
Prof. Subhas Ch. Roy, Department of Botany, NBU	Member
Prof. Manoranjan Chowdhury, Department of Botany, NBU	Member
Prof. Soumen Bhattacharjee, Department of Zoology, NBU	Member
Prof. Min Bahadur, Department of Zoology, NBU	Member
Prof. Dhiraj Saha, Department of Zoology, NBU	Member
Prof. Ranadhir Chakraborty, Department of Biotechnology, NBU	Member
Prof. Shilpi Ghosh, Department of Biotechnology	Member
Prof. Dipannwita Saha, Department of Biotechnology	
Prof. Jaydip Sen, Department of Anthropology, NBU (expired on 30.11.2021)	Member
Prof. Pinak Tarafdar, Department of Anthropology	Member
Prof Samar Kumar Biswas, Department of Anthropology	Member
The Registrar, NBU	Invitee
The Controller of Examinations, NBU	Invitee
Dr. Jhinuk Dasgupta, Department of Chemistry, Siliguri College, Siliguri	Nominees of the Hon'ble VC, NBU
Shri Dipayan Das, Research Scholar (NET JRF), Department of Botany, NBU-Nominee of the Hon'ble Vice-Chancellor, NBU	Nominees of the Hon'ble VC, NBU
Shri Minaj Uddin Ahamed, P.G. Student, Department of Zoology, NBU-Nominee of the Hon'ble Vice-Chancellor, NBU	Nominees of the Hon'ble VC, NBU

## **Faculty Council for P.G. Studies in Arts, Commerce & Law**

Faculty Council for P.G. Studies in Arts, Commerce & Law determines the policies related to the academic matters of the University of North Bengal. The Office of the Secretary of Faculty Council for P.G. Studies in Arts, Commerce & Law executes the decisions or policies of the Faculty Council for Post-Graduate Studies.

### **Office of the Secretary, Faculty Council for P.G. Studies in ACL**

The Office of the Secretary, Faculty Council for P.G. Studies in Arts, Commerce & Law was established in the Humanities & Social Science Building of the University of North Bengal, Raja Rammohunpur Campus. This office executes the decisions or policies of the Faculty Council for Post-Graduate Studies. The members of the Faculty Council determine the policies related to the academic matters of the University of North Bengal. The Secretary, Faculty Council for P.G. Studies in Arts, Commerce & Law holds the charge of this office and five other non-teaching staffs render their valuable duties towards the execution of the decisions of the Faculty Council and other works. There are Nineteen Academic Departments under this Faculty Council.

The Office of the Secretary, Faculty Council for P.G. Studies in Arts, Commerce & Law also takes care of the various works as directed by the Hon'ble Vice-Chancellor and as assigned by the Dean, Faculty Council for P.G. Studies in Arts, Commerce & Law.

### **Duties and Responsibilities**

#### **A. Admission Process**

The Office of the Secretary, Faculty Council for Post Graduate Studies in ACL is responsible for the admission to the P.G. Programmes running in all the nineteen Departments/Centre under the Faculty Council. The admission process in the University of North Bengal has been done through complete online system. This office conducts the admission process following the guidelines determined by the Core P.G. Admission Committee as per the rules of the Govt. of West Bengal and the directive of the Department of Higher Education, Govt. of West Bengal. The whole admission processes is executed under the supervision of the office of the Secretary, Faculty Council for P.G. Studies in ACL.

#### **B. Faculty Council Meetings**

The Office of the Secretary, Faculty Council for Post Graduate Studies in ACL convenes meetings of the Faculty Council as per the direction of the Hon'ble Vice-Chancellor, keeps the minutes thereof and communicates the recommendations to the appropriate authorities.



### C. P.G. Board of Studies

The Secretary, Faculty Council for P.G. Studies in ACL convenes meeting of P.G. Board of Studies/Expert Committees as per the requirements of the Department concerned.

### D. Free Studentship

University of North Bengal offers Semester-wise Full and Half Free studentship to the fifteen percent of total students of the Department concerned in terms of financial assistance in order to facilitate their higher studies through the Office of the Secretary, Faculty Council for Post Graduate Studies in Science.

#### Details of Officer:

Name	Designation	Qualification	Email
Shri Manash Esh	Secretary (Addl. Charge) till 09.03.2022	B. Tech, MLIS	manash@nbu.ac.in
Dr. Rupak Bhattacharjee	Secretary (from 10.03.2022)	Ph. D	secretary_acl@nbu.ac.in

List of the members of the Faculty Council for P.G. Studies in Arts, Commerce & Law for year 2021-2022

Dr. Subires Bhattacharya, Hon'ble Vice-Chancellor, NBU	Chairman
Prof. Rathin Bandyopadhyay, Dean, Faculty Council for P.G Studies in Arts, Commerce & Law	Vice-Chairperson
Prof. Ranjan Chakraborti, Hon'ble Vice-Chancellor	Nominee of the Hon'ble VC, NBU
The Head, Dept. of Bengali	Member
The Head, Dept. of Economics	Member
The Head, Dept. of Philosophy	Member
The Head, Dept. of History	Member
The Head, Dept. of English	Member
The Head, Dept. of Commerce	Member
The Head, Dept. of Nepali	Member
The Head, Dept. of Hindi	Member
The Head, Dept. of Mass Communication	Member
The Head, Dept. of Sociology	Member
The Head, Dept. of Political Science	Member
The Head, Dept. of Lifelong Learning & Extension	Member
The Head, Dept. of Law	Member
The Head, Dept. of Library & Information Science	Member
The Head, Dept. of Management	Member

The Head, Dept. of Education	Member
The Head, Dept. of Sanskrit	Member
The Head, Dept. of Women's Studies	Member
The Director, Centre for Himalayan Studies	Member
Prof. Manjula Bera, Dept. of Bengali	Member
Prof. Nikhil Ch. Roy, Dept. of Bengali	Member
Prof. Utpal Mandal, Dept. of Bengali	Member
Prof. Sanchari Roy Mukherjee, Dept. of Economics (on Lien)	Member
Prof. Anil Bhuimali, Dept. of Economics	Member
Prof. Kanak Kanti Bagchi, Dept. of Economics	Member
Prof. Saptarshi Ghosh, Dept. of Library & Information Science	Member
Prof. Kantilal Das, Dept. of Philosophy	Member
Prof. Joytish Ch. Basak, Dept. of Philosophy	Member
Prof. Debika Saha, Dept. of Philosophy	Member
Prof. Laxmikanta Padhi, Dept. of Philosophy	Member
Prof. Bijoy Kr. Sarkar, Dept. of History	Member
Prof. Ashis Sengupta, Dept. of English	Member
Prof. Palash Ranjan Sengupta, Dept. of Commerce	Member
Prof. Indrajit Roy, Dept. of Commerce	Member
Prof. Debabrata Mitra, Dept. of Commerce	Member
Prof. Dipen Roy, Dept. of Commerce	Member
Prof. Samirendra Nath Dhar, Dept. of Commerce	Member
Prof. Ghanshyam Nepal, Dept. of Nepali	Member
Prof. Mohan Prasad Dahal, Dept. of Nepali	Member
Prof. Sanjoy Rai, Dept. of Nepali	Member
Prof. Manisha Jha, Dept. of Hindi	Member
Prof. Sanjoy Roy, Dept. of Sociology	Member
Prof. Saswati Biswas, Dept. of Sociology	Member
Prof. Soumitra De, Dept. of Political Science	Member
Prof. Arun Kanti Jana, Dept. of Political Science	Member
Prof. Ranjita Chakraborty, Dept. of Political Science	Member
Prof. Gangotri Chakraborty, Dept. of Law	Member
Prof. Rathin Bandyopadhyay, Dept. of Law	Member
Prof. Maitreyee Choudhury, Centre for Himalayan Studies	Member
Prof. Karubaki Dutta, Centre for Himalayan Studies	Member
Prof. Swatasiddha Sarkar, Centre for Himalayan Studies	Member
The Librarian, NBU	Member
The Registrar, NBU	Invitee
The Controller of Examinations, NBU	Invitee
Jt. Registrar, NBU	Invitee
Dr. Rajib Bhowmik, Associate Professor, Dept. of English, Alipurduar College, Alipurduar	Nominee of the Hon'ble VC, NBU

## Council for Undergraduate Studies

The Undergraduate Council in Arts/Science/Commerce and Law is comparatively a young Department in the history of the University of North Bengal being established in 1985 after the passing of the North Bengal University Act of 1981, The prime agenda of the Under Graduate Council, is to form a bridge between the mother University of North Bengal and its affiliating Colleges.

### Office of the Secretary, UG Council

The Prime function of the Office of the Principal Secretary, UG Council is to form a bridge between the University and its affiliating Colleges. The office strives continuously with the objectives of helping and monitoring all Colleges to improve its quality of Academics. Through its various units like the Boards of Undergraduate Studies and numerous Expert Committees(s) the Department has tried to accomplish a process based on inter activity and quality enhancing mechanism which has yielded appreciable results at the Undergraduate workplace under the University.

### Details of Officer:

Name	Designation	Qualification	Email
Dr. Nupur Das	Principal Secretary	Ph. D.	nupurds4@gmail.com

### Composition of Various Committees under UG Council for 2021 – 22:

#### 1. Board of Undergraduate Studies : 38

- **Science:** Chemistry, Physics, Mathematics, Zoology, Botany, Computer Science, Geography, Microbiology, Environmental Studies, Statistic, , Geology, B.C.A. , Anthropology, Tea Science, Food Technology, B.P.Ed .
- **Humanities:** Bengali, English, Hindi, Nepali, Sanskrit, Political Science, Economics, B. Ed, Commerce, History, Philosophy, Sociology, Education, Physiology, Urdu, Psychology, BBA, BBA (in Tourism, Aviation & Hospitality Management)Physical Education, Law, Modern Tibetan, Mass Communication & Journalism.

#### 2. Expert Committee for Value Added Courses: 08

Functional English & Communicative English, Women's Studies, Music, Computer Application, Sports Management, Mass Communication & Journalism, Eco Tourism Management and Tourism & Travel Management, Human Rights & Values in Education.

#### 3. Experts Committees for Vocational Courses: 03

B.Voc (Retail Management), B.Voc (Tourism & Service), B.Voc (Social Work).

## D. General Administration

### Office of the Vice-Chancellor

The Vice-Chancellor is the principal executive and academic officer of the University and his Office provides academic and administrative control to the University for effective management and efficient use of resources in compliance with the Act and Rules of the University. The Office of the Vice-Chancellor leads and coordinates the development policies, strategic plans in order to achieve academic excellence, effectiveness and good governance of the University. The Office also implements the policy decisions undertaken by the Court and Executive Council for overall growth of the University.

#### Details of Vice-Chancellor:

Name	Qualification	Email
Dr. Subiresh Bhattacharyya	Ph. D.	nbuvc@nbu.ac.in

#### Details of Officer:

Name	Designation	Qualification	Email
Dr. Biswajit Chatterjee	Senior Secretary to the Vice-Chancellor	Ph.D. in Law	bchttterjee1@nbu.ac.in

### Office of the Registrar

The Office of the Registrar supports the academic mission of the University of North Bengal by ensuring the integrity, confidentiality, and security of educational records; interpreting and implementing academic policies; and providing sound and efficient services to support the academic needs of students, alumni, faculty, and staff in a way that promotes fairness, a commitment to excellence, open communication, and respect.

This office also maintains principal policies and procedures that guide academic stakeholders of the University community in the pursuit of University academic objectives and in relations with the community at large. Policies are also designed to acquaint new student, faculty, and staff members with the organization and aims of the University.

#### Details of the Officers:

Name	Designation	Qualification	Email
Prof. Pranab Ghosh	Registrar (Offg.)	Ph. D	regnbu@nbu.ac.in
Dr. Swapan Kumar Rakshit	Joint Registrar	Ph. D	jointregistrar@nbu.ac.in
Sri Debasish Bhattacharjee	Asst. Registrar	Graduate	assistantreg1@nbu.ac.in
Dr.Subhojit Sarker	Asst. Registrar	Ph. D	assistantreg2@nbu.ac.in

## Office of the Controller of Examinations

The Examination Branch, which began its journey in 1962, had been responsible for conducting examinations in six districts of North Bengal as well as Sikkim. Till the year 2007, the branch has not only conducted examinations for Undergraduate and Post Graduate students but also for those pursuing Medical, Engineering and Dental courses.

The Examination Branch on its journey has experienced reforms in examination system. Presently, the entire examination processes have been digitized breaking the age old mode of conducting examinations. All the documents of the examinees of the University have been digitally recorded with National Academic Depository (NAD), a scheme launched by the UGC. From the year 2000, the branch has introduced the concept of spot evaluation which has enabled timely publication of the results. A major breakthrough came in the year 2018 when the branch launched its own website, [www.nbuexams.net](http://www.nbuexams.net), and online process in the examination system. The branch has also launched the process of sending transcripts online to the candidates working abroad and willing to pursue higher degrees in foreign universities. Presently the Office of the Controller of Examination is working on the necessary steps required to bring in reforms for facilitating e-governance in the Examination Branch.

During the outbreak of COVID-19 Pandemic and its innumerable disruptions, the office has been able to conduct the examinations successfully overcoming all the odds

### Details of the Officers:

Name	Designation	Email
Dr. Debasis Dutta	Controller of Examinations	<a href="mailto:nbuce@nbu.ac.in">nbuce@nbu.ac.in</a>
Smt. Shankari Chakraborty	Assistant Controller of Examinations	<a href="mailto:assistantcont1@nbu.ac.in">assistantcont1@nbu.ac.in</a>
Dr. Biswajit Datta	Assistant Controller of Examinations	<a href="mailto:assistantcont2@nbu.ac.in">assistantcont2@nbu.ac.in</a>

## Office of the Finance Officer

The Finance and Accounts Department of the University is engaged in providing the services pertaining to Finance and maintenance of accounts to Teaching and Non-Teaching Departments / Sections / Units, affiliated colleges and recognized institutes. The office is headed by the Finance Officer, who is assisted by a team of dedicated team members consisting of Accounts Officer and Audit Officer. The Finance and Accounts Officer discharges duties related to budget and co-ordinates matters pertaining to Finance and Accounts under over all supervision of Vice-Chancellor adhering to laid down rules, regulations and time frame so as to contribute in enhancing the education process.

Centralized Finance Units of this office are Pay, Bills, Book, Grants, Endowment, Provident Fund, Budget, Cash, and Examination Finance. Decentralized Finance and Accounts Units

cater to the needs of Post Graduate Departments, Estate, Student Welfare, Hostels and Sports Board.

**Details of Officer:**

<b>Name</b>	<b>Designation</b>	<b>Email</b>
Dr. Sukhendra Narayan Saha	A & A.O., Finance Officer (Offg.)	nbufo@nbu.ac.in
Sri Surajit Das	Dy. Finance Officer	dassuraonbu@nbu.ac.in
Sri Lalan Choudhary	Accounts Officer	lalan@nbu.ac.in

**Office of the Inspector of Colleges**

The Office of the Inspector of Colleges performs the functions in regard to affiliation of colleges in accordance with the Statutes of the University and the UGC (Affiliation of Colleges by Universities) Regulations, 2009. For affiliation of professional programs in colleges the guidelines made by concerned regulatory authorities are also taken into consideration. For inclusion of new academic programs in colleges this office maintains close liaison with the West Bengal State Council of Higher Education and the Department of Higher Education, Government of West Bengal.

The Office of the Inspector of Colleges also looks after the affairs of Board of Residence and Discipline which includes supervision and control of Hostels for residence of students and to enforce rules of discipline.

**Details of Officer:**

<b>Name</b>	<b>Designation</b>	<b>Qualification</b>	<b>Email</b>
Dr. Subrata Sanyal	Inspector of Colleges	Ph. D.	nbuic@nbu.ac.in

**Office of the Development Officer**

The Office of the Development Officer examines continuously the needs for development in various Departments and units of the University and also monitors all development works of the University and Schemes of the colleges funded programs. This Office keeps contact with the University Grants Commission and maintains records pertaining to UGC. The grants received from UGC and other State Agencies are also distributed by the Office of the Development Officer. The Office also performs scholarship related activities.

The Office of the Development Officer collects year-wise information from each of the Academic / Administrative Departments / Centres / Directorates / Branches and does necessary compilation and editing works to prepare Annual Reports.

Apart from the above, the Office of the Development Officer looks after the UGC and CSIR Fellowships to the research scholars. Data compilation and submission for participating in NIRF India Ranking is done by this office.

**Details of Officer:**

<b>Name</b>	<b>Designation</b>	<b>Qualification</b>	<b>Email</b>
Dr. Tamal Sarkar	Development Officer (Addl. Charge) (till 15.03.2022)	Ph. D.	<a href="mailto:tsarkar@nbu.ac.in">tsarkar@nbu.ac.in</a>
Shri Palash Paul	Development Officer (from 16.03.2022)	M. Tech	palash@nbu.ac.in

In 2021 – 2022, a total of 55 Research Scholars have joined fellowships as per the following details –

NET JRF	37
MANF	05
NFOBC	05
NFSC	04
NFST	04

## E. Officers of the University

### List of Officers

Sl. No.	Name of the Officers	Designation of the Officers
1.	Dr. Subiresh Bhattacharyya	Hon'ble Vice-Chancellor
2.	Dr. Sukhendra Narayan Saha	A & A.O., Finance Officer (Offg.)
3.	Dr. Subrata Sanyal	Inspector of Colleges
4.	Dr. Debasis Dutta	Controller of Examination
5.	Dr. Mriganka Mondal	Librarian
6.	Sri Anirban Biswas	System Manager
7.	Dr. Nupur Das	Secretary, U.G. Council
8.	Dr. Arunava Bhadra	Sr. Scientific Research Officer
9.	Sri Gautam Sarkar	Technical Officer - III
10.	Sri Anriban Goon	University Engineer
11.	Dr. S.K. Rakshit	Deputy Registrar
12.	Dr. Joydeep Biswas	Secretary, Faculty Council for Science
13.	Dr. Biswajit Chatterjee	Secretary to Vice-Chancellor
14.	Dr. Rupak Bhattacharjee	Secretary, Faculty Council for Arts, Com & Law
15.	Dr. Zakia Banu	Medical Officer
16.	Sri Palash Paul	Development Officer
17.	Dr. Tamal Sarkar	Scientific Research Officer Gr-II
18.	Sri Brindaban Karmakar	Deputy Librarian
19.	Sri Sudip Basu	System Engineer
20.	Dr. Lakshmi Dutta	Technical Officer – II
21.	Sri Debasish Bhattacharjee	Assistant Registrar
22.	Sri Subhajit Sarker	Assistant Registrar
23.	Smt. Shankari Chakraborty	Assistant controller
24.	Dr. Biswajit Dutta	Assistant Controller
25.	Sri Surajit Das	Accounts Officer



<b>Sl. No.</b>	<b>Name of the Officers</b>	<b>Designation of the Officers</b>
26.	Sri Lalan Choudhary	Accounts Officer
27.	Sri Subhrangshu Mistri	Asst. Librarian
28.	Sri Santanu Chanda	Asst. Librarian
29.	Smt. Yangzee Sherpa	Asst. Librarian
30.	Sri Manash Esh	Information Scientist
31.	Sri Debasish Kar	Assistant Engineer
32.	Sri Kunal Choudhury	Assistant Engineer
33.	Sri Uttam Nunia	Supdt., Univ Press
34.	Sri Soumyadeep Laha	Technical Officer – I
35.	Sri Arindam Mukherjee	Research Officer
36.	Dr. Prajnamita Dasgupta	Scientific Officer
37.	Dr. Goutam Gope	Electro Instrumentation Officer
38.	Dr. Mayukh Deb	Micro-Analyst
39.	Sri Amitava Debbarman	Programmer
40.	Sri Utpal Mandi	Programmer
41.	Sri Apurba Paul	Documentation Officer
42.	Dr. Malay Saha	Assistant Curator

**CHAPTER – II**  
**ACADEMIC PROGRAMS AND  
STUDENTS**



## A. Academic Programs

The University of North Bengal offers various academic courses in Under-graduate (UG), Post-graduate (PG), M. Phil., Ph. D. and Diploma level in various subjects. The details of courses offered during 2020 – 21 are given below –

### Courses Offered in UG Level

Sl. No.	Department	Name of the Course
1	Department of Anthropology	B. Sc. in Anthropology (Honours)
2	Department of Geology	B. Sc. in Geology (Honours)
3	Department of Law	B.A. LL. B. (Honours)
4	Department of Tea Science	B. Sc. in Tea Science (Honours)

### Courses Offered in PG Level

Sl. No.	Department	Name of the Course
1	Department of Anthropology	MSc / MA in Anthropology
2	Department of Bengali	MA in Bengali
3	Department of Bioinformatics	MSc in Bioinformatics
4	Department of Bio-Technology	MSc in Bio-Technology
5	Department of Botany	MSc in Botany
6	Department of Chemistry	MSc in Chemistry
7	Department of Commerce	M. Com
8	Department of Computer Science and Application	MCA
9	Department of Computer Science and Application	MSc in Computer Science
10	Department of Economics	MA in Economics
11	Department of Education	MA in Education
12	Department of English	MA in English
13	Department of Food Technology	MSc in Food Technology
14	Department of Geography and Applied Geography	MSc / MA in Geography and Applied Geography

<b>Sl. No.</b>	<b>Department</b>	<b>Name of the Course</b>
15	Department of Geology	MSc in Geology
16	Centre for Himalayan Studies	MA in Strategic and Area Studies
17	Department of Hindi	MA in Hindi
18	Department of History	MA in History
19	Department of Law	LL. M.
20	Department of Library and Information Science	MLIS
21	Department of Lifelong Learning and Extension	MA in Rural Development
22	Department of Management	MBA
23	Department of Mass Communication	MA in Mass Communication
24	Department of Mathematics	MSc in Mathematics
25	Department of Microbiology	MSc in Microbiology
26	Department of Nepali	MA in Nepali
27	Department of Pharmaceutical Technology	M. Pharm
28	Department of Philosophy	MA in Philosophy
29	Department of Physics	MSc in Physics
30	Department of Political Science	MA in Political Science
31	Department of Sanskrit	MA in Sanskrit
32	Department of Sociology	MA in Sociology
33	Department of Tea Science	MSc in Tea Science
34	Department of Women's Studies	MA in Women's Studies
35	Department of Zoology	MSc in Zoology

### **Courses Offered in Ph. D.**

<b>Sl. No.</b>	<b>Department</b>	<b>Name of the Course</b>
1	Department of Anthropology	Ph.D. in Anthropology
2	Department of Bengali	Ph.D. in Bengali
3	Department of Bioinformatics	Ph.D. in Bioinformatics

<b>Sl. No.</b>	<b>Department</b>	<b>Name of the Course</b>
4	Department of Bio-Technology	Ph.D. in Bio-Technology
5	Department of Botany	Ph.D. in Botany
6	Department of Chemistry	Ph.D. in Chemistry
7	Department of Commerce	Ph.D. in Commerce
8	Department of Computer Science and Application	Ph.D. in Computer Science
9	Department of Economics	Ph.D. in Economics
10	Department of Education	Ph.D. in Education
11	Department of English	Ph.D. in English
12	Department of Food Technology	Ph.D. in Food Technology
13	Department of Geography and Applied Geography	Ph.D. in Geography and Applied Geography
14	Department of Geology	Ph. D in Geology
15	Centre for Himalayan Studies	Ph.D. in Himalayan Studies
16	Department of Hindi	Ph.D. in Hindi
17	Department of History	Ph.D. in History
18	Department of Law	Ph.D. in Law
19	Department of Library and Information Science	Ph.D. in Library and Information Science
20	Department of Mass Communication	Ph.D. in Mass Communication
21	Department of Mathematics	Ph.D. in Mathematics
22	Department of Microbiology	Ph.D. in Microbiology
23	Department of Nepali	Ph.D. in Nepali
24	Department of Pharmaceutical Technology	Ph.D. in Pharmaceutical Technology
25	Department of Philosophy	Ph.D. in Philosophy
26	Department of Physics	Ph.D. in Physics
27	Department of Political Science	Ph.D. in Political Science
28	Department of Sociology	Ph.D. in Sociology
29	Department of Tea Science	Ph.D. in Tea Science
30	Department of Zoology	Ph.D. in Zoology

## **Courses Offered in Diploma Level**

<b>Sl. No.</b>	<b>Department</b>	<b>Name of the Course</b>
1	Department of Bioinformatics	PG Diploma in Bioinformatics
2	Department of Tea Science	PG Diploma in Tea Management

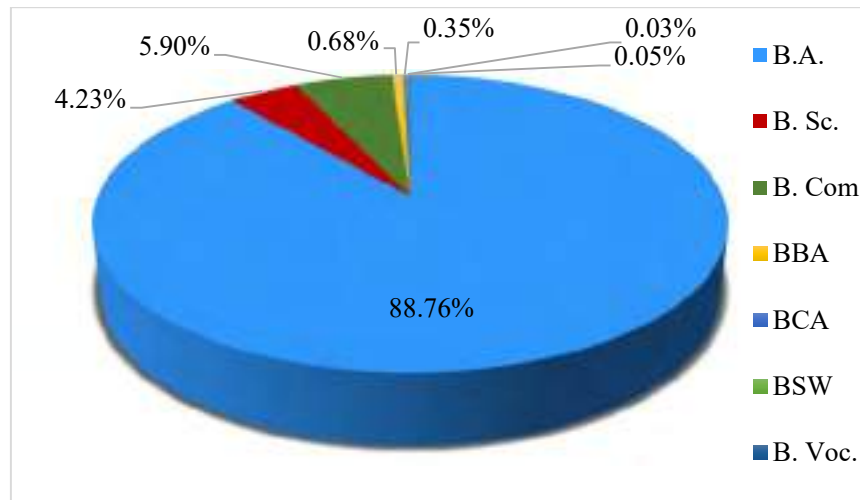
## **Courses Offered in Online and Distance Learning Mode**

<b>Sl. No.</b>	<b>Name of the Course</b>
1	B.A. (General)
2	B.Com. (General)
3	M.A. in Bengali
4	M.A. in Nepali
5	M.A. in English
6	M.A. in History
7	M.A. in Philosophy
8	M.A. in Political Science
9	M.Sc. in Mathematics

## B. Student Enrollment

### Enrolment of Students in UG Level

There are 50 affiliated colleges under the University of North Bengal in a spread of six districts. The present strength of students studying in various UG courses in the affiliated colleges in 2021-22 is 1,17,032 which is 5.6% higher than total number of students studied in preceding year. The stream-wise distribution of total students in the affiliated colleges have been represented graphically and shown below –

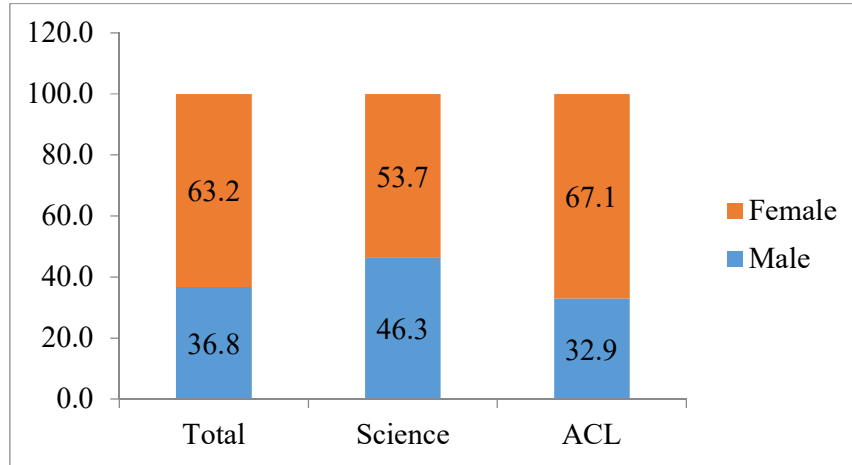


Among the above students, 49,737 (42.5%) are male and 67,295 (57.5%) are female. Also, while 30.6% students are pursuing Honours courses, program courses are pursued by 69.4% students.

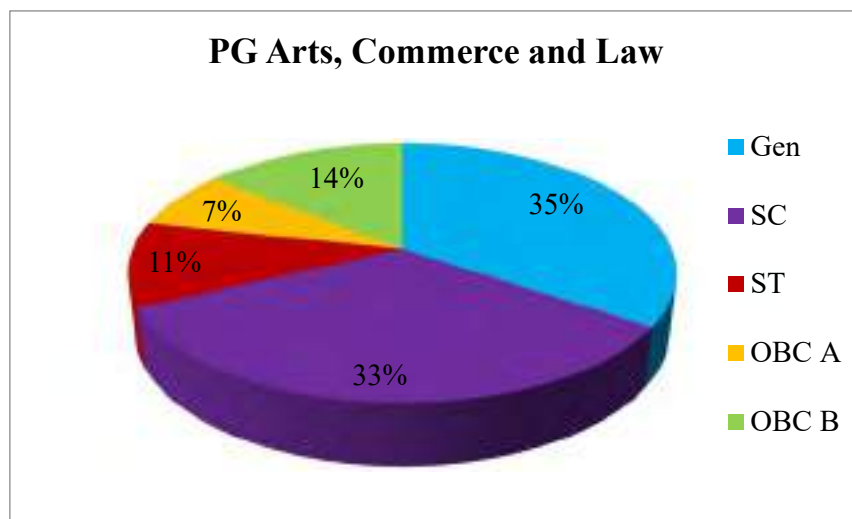
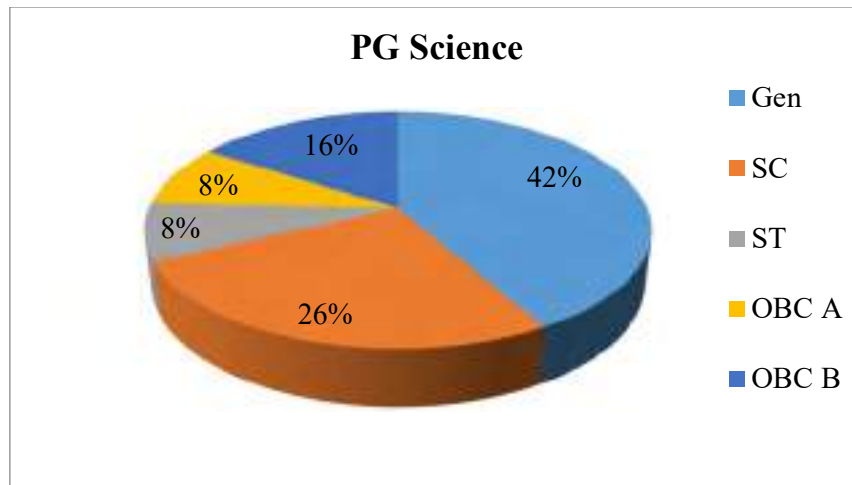
### Enrolment of Students in PG Level

A total of 1457 number of students have taken admission in the 34 Departments of the University in PG level in 2021 - 22, including 485 number of students in Science and 972 number of students in Arts, Commerce and Law (ACL). While considered the total number of students including all semesters, in 2021 – 2022, a total of 3153 number of students pursued PG programmes under faculty of Science and faculty of Arts, Commerce and Law. The gender ratio of total students studied in all PG programmes in 2021 – 2022 is given below, which shows more percentage of female students in PG irrespective of streams. While 63% female students among total students studied in that year, the ACL accounted for even more, i.e. 67% female students.





Analysis of category-wise total PG students shows that about 63% of the total students of PG belong to reserved category while about 37% from General category. Category-wise students in Science and ACL are given in the following graphs.



Department-wise statistical data of 1<sup>st</sup> Semester and 3<sup>rd</sup> Semester PG students in 2021 – 2022 are given below –

**Academic Session 2021 - 2022, Semester I**

Departments	Male							Female						
	Gen	SC	ST	FS	OBC A	OBC B	Total	Gen	SC	ST	FS	OBC A	OBC B	Total
Anthropology	2	2	0	0	0	0	4	3	1	2	0	0	6	12
Bioinformatics	6	0	0	0	0	1	7	1	1	1	0	0	1	4
Biotechnology	3	3	0	0	1	3	10	2	1	1	0	0	1	5
Botany	3	2	2	0	1	2	10	14	7	3	0	1	4	29
Chemistry	11	14	1	0	4	5	35	11	5	4	0	2	6	28
Computer Sc.	4	3	1	0	1	2	11	2	1	1	0	0	0	4
Food Technology	5	1	2	0	0	0	8	2	1	1	0	0	2	6
Geography	8	11	0	0	5	3	27	22	16	6	3	10	0	57
Geology	4	0	3	0	0	1	8	2	0	0	0	0	0	2
Mathematics	13	2	3	0	2	9	29	12	13	1	0	5	4	35
Microbiology	6	1	0	0	1	3	11	5	5	2	0	0	6	18
Pharmaceutical Tech.	9	4	0	0	1	1	15	5	3	1	0	2	1	12
Physics	12	7	3	0	5	6	33	7	5	0	0	0	2	14
Tea Sc.	3	4	0	0	0	2	9	4	2	0	0	0	0	6
Zoology	3	2	2	0	2	3	12	15	6	1	0	1	1	24
Bengali	7	24	2	0	6	2	41	25	59	6	0	10	13	113
Economics	16	2	3	0	2	5	28	27	10	6	0	1	6	50
Philosophy	4	10	2	0	3	6	25	10	31	3	0	3	3	50
History	8	14	2	0	3	3	30	21	27	9	0	6	10	73
English	15	27	4	0	10	0	56	40	27	7	0	6	18	98
Commerce	15	15	5	0	3	7	45	38	8	1	0	1	8	56
Nepali	3	1	2	0	0	2	8	23	6	24	0	0	16	69
Hindi	1	3	1	0	1	4	10	16	5	5	0	1	4	31
Mass Communication	4	1	2	1	0	3	11	14	7	2	0	1	2	26
Sociology	4	5	0	0	1	3	13	10	7	5	0	1	6	29
Political Science	5	15	0	0	2	7	29	13	17	9	0	7	8	54
Rural Development	11	6	0	0	4	4	25	8	7	4	0	1	1	21
Strategic Area Studies	3	3	0	0	0	3	9	2	3	1	0	0	1	7
LL.M	7	2	0	0	0	0	9	10	4	2	0	3	2	21
BLIS	2	15	1	0	4	4	26	10	11	4	0	2	7	34
MLIS	4	4	2	0	1	1	12	10	13	6	0	2	5	36
MBA	11	5	2	0	2	6	26	8	2	3	0	0	3	16
Education	1	3	0	0	1	0	5	3	8	1	0	0	1	13
Women's Studies	1	2	0	0	0	0	3	5	8	1	0	0	4	18
Sanskrit	2	4	3	0	2	0	11	4	25	1	0	3	3	36

**Academic Session 2021 - 2022, Semester III**

Departments	Male							Female						
	Gen	SC	ST	FS	OBC A	OBC B	Total	Gen	SC	ST	FS	OBC A	OBC B	Total
Anthropology	2	0	0	0	0	1	3	7	0	0	0	0	1	8
Bioinformatics	6	0	0	0	0	1	7	1	1	1	0	0	1	4
Biotechnology	3	0	1	0	0	0	4	4	0	0	0	0	0	4
Botany	4	5	1	0	0	2	12	13	5	5	0	3	2	28
Chemistry	13	4	1	0	2	4	24	9	9	1	0	1	9	29
Computer Sc.	4	3	1	0	1	0	9	3	1	0	0	0	2	6
Food Technology	7	1	0	0	0	3	11	2	2	1	1	0	0	6
Geography	6	15	3	0	4	4	32	17	19	4	0	5	7	52
Geology	3	2	0	0	0	0	5	1	0	0	0	0	0	1
Mathematics	8	9	0	0	3	7	27	11	7	3	0	4	3	28
Microbiology	4	0	0	0	0	1	5	9	4	1	0	0	2	16
Pharmaceutical Tech.	7	4	1	0	0	3	15	0	0	0	0	0	0	0
Physics	7	7	4	0	3	2	23	10	3	0	0	1	4	18
Tea Sc.	3	2	0	0	1	1	7	3	1	0	0	1	1	6
Zoology	3	1	0	0	2	1	7	9	8	1	0	2	6	26
Bengali	4	29	3	0	7	6	49	22	44	6	0	7	10	89
Economics	9	1	0	0	0	1	11	16	0	1	0	1	3	21
Philosophy	3	12	1	0	6	2	24	10	18	4	0	1	5	38
History	9	14	2	0	7	3	35	12	22	13	0	3	2	52
English	8	16	1	0	3	3	31	45	24	8	0	10	12	99
Commerce	18	7	7	0	0	8	40	18	4	6	0	1	5	34
Nepali	4	1	0	0	0	1	6	20	4	17	0	0	18	59
Hindi	6	2	0	0	1	1	10	11	6	2	0	0	6	25
Mass Communication	5	3	1	0	1	3	13	16	4	2	0	0	2	24
Sociology	4	0	1	0	0	1	6	15	7	5	0	0	5	32
Political Science	4	16	1	0	4	3	28	13	12	7	0	3	10	45
Rural Development	2	2	0	0	0	3	7	12	4	4	0	0	2	22
Strategic Area Studies	4	0	0	0	0	0	4	3	2	1	0	0	0	6
LL.M	4	2	0	0	0	2	8	8	2	0	0	0	1	11
BLIS	4	7	2	0	1	3	17	6	10	7	0	3	6	32
MLIS	11	1	0	0	4	3	19	14	5	3	1	0	2	25
MBA	0	2	0	0	1	0	3	3	2	2	0	3	0	10
Education	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Women's Studies	1	2	0	0	1	2	6	8	16	0	0	3	4	31

## Enrolment of Research Scholars in Ph. D. Level

In 2021 – 22 a total of 332 numbers of Research Scholars have enrolled themselves for coursework.  
The Department-wise breakup are given below –

Sl. No.	Department	No. of Research Scholars completed Coursework
1	Anthropology	4
2	Bengali	30
3	Bioinformatics	8
4	Biotechnology	12
5	Botany	14
6	Chemistry	41
7	Commerce	14
8	Computer Science	13
9	Economics	20
10	English	30
11	Food Technology	5
12	Geography and Applied Geography	17
13	Himalayan Studies	4
14	Hindi	2
15	History	13
16	Library and Information Science	2
17	Lifelong Learning And Extension	30
18	Mathematics	12
19	Nepali	6
20	Pharmaceutical Technology	15
21	Philosophy	10
22	Physics	8
23	Political Science	5
24	Sanskrit	3
25	Sociology	4
26	Tea Science	6
27	Zoology	4



## **CHAPTER – III**

# **ACADEMIC DEPARTMENTS**



## A. Faculty of Science

### DEPARTMENT OF ANTHROPOLOGY

#### About the Department:

The Department of Anthropology, University of North Bengal was established under the faculty of Science in the year 2001 and presently offers Under-Graduate, Post-Graduate and Ph.D. programmes in different fields of Anthropology. The academic programmes are so designed as to enable the students and scholars to acquire a good understanding of people, society and culture at the micro level. The special focus of the department is to examine and analyze the regional and local issues of greater anthropological significance. The Department has an innovative plan to develop interdisciplinary interaction for strengthening its teaching and research programmes. Participatory approach and Lab to Land method has been adopted to develop the teaching and research activities of the Department.

#### Courses Offered:

- B. Sc. (Anthropology Hons.)
- M. Sc. / MA in Anthropology
- Ph. D.

#### Research Focus:

- Social-Cultural Anthropology
- Physical Anthropology: Growth and Nutrition
- Prehistoric Anthropology: Conservation of Prehistoric Sites and Relics

#### Research Laboratory:

- Field Area (Tribal Villages in Darjeeling, Kalimpong District)
- Physical Laboratory in the Department Anthropology
- Prehistoric Laboratory in the Department of Anthropology
- Ethnographic Museum in the Department of Anthropology

#### Faculty Details:

Name	Qualification	Designation	Email
Prof. Pinak Tarafdar	Ph.D.	Professor	pinaktarafdar@nbu.ac.in
Dr. Samar Kumar Biswas	Ph.D.	Assoc. Professor	smrkbis@yahoo.co.in
Dr. Argina Khatun	Ph.D.	Asst. Professor	arginakhatun87@gmail.com
Dr. Rinzi Lama	Ph.D.	Asst. Professor	rinzi.lama@nbu.ac.in

#### Details of Non-Teaching Staff:

Name	Qualification	Designation
Ms. Anangana Alam	MA	Jr. Assistant cum Typist (Gr.-C)
Mr. Sujit Kangsha Banik	VIII	Casual staff (Gr.-D)



**Details of Research Scholars:**

Name	Fellowship Name	Supervisor's Name	Gender
Mr. Riwan Rai	University Fellowship	Prof. Samar Kumar Biswas	Male
Shreyashi Roy	UGC NET SRF	Prof. Samar Kumar Biswas	Female
Ms. Manisha Thapa	NFOBC (Completed)	Prof. Pinak Tarafdar	Female
Ms. Grace Leivon	RGNF (completed)	Prof. Pinak Tarafdar	Female
Ms. Chumu Sherpa	RGNF (completed)	Prof. Pinak Tarafdar	Female
Arindam Biswas	UGC-JRF	Dr. Argina Khatun	Male
Mampi Debnath	SVMCM	Dr. Argina Khatun	Female
Antara Bose	SVMCM	Dr. Argina Khatun	Female
Sutapa Bhowmik	SVMCM	Dr. Argina Khatun	Female
Trishala Subba	NFST	Dr. Rinzi Lama	Female

**Details of PhD Students (Without Fellowship):**

Name	Fellowship Name	Supervisor's Name	Gender
Ms. Sunidhi Oraon	NA	Prof. Pinak Tarafdar	Female

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Samar Kumar Biswas	International Webinar on COVID-19: A Geo- Ecological Perspective	26-27.09.2021	<i>Attended</i>
	International Webinar On "Anthropology of Epidemics"	28.10.2021	<i>Issues of Epidemics and the Role of Anthropology</i>
	A Five Day National Workshop on "Research Methodology" Course.	23.11.2021	<i>The Necessities of Research Methodology and Important Research Methods in Anthropology</i>
	International Talk on Online Learning Satellite Programme and Teaching Staff Mobility	31.01 2022	<i>"Tribes/Indigenous Peoples of India: Issues of Tribal Livelihood, Economy and Socio-Economic Changes- I"</i>
	International Talke on Online Learning Satellite Programme and Teaching Staff Mobility	01.02 2022	<i>"Tribes/Indigenous Peoples of India: Issues of Tribal Livelihood, Economy and Socio-Economic Changes- II"</i>
	International conference on "Perspectives on Indigenous and Tribal Peoples from India and the Arctic	27.05.2022	<i>"Fragmenting and Weakening the Greater Solidarity and Identity of the Indigenous Gorkha Janajatis of Himalayan West Bengal, India: An Observation"</i>
Dr. Pinak Tarafdar	International Webinar on "Anthropology of Epidemics"	30.10.2021	<i>An exclusive way of understanding about Health,</i>

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
			<i>Sickness and Care Seeking Behaviour in the era of Pandemic</i>
	A Five Day National Workshop on “Research Methodology”	22 - 26.11.2021	<i>Applications and its Relevancy in Social Science Research</i>
	Invited online lecture on National Science Day, Date 26.02.2022.	26.02.2022.	<i>Traditional Knowledge on Health Care Practices</i>
Dr. Argina Khatun	International workshop entitled “International workshop on advance statistical analysis using SPSS” organized by Science Tech Institute, Lucknow.	21 - 27.01.2022	<i>Attended</i>
Dr. Argina Khatun	National Webinar entitled “Anthropology and Contemporary Era” organized by Department of Anthropology, University of North Bengal.	02 - 04.02.2022	<i>Anthropometric and adiposity measurements among rural Bengali Muslim males of Nandigram, Purba Medinipur, West Bengal, India</i>
Dr. Argina Khatun	National FDP entitled “One Week Online National Faculty Development Program on Quantitative Data Analysis” organized by Human Behavtics Private limited, Lucknow.	10 - 15.04.2022	<i>Attended</i>
Dr Rinzi Lama	National Webinar entitled ‘Anthropology and Contemporary Era’, organized by Department of Anthropology, University of North Bengal	02 - 04.03.2022	<i>Dhams in Darjeeling: Revisiting Health from place perspective</i>

**Details of Seminar/Conferences /Webinar Attended by Student:**

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Riwaj Rai	National Webinar on Anthropology of Contemporary Era	02 – 04. 03. 2022	<i>Attended</i>
Mampi Debnath	National webinar entitled “Anthropology of Contemporary Era” organized by Department of Anthropology, University of North Bengal, and Darjeeling	02 – 04. 03. 2022	<i>A review on anemia among Indian adolescent girls</i>
Sutapa Bhowmik	National webinar entitled “Anthropology of Contemporary	02 – 04. 03. 2022	<i>Undernutrition among adolescents of India : A</i>

<b>Name</b>	<b>Details of Seminars / Conferences / Webinar</b>	<b>Date</b>	<b>Title of the Paper Presented</b>
	Era” organized by Department of Anthropology, University of North Bengal, Darjeeling		<i>review</i>
Arindam Biswas	National webinar entitled “Anthropology of Contemporary Era” organized by Department of Anthropology, University of North Bengal, Darjeeling	02 – 04. 03. 2022	<i>Nutritional assessment of preschool children in Indian States: A Review</i>
Antara Bose	National seminar entitled “Public Health and Nutrition” organized by department of Anthropology, University of Delhi.	30.11.2021	<i>“Post-covid, school reopening and effect on the health status: a study among the Rajbangshi adolescents aged 14-17 years”</i>
Antara Bose	National seminar entitled “Anthropology in 21st Century and Beyond” organized by department of Anthropology, University of Delhi.	09 - 11.02.2022	<i>“The Interlink Between Diabetes and Obesity: A Rise in Severe Form of Covid-19”</i>
Antara Bose	National Webinar entitled “Anthropology and Contemporary Era” organized by Department of Anthropology, University of North Bengal.	02 - 04.02.2022	<i>“Hypertension in India: A Systematic Review”</i>
Antara Bose	National webinar entitled “Anthropology in policy making: Challenges and Opportunities” organized by Department of Anthropology, Fakir Mohan College.	07 - 09.08.2021	<i>Attended</i>
Antara Bose	International conference entitled “Responsible research and innovations in management and human sciences” organised by the London School of Management Education, London (LSME)	26 - 27.08.2021	<i>“Socio-Demographic determinants affecting Education and the Nutritional Status among School Children and Adolescents during COVID-19: In context to India”</i>
Antara Bose	51st Annual Conference of the Indian Anthropological Society and International Seminar entitled “Anthropology of Health and	21.12.2021	<i>“Online classes and its effect on the health of adolescences during the pandemic: a study among</i>

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
	Disease: Past, Present and Future” organized by Indian anthropological society and West Bengal state university		<i>the students belonging to age 14 - 17 years”</i>
Antara Bose	International Workshop on 'Kinanthropometry and Human Welfare, organized by Department of Anthropology, University of Delhi	7.12.2021	<i>Attended</i>
Antara Bose	International Workshop on "Digital Children: Learning Curves, Accessibility and Mental Health" organized by Department of Anthropology, University of Delhi.	12.11.2021	<i>Attended</i>
Antara Bose	International Workshop on “Physiological Anthropology in Public Health” organized by Department of Anthropology, University of Delhi.	21.01.2022 to 22.01.2022	<i>Attended</i>
Antara Bose	Internship program for World Anthropological Congress, 2023 for a period of 1 year from January 2022-December 2022.	01.01.2022 to 31.12.2022	<i>Attended</i>
Antara Bose	National seminar entitled Indian Anthropological Congress 2022 organized by University of Hyderabad	21 - 23.02.2022	<i>"Physical Inactivity as an important determinant for the rise of overnutrition: Theoretical perspectives in context to COVID-19"</i>
Trishala Subba	National Webinar entitled ‘Anthropology and Contemporary Era’, organized by Department of Anthropology, University of North Bengal	02 - 04.03.2022	<i>Religious beliefs and practices among the Limbus of Bijanbari, Darjeeling: A review</i>

**Publications:**

Name of the Author(s)	Publication Details
Rai, Riwanj and Samar Kumar Biswas	Diminishing Indigenous Material Culture among the Totos of North Bengal. In Uday Chatterjee, Anil Kashyap, Mark Everard, Gopal Krishna Panda and Dinabandhu Mahata (Eds.), <i>Indigenous People and Nature: Insights of Social, Ecological and Technological Sustainability</i> , 313-327. Amsterdam; Netherland; Oxford; UK, and

Name of the Author(s)	Publication Details
	Cambridge; US: Elsevier. [ISBN: 978-0-323-91603-5].
Manisha Thapa and Pinak Tarafdar	Impact of Religion on Traditional Health Care Practices among the Lepchas of Upper and Lower Lingthem of Upper Dzongu, Sikkim, India, <i>Contemporary Voice of Dalit</i> , Vol.13 No. 2, November, 2021
Suvendu Kundu and Pinak Tarafdar	Hill Kharia and Health Care Practices: Perspectives and Problems (Monograph), January 2022
Argina Khatun	Nutritional status among adult Muslims: A study from Purba Medinipur, West Bengal. <i>International Journal of Food and Nutritional Sciences</i> . 11, 75-84, 2022
Dipti Tamang, Rinzi Lama	Introduction to Multivocal Spaces: An exploration of Everyday life in Darjeeling Himalayas, <i>Himalaya: The Journal of the Association for Nepal and Himalayan Studies</i> , Vol 41 No 1, 4-7, 2022

#### Research Projects Details:

Title of the Project	Funding Body	Year of Sanction	Duration	Budget (Rs.)	Name of PI
Assemblages and Conservations of Selected Prehistoric Sites and Relics in West Bengal and Jharkhand	North Bengal University	2021-2022	2021-2022	150,000/-	Prof. Pinak Tarafdar

## DEPARTMENT OF BIOINFORMATICS

### About the Department:

The Bioinformatics Department of the University of North Bengal was established in 2017 which is currently housed in a two-story building along with the NBU Bioinformatics Facility. Since 2021-22 academic year, the Department is offering a PhD program and a two-year postgraduate course (M.Sc.) in Bioinformatics. The Department has also been offering a one-year Postgraduate Diploma in Bioinformatics since 2018. All these courses offer students an excellent opportunity to acquire skills in Bioinformatics. This emerging interdisciplinary field is often considered a junction between biology and computational sciences. All these courses are first-of-its-kind in North Bengal.

The primary vision of the Department is to impart quality education, practical based training, and research experience in the emerging frontier of bioinformatics and allied areas. The Department regularly organizes workshops, expert lectures, training programs, etc., to groom students and research scholars. All the faculties in the Department are actively involved in cutting-edge research in Genomics, Transcriptomic, Proteomics, Systems Biology, Computer-aided drug discovery, etc. and have many publications in peer-reviewed high-impact factor international journals.

Enormous data generated from various biological experiments must be stored, analyzed, and interpreted through computers. However, research institutes and industries worldwide were running short of experts in these fields. The Department prioritizes the students' skill development in these demanding areas. The focused area of the department is Biomathematics, Biostatistics including R language, Computer programming including scripting languages, algorithms, Database Management, Website Development, Genomics, Transcriptomics, Proteomics, and Computer-aided drug discovery.

### Courses Offered:

- Ph. D.
- Post Graduate Diploma in Bioinformatics
- M. Sc. in Bioinformatics

### Research Focus:

- Novel Drug Target Identification
- Computer-Aided Drug Discovery
- Protein Engineering
- Comparative Genomics of Bacteria
- Next generation sequence analysis
- Host-pathogen interaction study
- Computational system biology

**Faculty Details:**

Name	Qualification	Designation	Email
Dr. John J. George	Ph. D.	Assoc. Professor	georrge@nbu.ac.in
Dr. Subarna Thakur	Ph. D.	Asst. Professor	subarna.thakur@nbu.ac.in
Dr. Chiranjib Sarkar	Ph. D.	Asst. Professor	chiranjib@nbu.ac.in

**Details of Non-Teaching Staff:**

Nam	Qualification	Designation	Email
Anjan Dey		Junier Suprendendent	

**Details of Research Scholars:**

Name	Fellowship Name	Supervisor's Name	Gender
Maheswari Dasgupta	UGC-JRF	Dr. Subarna Thakur	Female
Swarup Das	UGC-JRF	Dr. Subarna Thakur	Male
Dipayan Sarkar	UGC-JRF	Dr. Chiranjib Sarkar	Male

**Details of PhD Students (Without Fellowship):**

Name	Supervisor Name	Gender
Kanchan Sharma	Dr. John J. George	Female
Barsha Dey	Dr. Subarna Thakur	Female
Subhajit Ghosh	Dr. Subarna Thakur	Male
Saurav Kumar Mishra	Dr. John J. George	Male

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar	Date
Dr. John J. George	A two-day workshop on insight to microbiology and its inter-disciplinary fields, organized by North Bengal St. Xavier's College, Rajganj, West Bengal	11.05.2022
Dr. John J. George	IP Awareness/Training program organized by the NBU	20.04.2022
Dr. John J. George	Gujarat State Biotechnology Mission (GSBTM), Govt. of Gujarat sponsored International Symposium on recent trends in Science and Technology organized by Christ College, Rajkot, Gujarat, India,	22.01.2022- 23.01.2022
Dr. John J. George	National Level Workshop on "Online Teaching Tools", Organised by ESSGEE Digiskills, Mumbai	15.07.2021- 06.08.2021
Dr. John J. George	International level seminar on "Journal Citation Reports (JCR) certificate series-2021", organised by Clarivate	08.07.2021
Dr. Subarna	Two-Day National Webinar on Advancement of Plant	30.09.21-

<b>Name</b>	<b>Details of Seminars / Conferences / Webinar</b>	<b>Date</b>
Thakur	Sciences for Food Diversity and Nutritional Security Organized by Dept. of Botany, NBU	01.01.21
Dr. Subarna Thakur	Online Faculty Development Programme (FDP) entitled Machine Learning & Deep Learning in Biology organized by Department of Computer Science & Electronics, Ramakrishna Mission Vidyamandira	14.03.2022
Dr. Subarna Thakur	International Conference (Online) titled 'Biomolecules to Biome' (BMB) organized by the Department of Life Sciences, Presidency University, Kolkata	24.08.2022

**Details of Seminar/Conferences /Webinar Attended by Student:**

<b>Name</b>	<b>Details of Seminars / Conferences / Webinar</b>	<b>Date</b>
Kanchan Sharma	One-day National Webinar on Career Opportunities in Bioinformatics Organized by the Department of Bioinformatics, University of North Bengal.	03.04.2022
Kanchan Sharma	IP Awareness/Training program Organized by National Intellectual Property Awareness Mission (NIPAM).	20.04.2022
Saurav Kumar Mishra	National Seminar on 'Food Science and Technology, organized by the Department of Food Technology, University of North Bengal, India	25.04.2022
Saurav Kumar Mishra	Virtual conference under NORTH ZONE ACBICON 2022 'Biochemical & Molecular basis of Lifestyle Diseases' Conducted by International Federation of Clinical Chemistry and Laboratory Medicine	22-23.04.2022
Saurav Kumar Mishra	Workshop on 'National Intellectual Property Awareness Mission' Conducted by University of North Bengal, West Bengal	20.04.2022
Saurav Kumar Mishra	One-day National Webinar on 'Career Opportunities in Bioinformatics' Organized by Department of Bioinformatics University of North Bengal, West Bengal	03.04.2022
Dipayan Sarkar	One-day National Webinar on Career Opportunities in Bioinformatics Organized by the Department of Bioinformatics, University of North Bengal.	03.04.2022
Dipayan Sarkar	IP Awareness/Training program Organized by National Intellectual Property Awareness Mission (NIPAM).	20.04.2022
Subhajit Ghosh	"One-day National Webinar on Career Opportunities in Bioinformatics" Organized by the Department of Bioinformatics, University of North Bengal	03.04.2022
Subhajit Ghosh	"Hands-on Workshop on Molecular Docking, Pharmacophore Modelling, and Machine Learning" organized by the Bioinformatics Division, ICMR – National Institute of Cancer Prevention and Research (NICPR), Noida and Schrodinger Inc.	15.03.22 – 16.03.22



<b>Name</b>	<b>Details of Seminars / Conferences / Webinar</b>	<b>Date</b>
Subhajit Ghosh	'Online Training Program on Application of Biostatistics in Health Research' organized by ICMR- National Institute for Research in Environmental Health (NIREH), Bhopal	24.01.22- 25.01.22
Subhajit Ghosh	"Genes to Pathways- Second Edition 2021"- organized by Decode life Bioinformatics	02.08.21- 17.08.21
Subhajit Ghosh	One month Bioinformatics training on "Data science and machine learning" – organized by Decode life Bioinformatics	29.05.21 – 30.06.21
Maheswari Dasgupta	Online National Webinar on Career Opportunities in Bioinformatics	03.04.2022
Swarup Das	IP Awareness/Training Program Organized by the National Intellectual Property Awareness Mission (NIPAM).	20.04.2022
Swarup Das	One-day National Webinar on Career Opportunities in Bioinformatics	03.04.2022
Rahul Kumar Singh	Certificate Course on "Basics in Genomics and Proteomics". By Microbiologists Society India (MSI).	07-02-2022
	One-day National Webinar on Career Opportunities in Bioinformatics. Organized by Department of Bioinformatics, University of North Bengal	03-04-2022
	Certificate of Workshop on "Bioinformatics".By BDG Life Sciences (OPC) Pvt. Ltd. India. Ministry of MSME, Govt. of India	23-05-2022
Suman Modak	One-day National Webinar on Career Opportunities in Bioinformatics	03-04-2022
Priyam Chakraborty	One-day National Webinar on Career Opportunities in Bioinformatics	03-04-2022
Riya Bhattacharjee	One-day National Webinar on Career Opportunities in Bioinformatics	03-04-2022
	International Workshop on Drug Discovery and Development (organized by Decode life Bioinformatics)	21.05.2022 – 15.06.2022
Ritobhas Datta	One-day National Webinar on Career Opportunities in Bioinformatics	03-04-2022
Sudarshan Sarkar	One-day National Webinar on Career Opportunities in Bioinformatics	03-04-2022
	Strategies To Crack Competitive Exams After MSc in Bioinformatics	18-05-2022
Aditi Biswas	One-day National Webinar on Career Opportunities in Bioinformatics	03-04-2022
	Strategies To Crack Competitive Exams After MSc in Bioinformatics	18-05-2022

Name	Details of Seminars / Conferences / Webinar	Date
Bratati Roy	One-day National Webinar on Career Opportunities in Bioinformatics	03-04-2022
	Strategies To Crack Competitive Exams After MSc in Bioinformatics	18-05-2022
Akansha Subba	One-day National Webinar on Career Opportunities in Bioinformatics	03-04-2022
	Strategies To Crack Competitive Exams After MSc in Bioinformatics	18-05-2022

### Publications:

Name of the Author(s)	Publication Details
Moustafa MAA, Nath D, <b>George JJ</b> , Chakraborty S.	Binding sites of miRNA on the overexpressed genes of oral cancer using 7mer-seed match. <i>Mol Cell Biochem.</i> 2022 May; 477(5):1507-1526. doi: 10.1007/s11010-022-04375-7. Epub 2022 February 18. PMID: 35179676. (JCR IF: 3.396)
Ashara Mausami Pranavbhai, Jay P. Raichura, Sakina Vakhariya, <b>John J. George</b>	Identification of potential vaccine candidates from <i>Mycoplasma genitalium</i> g37a strain: a reverse vaccinology approach, <i>Recent Trends in Science and Technology-2022</i> (ISBN: 978-81-929521-8-5). pp.121 – 128
Maitri Mehta, Sakina Vakhariya, <b>John J. George</b>	Functional annotation of hypothetical proteins of <i>Chlamydia trachomatis</i> A/HAR-13, 1. <i>Recent Trends in Science and Technology-2022</i> (ISBN: 978-81-929521-8-5). pp.129 – 142
VK Ranjan, S Mukherjee, <b>S Thakur</b> , K Gupta, R Chakraborty	Pandrug-resistant Pseudomonas sp. expresses New Delhi metallo- $\beta$ -lactamase-1 and consumes ampicillin as sole carbon source. <i>Clin Microbiol Infect.</i> 2021 Mar;27(3):472.e1-472.e5. doi: 10.1016/j.cmi.2020.10.032
D Modak, S Paul, S Sarkar, <b>S Thakur</b> , S Bhattacharjee	Validating potent anti-inflammatory and anti-rheumatoid properties of <i>Drynaria quercifolia</i> rhizome methanolic extract through in vitro, in vivo, in silico and GC-MS-based profiling. <i>BMC Complement Med Ther.</i> 2021 Mar 12;21(1):89
<b>S. Thakur</b> and S. Ghosh	S. Thakur and S. Ghosh, “Recent advances in transcriptomic biomarker detection for cancer,” <i>Transcr. Profiling Prog. Prospect.</i> , pp. 453–478, 2022, doi: 10.1016/B978-0-323-91810-7.00007-8.
<b>Sarkar, C.</b> , Parsad, R., Mishra, D. C., & Rai, A.	Sarkar, C., Parsad, R., Mishra, D. C., & Rai, A. (2021). A Web Tool for Consensus Gene Regulatory Network Construction. <i>Frontiers in Genetics</i> , 12, 745827.

**Research Projects Details:**

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
<i>In silico</i> protein engineering of thermostable alpha-amylase	NBU	2021	One Year	1,50,000/-	Dr. John J. George
<i>In-silico</i> investigation of transposable elements in a tea pathogen, <i>Colletotrichum</i> spp.	NBU	2021	One Year	75,000/-	Dr. Subarna Thakur
<i>Inferring dynamic c gene regulatory network using SVM</i>	NBU	2021	One Year	75,000/-	Dr. Chiranjib Sarkar

**Miscellaneous Events:**

- Department of Bioinformatics organized a One-Day National Webinar with the theme “Bioinformatics Opportunities” on July 24, 2021
- Department of Bioinformatics organized a One-Day National Webinar with the theme “Career opportunities in Bioinformatics” on April 03, 2022.

## DEPARTMENT OF BIOTECHNOLOGY

### About the Department:

The Department of Biotechnology, University of North Bengal was established in 2001 and it promotes and facilitates research in microbiology, biochemistry, molecular biology, cell biology, and molecular genetics. The Department provides technical support for research and a nucleus for interdisciplinary research and training initiatives at University of North Bengal. The Department of Biotechnology spearheads in research and educational programs in cell and molecular biosciences by leading research initiatives to increase the competitiveness of researchers at North Bengal University in this critical area.

### Courses Offered:

- M. Sc.
- Ph. D.

### Research Focus:

- Microbial Biotechnology with special emphasis on Omics technology
- Plant Biotechnology and Molecular Biology
- Animal Cell Culture & Animal Biotechnology

### Research Laboratory:

- Omics Laboratory
- Advanced Cell Culture and Molecular Biology
- Plant Biotechnology and Molecular Biology
- Nano-biotechnology Laboratory
- Molecular Mycology and Advanced Biocontrol Research Laboratory

### Sophisticated Instrument/Equipment:

- Fluorescence Microscope
- Co<sub>2</sub> Incubator
- BSL -2 facility equipped with advanced culture transfer facility

### Details of Faculties:

Name	Qualification	Designation	Email Address
Dr. Ranadhir Chakraborty	Ph.D.	Professor	ranadchakrabort@nbu.ac.in
Dr. Dipanwita Saha	Ph.D.	Professor	dipanwitasaha@nbu.ac.in
Dr. Shilpi Ghosh	Ph.D.	Professor	shilpighosh@nbu.ac.in
Dr. Anoop Kumar	Ph.D.	Asst. Professor	anoop@nbu.ac.in
Dr. Manab Deb Adhikari	Ph.D.	Asst. Professor	madhikari@nbu.ac.in

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Sri Raja Bauri	VIII pass	Sr. Peon

**Details of Research Scholars:**

Name	Fellowship Status	Supervisor Name	Gender	Date of Joining
Ms. Chandana Basak	CSIR-SRF	Prof. Ranadhir Chakraborty	Female	01-08-2018
Sri Partha Barman	CSIR-SRF		Male	14-09-2018
Ms. Anasuya Karjee	CSIR-SRF		Female	02-01-2020
Ms. Sriradha Ganguli	SVMCM		Female	01-01-2020
Sri Anukul Paul	SVMCM		Male	02-01-2020
Sri Deep Deb	UGC-NET JRF		Male	01-06-2022
Sri Subhanil Chakraborty	DST-INSPIRE		Male	19-12-2013
Ms. Smriti Pradhan	CSIR-SRF	Prof. Dipanwita Saha	Female	04-12-2018
Ms. Enakshi Sadhu	SVMCM		Female	02-01-2020
Ms. Susmita Das	SVMCM		Female	10-01-2020
Sri Abhinandan Choudhury	SVMCM		Male	09-02-2022
Ms. Suyoyna Tamang	MANF-UGC		Female	01-10-2021
Ms. Vijeta Rai	CSIR-NET	Prof. Shilpi Ghosh	Female	?-06-2015
Ms. Arijita Basak	NBU-SRF		Female	?-09-2017
Ms. Puja B.K	CSIR-JRF		Female	01-05-2021
Ms. Satarupa Mallick,	DST-INSPIRE		Female	11-03-2021
Sri Ashwani Varma,	DST-INSPIRE		Male	22-04-2022
Sri Kaushik Maji	UGC-JRF		Male	01-09-2022
Sri Ayan Kumar Mohanty	SVMCM		Male	03-01-2019
Ms. Arpita Das	CSIR-JRF	Dr. Anoop Kumar	Female	29-07-?
Ms. Sangita Dey	ICMR Lab-assistantship		Female	05-04-2022
Ms. Priyashree Banerjee	SVMCM		Female	07-03-2022
Ms. Enish Kujur	SVMCM		Female	09-02-2022
Ms. Ankita Dutta	SVMCM		Female	18-09-2017
Sr. Sudev Sarkar	CSIR-SRF		Male	01-11-2017
Ms. Divya Limbu	SVMCM	Dr. Manab Deb Adhikari	Female	02/01/2020

**Details of Ph. D. Students without Fellowship:**

Name	Supervisor's Name	Gender	Date of Joining
Ms. Dipanwita Ghosh	Prof. Dipanwita Saha	Female	25-03-2019
Sri Sanay Kumar Das		Male	09-02-2022
Ms. Piyali Sarkar,		Female	02-06-2014
Ms. Khusboo Lepcha	Prof. Shilpi Ghosh	Female	NA
Ms. Subhasmita Chanda		Female	11-03-2021
Ms. Swatoleena Bhattacharya		Female	NA
Ms. Nitya Rai	Dr. Manab Deb	Female	NA
Ms. Koyeska Roy	Adhikari	Female	NA

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars/Conferences / Webinar	Date	Title of the Paper Presented
Prof. Ranadhir Chakraborty	International Webinar on 'COVID-19- The current scenario' Organized by St. Xavier's College (Autonomous), Kolkata	02-07-2020	<i>Insidious SARS-CoV-2: its Molecular peculiarities and genomic plasticity</i>
Prof. Ranadhir Chakraborty	International Webinar titled "In search of origin, prevention and possible cure of COVID-19" Organized by Vijoygarh College	18-07-2020	<i>Sneaking SARS-CoV-2: Molecular distinctiveness and Mutation Spectra</i>
Prof. Ranadhir Chakraborty	National level Webinar on "Challenges in Environmental Microbiology" Organized by Chakdah College, Nadia	31-08-2020	<i>Antibiotic residues in the Environment and the ways to its mitigation</i>
Prof. Ranadhir Chakraborty	National Webinar on "Impact of Viral diseases challenging Human lives" Organized by West Bengal State University, Barasat	18-08-2020	<i>SARS-CoV-2: Trends of mutation accumulation</i>
Prof. Ranadhir Chakraborty	National Workshop/ Webinar on "Functional foods, Bioactive compounds and phytochemicals for better nutrition" Organized by Uttar Banga Krishi Vishwavidyalaya, Pundibari, Coochbehar	10-12-2020	<i>Future innovations in Food based industries</i>
Prof. Ranadhir Chakraborty	National Webinar on 'COVID-19 & Vaccine preparedness's Organized by Ministry of Culture, GoI	14-01-2021	<i>New strains of SARS-CoV-2 and vaccine</i>
Prof. Ranadhir Chakraborty	'Vigyan Sarvatra Pujyate' (celebration of 75 years of Science & Technology progress in India)	23-02-2022	<i>From the Annals of History of Science</i>

<b>Name</b>	<b>Details of Seminars/Conferences / Webinar</b>	<b>Date</b>	<b>Title of the Paper Presented</b>
Prof. Ranadhir Chakraborty	‘Vigyan Sarvatra Pujyate’(celebration of 75 years of Science & Technology progress in India)	24-02-2022	<i>Important Advancement of Science and Technology</i>
Prof. Ranadhir Chakraborty	Celebration of World Environment Day, organized by North Bengal Science Centre, National Council of Science Museums, Ministry of Culture, GoI. Organized by North Bengal Science centre, Matigara, Siliguri	05-06-2022	<i>Emerging Viral diseases .....to Monkey Pox</i>
Prof. Ranadhir Chakraborty	One day National Seminar on the occasion of World Environment day organized by the Department of Microbiology of Darjeeling Government College & St. Joseph’s College in collaboration with Microbiologists Society India (MSI). Organized by Darjeeling Government College, Darjeeling	06-06-2022	<i>Climate Change..... Microbiome</i>
Dr. Anoop Kumar	National Level IP awareness/Training Program entitled, “National Intellectual Property Awareness Mission”, organized by Intellectual Property Office, India Ministry of Commerce and Industry	20.04.2022	<i>Participated</i>
Dr. Manab Deb Adhikari	Participated in IP awareness/training program under National Intellectual Property Awareness Mission	20.04.2022	<i>Attended</i>

### **Publications:**

<b>Name of the Author(s)</b>	<b>Publication Details</b>
Sen S, Mondal N, Ghosh W, <b>Chakraborty R.</b>	Inducible boron resistance via active efflux in <i>Lysinibacillus</i> and <i>Enterococcus</i> isolates from boron-contaminated agricultural soil, 2021, <i>BioMetals</i> , <a href="https://doi.org/10.1007/s10534-">https://doi.org/10.1007/s10534-</a>
Basak C, Mondal N, Sen S, Sarkar J, Ghosh W, <b>Chakraborty R.</b>	Draft genome sequences from four novel strains of microbes isolated from <i>Lepidocephalichthys guntea</i> , 2021, <i>Microbial Resource Announcement</i> 0(38):e0062121
Ganguly S, <b>Chakraborty R.</b>	Bacterial epigenetics opens door to novel frontier in Infection biology, 2021m, <i>Nucleus</i> v.64 no.3 pp. 383-399
Bhattacharya S, Mapder T, Fernandes S, Roy C, Sarkar J, Rameez M J, Mandal S, Sar A,	Sedimentation rate and organic matter dynamics shape microbiomes across a continental margin, 2021, <i>Biogeosciences</i> 18, 5203–5222,

Name of the Author(s)	Publication Details
Chakraborty A K, Mondal N, Dam B, Peketi A, <b>Chakraborty R</b> , Mazumdar A, Ghosh W	
Mondal N, Peketi A, Mapder T, Mazumdar A, <b>Chakraborty R</b> and Ghosh W	Indus and Nubra Valley hot springs affirm the geomicrobiological specialties of Trans-Himalayan hydrothermal systems, 2021, Journal of Earth System Science
Ranjan VK, Mukherjee S, Basak C, <b>Chakraborty R</b> .	Abundance of New Delhi Metallo- $\beta$ -Lactamase-Producing <i>Acinetobacter</i> , <i>Escherichia</i> , <i>Proteus</i> , and <i>Pseudomonas</i> spp. in Mahananda and Karala Rivers of India, 2021. Microbial Drug Resistance, 12, 1603-1615
Bandara P, <b>Chakraborty R</b> , Holliday ZM, Mandal SM, Schrum AG.	Oral probiotics in coronavirus disease 2019: connecting the gut–lung axis to viral pathogenesis, inflammation, secondary infection and clinical trials, 2021. New Microbes and New Infections 40: 100837
Ranjan VK, Mukherjee S, Thakur S, Gupta K, <b>Chakraborty R</b> .	Pandrug-resistant <i>Pseudomonas</i> sp. expresses New Delhi metallo- $\beta$ -lactamase-1 and consumes ampicillin as sole carbon source. 2021, Clin Microbiol Infect. 4:S1198-743X(20)30667-4
Manna S, Chowdhury T, <b>Chakraborty R</b> , Mandal SM	Probiotics-Derived Peptides and Their Immunomodulatory Molecules Can Play a Preventive Role Against Viral Diseases Including COVID-19. 2021. Probiotics Antimicrob Proteins. Jun;13(3):611-623.
Barman P, Mondal N, Sen S, Chatterjee S, Sinha S, Ghosh W, <b>Chakraborty R</b> .	Draft Genome Sequences from Two Gram-Negative Bacteria, <i>Serratia</i> sp. Strain EWG9 and <i>Leclercia</i> sp. Strain EMC7, Isolated from the Earthworm Eisenia fetida. 2022. Microbiol Resour Announc. 2022 Feb 17;11(2):e0093921. doi: 10.1128/mra.00939-21
Sen S, Mondal N, Ghosh W, <b>Chakraborty R</b> .	Inducible boron resistance via active efflux in Lysinibacillus and Enterococcus isolates from boron-contaminated agricultural soil. 2022. Biometals. Apr;35(2):215-228.
<b>Saha D</b>	Synthesis, X-ray structure and evaluation of bactericidal activity of an o-vanillin functionalised schiff's base. 2021, SSN: 2717-5928 Applied Microbiology: Theory and Technology 2:18-27.
<b>Saha D</b>	Genetic variability of Tomato leaf curl New Delhi virus infecting cucumber in sub-Himalayan plains in eastern India. ISSN: 2630-0192 International Journal of Agricultural Technology 17:535-544
Mangar P, Barman P, Kumar A, Saha, A, <b>Saha D</b>	Detection of virulence associated genes and in vitro gene transfer from Aeromonas sp. isolated from aquatic environments of sub-Himalayan West Bengal. ISSN 2297-1769 Frontiers in Veterinary Sciences . 9:887174. doi: 10.3389/fvets.2022.887174
Mondal M, Basak S, Roy D, Haydar MS,	Probing the molecular assembly of a metabolizer drug with $\beta$ -cyclodextrin and its binding with CT-DNA in augmenting



Name of the Author(s)	Publication Details
Choudhury S, Ghosh B, Ghosh NN, Dutta A, Mandal P, Roy K, <b>Kumar A</b>	antibacterial activity and photostability by physicochemical and computational methodologies. ACS omega. 2022 Jul ,19 ; 7(30): 26211-25.
Rai V, Pogu SV, Bhatnagar R, Bomzan P, Dutta A, Mandal A, Roy MN, <b>Kumar A</b> , Ghosh S.	Biological evaluation of a natural steroid ester, Stigmasta-5 (6), 22 (23)-dien-3-beta-yl acetate isolated from the Himalayan herb <i>Astilberivularis</i> as potential antitumor agent. Chemico-Biological Interactions. 2022 Jun 1;360:109935
Ray S, Roy N, Barman BK, Karmakar P, Bomzan P, Rajbanshi B, Dakua VK, Dutta A, <b>Kumar A</b> , Roy MN.	Synthesis and characterization of an inclusion complex of dl-aminoglutethimide with $\beta$ -cyclodextrin and its innovative application in a biological system: computational and experimental investigations. ACS omega. 2022 Mar 28;7(13):11208-16.
Ali S, Sikdar S, Basak S, Rajbanshi B, Mondal M, Roy D, Dutta A, <b>Kumar A</b> , Dakua VK, Chakrabarty R, Roy	$\beta$ -cyclodextrin-stabilized biosynthesis nanozyme for dual enzyme mimicking and Fenton reaction with a high potential anticancer agent. ACS omega. 2022 Jan 28;7(5):4457-70.
Mondal M, Basak S, Roy D, Saha S, Ghosh B, Ali S, Ghosh NN, Dutta A, <b>Kumar A</b> , Roy MN.	Cyclic oligosaccharides as controlled release complexes with food additives (TZ) for reducing hazardous effects. Journal of Molecular Liquids. 2022 Feb 15;348:118429.
Saxena A, Dutta A, Kapoor N, <b>Kumar A</b> , Tiwari A	Envisaging marine diatom <i>Thalassiosira weissflogii</i> as a " SMART" drug delivery system for insoluble drugs. Journal of Drug Delivery Science and Technology. 2022 Feb 1;68:102983.
Banerjee S, Kar P, Sarkar I, Chhetri A, Mishra DK, Dutta A, <b>Kumar A</b> , Sinha B, Sen A	Structural elucidation and chemical characterization of underutilized fruit silverberry ( <i>Elaeagnus pycnanthus</i> ) silver nanoparticles playing a dual role as anti-cancer agent by promoting apoptosis and inhibiting ABC transporters. South African Journal of Botany. 2022 Mar 1;145:243-57.
Basak S, Ali S, Mondal M, Roy D, Dutta A, <b>Kumar A</b> , Sikdar S, Roy	Green synthesis and characterization of heterostructure MnO-FeO nanocomposites to study the effect on oxidase enzyme mimicking, HSA binding interaction and cytotoxicity. Chemical Physics Letters. 2021 Dec 16;785:139163.
Rai V, Pogu SV, Bhatnagar R , Bomzan P, Dutta A ,Mandal A, Mahendra Nath Roy MN, Kumar A , <b>Ghosh S</b>	Biological evaluation of a natural steroid ester, Stigmasta-5(6), 22(23)-dien-3-beta-yl acetate isolated from the Himalayan herb <i>Astilberivularis</i> as potential antitumor agent. <i>Chemico-Biological Interactions</i> 360:109935, 2022.

Name of the Author(s)	Publication Details
Mahanty A, Giri S, Kar A. <b>Ghosh S</b>	Biocatalytic pretreatment of rice straw by ligninolytic enzymes produced by newly isolated <i>Micrococcus unnanensis</i> strain B4 for downstream cellulolytic saccharification. <i>Journal of Basic and Applied Microbiology</i> 68:184-192, 2022
Singh KK, Shyamaprasad Saha SP, Kadiravana R C, Mazumdar D, Vijeta Rai V, <b>Ghosh S</b>	Ammonium metabolism in <i>Selaginella bryopteris</i> in response to dehydration-rehydration and characterisation of desiccation tolerant, thermostable, cytosolic glutamine synthetase from plant. <i>Functional Plant Biology</i> 48:358, 2021.
Gavande PV, Basak A, Sen S, Lepcha K, Murmu N, Rai V, Mazumdar D, Shyama Saha SP, Das V, <b>Ghosh S</b>	Functional characterization of thermotolerant microbial consortium for lignocellulolytic enzymes with central role of Firmicutes in rice straw depolymerization. <i>Scientific Report</i> 11:3032, 2021.
Lepcha K, Basak A, Kanoo S, Sharma P, Puja BK, <b>Ghosh S</b>	Thermoxyylanolytic and Thermosaccharolytic Potential of a Heat Adapted Bacterial Consortium Developed From Goat Rumen Contents. <i>Frontiers in Energy Research</i> 9:755779, 2021.
Kumar G, Saha SP, <b>Ghosh S</b> , Mondal PK	Artificial neural network-based modelling of optimized experimental study of xylanase production by <i>Penicillium citrinum</i> xym2. <i>Journal of Process Mechanical Engineering</i> 236:1340-1348, 2021.
Mazumdar D, Saha SP, <b>Ghosh S</b>	RSM based optimization of plant growth promoting rhizobacteria and nitrogen dosage for enhanced growth and yield of mustard ( <i>Brassica campestris</i> L.). <i>Journal of Plant Nutrition</i> 44:2228-2244.2021.
Bomzan P, Roy N, Sharma A, Rai V, <b>Ghosh S</b> , Kumar A, Roy MN	Molecular encapsulation study of indole-3-methanol in cyclodextrins: Effect on antimicrobial activity and cytotoxicity. <i>Journal of Molecular Structure</i> 1225: 129093, 2021.
Mandal, B. K., Mandal, R., Limbu, D., <b>Adhikari, M. D.</b> , Chauhan, P. S., & Das, R	Green synthesis of AgCl nanoparticles using <i>Calotropis gigantea</i> : Characterization and their enhanced antibacterial activities, <i>Chemical Physics Letters</i> , 801, 139699, 2022
<b>Adhikari MD</b> , and Samanta P.	Chitosan-Based Composites as Sustainable Food Packaging Materials. In: Baskar, C., Ramakrishna, S., Daniela La Rosa, A. (eds) <i>Encyclopedia of Green Materials</i> . 2022, Springer, Singapore. <a href="https://doi.org/10.1007/978-981-16-4921-9_92-1">https://doi.org/10.1007/978-981-16-4921-9_92-1</a>
Biswas, K., and <b>Adhikari, M.D.</b>	Green Synthesis of Iron Oxide Nanoparticles for Biomedical Applications. In: Baskar, C., Ramakrishna, S., Daniela La Rosa, A. (eds) <i>Encyclopedia of Green Materials</i> . 2022, Springer, Singapore. <a href="https://doi.org/10.1007/978-981-16-4921-9_253-1">https://doi.org/10.1007/978-981-16-4921-9_253-1</a>

**Research Projects Details:**

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Identification, isolation and bio-evaluation of natural bio-active anticancer compound from leaves of <i>Masea macrophylla</i> plant of Darjeeling district	I.C.M.R.,India	2021	03 years	15.0 lakh	Dr. Anoop Kumar
Synthesis and Evaluation of Antimicrobial and Antibiofilm Potency of Biogenic metallic Nanoparticles by Plant Sources	University Assistance Research Project (UGC)	2021	1 year	1.5 lakh	Dr. Manab Deb Adhikari
Water quality monitoring and metagenomic analyses of waters from selected Rivers, Lakes, and Ground water sources of Northern West Bengal, India, with a strategy to study impact of pollution and assess the load of antimicrobial-resistance genes in the environment-	WBPCB	2019	1 yr	7.15 lakh	Prof. Ranadhir Chakraborty
Exploring gut-microbiome of intestine breathing fish, <i>Lepidocephalichthys guntea</i> , with metagenomic and metatranscriptomic data for evaluating the role of bacteria in fish gut function and immunity.	University Assistance Research Project (UGC)	2020	1 yr	1.5 lakh	Prof. Ranadhir Chakraborty
To reveal the molecular mechanism(s) of bacterial degradation of difficult-to-degrade-antibiotic, ciprofloxacin	University Assistance Research Project (UGC)	2022	1 yr	1.5 lakh	Prof. Ranadhir Chakraborty

## DEPARTMENT OF BOTANY

### About the Department:

The Department of Botany of University of North Bengal was initiated in the summer of 1984. Since then the Department flourished tremendously with tireless efforts of faculties, staff and students. The Department has marked its golden presence by its remarkable achievements in shaping the scientific and academic pursuit of Sub-Himalayan West Bengal, Sikkim and neighbouring countries like Nepal, Bhutan and Bangladesh. Though, being a University situated in a remote location with limited resources and infrastructure, our University as well as the Department is second to none when it comes to producing quality students, researchers and scientists.

The voyage started off in the year 1982 with the decision of the University authority to have two new Departments namely; Botany and Zoology under the Centre for Life Sciences, the then a unit exclusively for R&D. The Department has received Special assistance program (SAP-DRS) for three phases (2002-2007, 2007-2012 and 2013-2018) as well as DST-FIST assistance in 2003. With the support from the Department of Environment and Forests, Govt. of India, a Botanic garden has been set up while with the financial support from the Department of Biotechnology, Ministry of Science and Technology, Govt. of India, infrastructural facilities including Immuno-Phytopathology Laboratory, Tea Germplasm Bank, Rice Germplasm Bank and rice Breeding for improvement, Antisera Reserves for Plant pathogens, Mushroom Production Unit have been established. With the financial support of DST, West Bengal and National Medicinal Plants Board a beautiful garden of Medicinal Plants has been developed in this campus. This year the University has uplifted this as a Centre for Conservation and Utilization of Medicinal and Aromatic Plants. The Department has been rendering bioinformatics facility in this University with the support from DBT, Govt. of India.

### Courses Offered:

- M. Sc.
- Ph. D.

### Research Focus:

- Plant disease management and plant viruses
- Development of high yielding climate resilient biofortified rice varieties for food and nutritional security through conventional breeding
- New Model for Origin of Black Rice from Wild Rice of India: Based on Genetic Evidences of Interspecific Hybridization (*O. sativa* x *O. rufipogon*) and Genome Analysis.
- Taxonomy of Angiosperms and Biosystematics
- Morpho-Anatomical studies, heavy metal stress and study of endophytic bacteria from ferns
- Nano-biotechnology, Bioinformatics, Molecular Biology
- Microbial diversity, Plant-microbe interaction, Characterization of Fungal endophytes associated with medicinal plants

- Nanotechnology for the mitigation of salinity stress in crop plants.
- Plant responses to water pollutants.
- Starch-based biopolymers for food packaging and edible coatings.

#### Research Laboratory:

- Plant Pathology
- Molecular Cyto-Genetics Laboratory
- Bioinformatics Facility
- Pteridology, Palaeobotany and Palynology
- Taxonomy of Angiosperms and Biosystematics
- Plant Biochemistry Laboratory
- Microbiology Laboratory

#### Faculty Details:

Name	Qualification	Designation	Email
Prof. Aniruddha Saha	M.Sc, Ph.D	Professor	asahabotany@nbu.ac.in
Prof. Subhas Ch. Roy	M.Sc, M. Tech (Biotech), Ph.D.	Professor	subhasroy@nbu.ac.in
Prof. Arnab Sen	M.Sc, Ph.D	Professor	arnab.sen@nbu.ac.in
Dr. Monoranjan Chowdhury	M.Sc, Ph.D	Professor	mchowdhury@nbu.ac.in
Dr. Palash Mandal	M.Sc, Ph.D	Assoc. Professor	pmandalbotppprl@nbu.ac.in
Dr. Jnan Bikash Bhandari	M.Sc, Ph.D	Assoc. Professor	jnanbikashbhandari@nbu.ac.in
Dr. Swarnendu Roy	M.Sc, Ph.D	Asst. Professor	swarnendubotany@nbu.ac.in
Dr. Piyush Mathur	M.Sc, Ph.D	Asst. Professor	piyushmathur316@nbu.ac.in

#### Details of Non-Teaching Staff:

Name	Qualification	Designation
Susanta Roy	HS, Diploma in Pharmacy	Lab Assisstant
Nayan Ranjan Ghosh	Madhyamik	Lab Attendant (Gr-I)
Dr. Sumon Chatterjee	MBA, Ph. D.	Sr. Assisstant

#### Details of Research Scholars:

Name	Fellowship Name	Supervisor's Name	Gender	Date of Registration
Subhrajyoti Saha	UGC NET SRF	Prof. Aniruddha Saha	Male	28/04/2022

Name	Fellowship Name	Supervisor's Name	Gender	Date of Registration
Suyojna Tamang	UGC MANF	Prof. Aniruddha Saha	Female	02/01/2019
Ritabrita Saha	DBT SRF	Prof. Aniruddha Saha	Female	05/02/2022
Kalyan Roy	UGC NET JRF	Prof. Aniruddha Saha	Male	10/05/2023
Ankita Roy	UGC NET JRF	Prof. Aniruddha Saha	Female	-
Praveen Mandal	UGC NET JRF	Prof. Aniruddha Saha	Male	-
Gourab Kumar Barman	UGC NET JRF	Prof. Aniruddha Saha	Male	-
Asit Ray	EX- UGC NET JRF (Presently in service in college)	Prof. Aniruddha Saha	Male	04/12/2018
Piyali Sarkar	EX- RGNF JRF (Presently in service FCI)	Prof. Aniruddha Saha	Female	28/02/2019
Jayita Sarkar	SVMC		Female	01.01.2020
Sona Limboo	NFST		Female	28.04.2022
Aparna Sarker	NFSC		Female	15.05.2023
Bhumika T. Yonzon	UGC MNET JRF		Female	NA
Soumita Bhattacharjee	SVMCM	Prof. Arnab Sen	Female	03/01/2019
Swarnendra Banerjee	CSIR-NET	Prof. Arnab Sen	Male	02/01/2020
Sandipan Ghosh	SVMVM	Prof. Arnab Sen	Male	01/01/2020
Sutapa Datta	UGC-NET	Prof. Arnab Sen	Female	01/01/2020
Sagarika Ray	UGC-NET	Prof. Arnab Sen	Female	6/02/2023
Puja Singh	CSIR –JRF	Dr. Jnan Bikash Bhandari	Female	-
Maitri Saha	University Fellowship	Dr. Jnan Bikash Bhandari	Female	-
Afsana Begum	SVMCM	Dr. Jnan Bikash Bhandari	Female	-
Prashan Kumar Chhetri	-	Dr. Jnan Bikash Bhandari and Dr. Cyaria Gurung	Male	16/12/2020
Subhas Kumar Gupta	-	Dr. Jnan Bikash Bhandari	Male	-

Name	Fellowship Name	Supervisor's Name	Gender	Date of Registration
Mr. Aaratrik Pal	UGC-NET JRF	Prof. Monoranjan Chowdhury	Male	01-01-2020
Miss. Keya Modak	UGC-SJSGC	Prof. Monoranjan Chowdhury	Female	02-01-2019
Mr. Kushankur Sarkar	CSIR UGC-NFSC	Prof. Monoranjan Chowdhury	Male	03-01-2020
Mr. Sandip Pramanik	WBSVMCM	Prof. Monoranjan Chowdhury	Male	-
Ashis Sarkar	UGC-NET- SRF	Dr. Swarnendu Roy	Male	01.01.2020
Mahima Misti Sarkar	UGC-NET-SRF	Dr. Swarnendu Roy	Female	01.01.2020
Biswanath Karmakar	SVMCM	Dr. Swarnendu Roy	Male	13.03.2021
Salman Haider	SVMCM	Dr. Swarnendu Roy	Male	02.01.2019
Dibakar Ghosh	DST-INSPIRE-JRF	Dr. Swarnendu Roy	Male	-
Raja Ghosh	UGC-NET-JRF	Dr. Swarnendu Roy	Male	-
Anindita Ghosh Basu	SVMCM	Dr. Swarnendu Roy	Female	-
Prabha Toppo	MANF UGC NET SRF	Dr Piyush Mathur	Female	02/01/2020
Rewaj Subba	CSIR-NET JRF	Dr Piyush Mathur	Male	13/03/2021
Divya Chouhan	UGC-NET SRF	Dr Piyush Mathur	Female	01/01/2020
Debamalla Pathak	UGC-NET JRF	Dr Piyush Mathur	Male	

#### Details of Project Scholar

Name	Project Name	Supervisor's Name	Gender	Date of Joining
Dr. Sujit Mondal	Herbarium Dizitalization Facility	Prof. Monoranjan Chowdhury	Male	02.09.2022

#### Details of PhD Scholars (Without Scholarship):

Name	Supervisor Name	Gender	Date of Registration
Pankaj Shil	Prof. (Dr.) Subhas Chandra Roy	Male	27 <sup>th</sup> January 2020
Moushikha Lala	Prof. Arnab Sen	Female	19/3/2019
Saroja Chettrri	Prof. Arnab Sen	Female	13/12/2018

Name	Supervisor Name	Gender	Date of Registration
Shukdeb Sarkar	Prof. (Dr.) Subhas Chandra Roy	Male	01.01.2020
Prashan Kumar Chhetri	Dr. Jnan Bikash Bhandari and Dr. Cyaria Gurung	Male	16/12/2020
Subhas Kumar Gupta	Dr. Jnan Bikash Bhandari	Male	-
Mrs. Deepika Chettri	Prof. Monoranjan Chowdhury	Female	04-12-2018
Mr. Dipayan Mitra	Prof. Monoranjan Chowdhury	Male	17-03-2021
Mr. Satyajit Sarkar	Prof. Monoranjan Chowdhury	Male	04-12-2018
Mrs. Roshni Chowdhury	Prof. Monoranjan Chowdhury	Female	18-09-2017

**Details of Seminar/Conferences /Webinar Attended:**

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Prof. Subhas Ch. Roy	2nd International Agrobiodiversity Congress, Use agrobiodiversity to transform food systems organized by: Bioversity International / CIAT / CGIAR / Italy Govt. Rome, Italy (Virtual mode)	15-18 November 2021	Origin of Black Rice from Wild rice ( <i>O. rufipogon</i> ) of India, (Black Rice Developed Through Interspecific Hybridization ( <i>O. sativa</i> x <i>O. rufipogon</i> )).
Prof. Arnab Sen	One-day National Seminar cum Workshop on Advanced bioinformatics Organized by Kurseong College	04/02/2022	Phytochemicals in Post-Covid era
Dr. Jnan Bikash Bhandari	National Webinar on “Think Green, Live Green” organized by IQAC and Durgapur Government College.	7.07.2021	-
Dr. Jnan Bikash Bhandari	‘Advance of Plant Science for Food Diversity and Nutritional Security’ organized by Dept. of Botany, University of North Bengal	30.09.2021-01.10.2021	‘Phytochemical evaluation and antioxidant activity of two sp. of <i>Pteris</i> from Darjeeling District’.
Dr. Jnan Bikash	National seminar on ‘Plant and	21.02.2022-	Attended under



Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Bhandari	Traditional Knowledge in the Himalayas and North-East India & Annual Conference of East Himalayan Society for Spermatophyte Taxonomy (EHHST) organized by Dept. of Botany, Rajiv Gandhi University	22.02.2022	'Phytochemical and Pigment analysis along with Antioxidant Properties of <i>Pteris</i> from Darjeeling District, W.B'.
Dr. Piyush Mathur	Invited lecture cum hands on workshop on "Bioinformatics: resources, tools and its application" at Zakir Husain Delhi College	19.07.2021-27.07.2021	Delivered a talk
Dr. Piyush Mathur	Workshop on "Microbes for Sustainable and Resilient Future" scheduled organized by organized by Delhi University Botanical Society (DUBS), Department of Botany, University of Delhi	6.12.2021-9.12.2021	Participated

**Details of Seminar/Conferences /Webinar Attended by Student:**

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Suyojna Tamang	Mucormycosis: The Black Fungus infection maiming COVID-19 patients in India	3rd June, 2021	Attended
Suyojna Tamang	Recent trends of climate change and its impact on mankind and it's biosphere	5 <sup>th</sup> June, 2021	Attended
Suyojna Tamang	Workshop on 'Application of Bioinformatics Tools in Agricultural Research'. , UBKV. Coochbehar.	20 <sup>th</sup> -30 <sup>th</sup> September, 2021	Attended
Suyojna Tamang	Genomics and Bioinformatics in High throughput Era. Dep of Botany, NBU	26 <sup>th</sup> -27 <sup>th</sup> March, 2022	Attended

<b>Name</b>	<b>Details of Seminars / Conferences / Webinar</b>	<b>Date</b>	<b>Title of the Paper Presented</b>
Subhrajyoti Saha	Workshop on ‘Application of Bioinformatics Tools in Agricultural Research’, UBKV. Coochbehar.	20 <sup>th</sup> -30 <sup>th</sup> September, 2021	Attended
Subhrajyoti Saha	Genomics and Bioinformatics in High throughput Era. Dep of Botany, NBU	26 <sup>th</sup> -27 <sup>th</sup> March, 2022	Attended
Kalyan Roy	Genomics and Bioinformatics in High throughput Era. Dep of Botany, NBU	26 <sup>th</sup> -27 <sup>th</sup> March, 2022	Attended
Praveen Mandal	Genomics and Bioinformatics in High throughput Era. Dep of Botany, NBU	26 <sup>th</sup> -27 <sup>th</sup> March, 2022	Attended
Ankita Roy	Workshop on ‘Application of Bioinformatics Tools in Agricultural Research’, UBKV. Coochbehar.	20 <sup>th</sup> -30 <sup>th</sup> September, 2021	Attended
Kalyan Roy	Workshop on ‘Application of Bioinformatics Tools in Agricultural Research’, UBKV. Coochbehar.	20 <sup>th</sup> -30 <sup>th</sup> September, 2021	Attended
Ritabrita Saha	Workshop on ‘Application of Bioinformatics Tools in Agricultural Research’, UBKV. Coochbehar.	20 <sup>th</sup> -30 <sup>th</sup> September, 2021	Attended
Praveen Mandal	Genomics and Bioinformatics in High throughput Era. Dep of Botany, NBU	26 <sup>th</sup> -27 <sup>th</sup> March, 2022	Attended
Sona Limboo	1 <sup>st</sup> National conference on Plant Genetic resources management.	22-24 Nov 2022	Agro-morphological characterization of 50 Local rice ( <i>O. sativa</i> L.) varieties and caryopsis ultrastructure of rice through Scanning electron microscopy.
Aparna Sarker	1 <sup>st</sup> National conference on Plant Genetic resources management.	22-24 Nov 2022	Morpho-physiological phenotyping of 15 different Local rice cultivars and its partial grain quality assessment related to

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
			nutrition.
Shukdeb Sarkar	Advancement of plant sciences for food diversity and nutritional security.	30/09/2021 to 01/10/2021	Geneyic Diversity analysis of Rice varieties( <i>O. sativa</i> L.) Based on agromorphological characterization.
Pankaj Shil	Advancement of plant sciences for food diversity and nutritional security.	30/09/2021 to 01/10/2021	Intra-specific hybridization in rice for the development of phenotypically photoinsensitive aromatic rice ( <i>O. sativa</i> L.)
Sutapa Datta	Assam Botanical Congress,2022	2022	Neem and Turmeric in the management of Covid Associated Mucormycosis (CAM) derived through network pharmacology
Soumita Bhattacharjee	Assam Botanical Congress,2022	2022	Biochemical and microbial profiling establish “Eu”(a traditional fermented beverage of Toto people) as a probiotic health drink
Puja Singh	‘Advance of Plant Science for Food Diversity and Nutritional Security’ organized by Dept. of Botany, University of North Bengal	30.09.2021 & 01.10.2021	Phytochemical evaluation and antioxidant activity of two sp. of <i>Pteris</i> from Darjeeling District.
Maitri Saha	‘Advance of Plant Science for Food Diversity and Nutritional Security’ organized by Dept. of Botany, University of North Bengal	30.09.2021 & 01.10.2021	-
Puja Singh	National seminar on ‘Plant and Traditional Knowledge in the Himalayas and North-East India & Annual Conference of East Himalayan Society for Spermatophyte Taxonomy (EHHST)’ organized by Dept. of Botany, Rajiv Gandhi University	21.02.2022 & 22.02.2022	Phytochemical and Pigment analysis along with Antioxidant Properties of <i>Pteris</i> from Darjeeling District, W.B.
Prashan	National seminar on ‘Plant	21.02.2022	Lead (Pb <sup>2+</sup> ) induced

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Kumar Chhetri	and Traditional Knowledge in the Himalayas and North-East India & Annual Conference of East Himalayan Society for Spermatophyte Taxonomy (EHHST)' organized by Dept. of Botany, Rajiv Gandhi University	& 22.02.2022	heavy metal stress response in <i>Christella dentata</i> (Forssk.) Brownsey & Jermy
Mr. Aaratrik Pal	National Seminar entitled "Advancement of Plant Sciences for Food Diversity and Nutritional Security", organised by Dept. Of Botany, University of North Bengal	30.09.2021 to 01.10.2021	"On the discovery of two new species of Linderniaceae"
Mr. Satyajit Sarkar	National Seminar entitled "Advancement of Plant Sciences for Food Diversity and Nutritional Security", organised by Dept. Of Botany, University of North Bengal	30.09.2021 to 01.10.2021	"Effectiveness of CTC Tea Wastes Organic Manure in <i>Abelmoschus esculentus</i> (L.): A preliminary study"
Mrs. Deepika Chettri	National Seminar entitled "Advancement of Plant Sciences for Food Diversity and Nutritional Security", organised by Dept. Of Botany, University of North Bengal	30.09.2021 to 01.10.2021	Quantitative Analysis of Ethnomedicines Used to Cure Cuts and Wounds by the Tea Garden Workers, Darjeeling Himalaya
Ms. Keya Modak	National Seminar entitled "Advancement of Plant Sciences for Food Diversity and Nutritional Security", organised by Dept. Of Botany, University of North Bengal	30.09.2021 to 01.10.2021	Attended
Ashis Sarkar	Advancement of plant sciences for food diversity and nutritional security' organized by 'The Department of Botany, NBU'	Sep. 30 to Oct 1, 2021	An assessment of bis phenol a toxicity in <i>Azolla pinata</i>

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Mahima Misti Sarkar	International Online Conference on Nano Materials (ICN 2021) Organized by Mahatma Gandhi University, P.D Hills P.O, Kottayam, Kerala, India & Wroclaw University of Technology, Wroclaw, Poland & Gdansk University of Technology, Poland & Wuhan University, China	09th to 11th April 2021	Synthesis, Characterization, and Evaluation of Salinity Stress Alleviating Properties of Silica Nanoparticles
Biswanath Karmakar	1. Advancement of plant sciences for food diversity and nutritional security' organized by 'The Department of Botany, NBU' 2. 'Virtual national conference on transforming trends in life sciences and health care' organized by NTTLH	1. Sep. 30 to Oct 1, 2021  2. 17 Nov. 2021	1. Optimization of the starch extraction process from foot yam ( <i>Amorphophallus paeoniifolius</i> ) using Response Surface Methodology  2. Optimization of extraction of Foot yam ( <i>Amorphophallus paeoniifolius</i> ) starch using Response Surface Methodology
Salman Haider	Advancement of plant sciences for food diversity and nutritional security' organized by 'The Department of Botany, NBU'	Sep. 30 to Oct 1, 2021	Application of functionalized iron oxide nanoparticles as micronutrient fertilizer in mulberry propagation
Dibakar Ghosh	1. Advancement of plant sciences for food diversity and nutritional security' organized by 'The Department of Botany, NBU' 2. 'Virtual national conference on transforming trends in life sciences and health care' organized by NTTLH	1. Sep. 30 to Oct 1, 2021  2. 17 Nov. 2021	1. Variable impacts and implications of Bisphenol-A toxicity on <i>Azolla-Spirodela</i> Interaction. 2. Evaluation of Bisphenol-A Toxicity on <i>Azolla-Spirodela</i> Interrelation.
Raja Ghosh	Advancement of plant	Sep. 30 to	Participation only

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
	sciences for food diversity and nutritional security' organized by 'The Department of Botany, NBU'	Oct 1, 2021	
Prabha Toppo	Virtual national conference 'Biodiversity and Biotechnology of Fungi' organized by 'Mycological Society of India'	Feb. 22 to 24, 2021	Isolation and identification of endophytic fungi associated with leaves of <i>Anisomeles indica</i> L. (an important medicinal plant)
	Advancement of plant sciences for food diversity and nutritional security' organized by 'The Department of Botany, NBU'	Sep. 30 to Oct 1, 2021	Evaluation of plant growth promoting parameters and screening for extracellular enzyme activities of endophytic fungi isolated from <i>Anisomeles indica</i> L. an important medicinal plant
Rewaj Subba	Advancement of plant sciences for food diversity and nutritional security' organized by 'The Department of Botany, NBU'	Sep. 30 to Oct 1, 2021	Sustainable utilization of bio-fungicides for the management of phytopathogenic fungi
Divya Chouhan	Advancement of plant sciences for food diversity and nutritional security' organized by 'The Department of Botany, NBU'	Sep. 30 to Oct 1, 2021	Comparative study of nanochitosan and nickel nanochitosan on combating foot rot of wheat and elicitation of nutritional value of wheat seedling.

#### Publications:

Name of the Author(s)	Publication Details
Roy SC, Chowdhury A	Comparative ultrastructure of caryopsis and leaf surface anatomy in wild rice <i>Oryza coarctata</i> and <i>O. rufipogon</i> through Scanning Electron Microscope (SEM). Open J Plant Sci 6(1): 030-041. 10.17352/ojps.000030 . 2021.
Karmakar, A., Sarkar, T., Chakraborty, P., Biswas, K. K., Saha, A. and Saha, D.	Genetic variability of <i>tomato leaf curl new delhi virus</i> infecting cucumber in sub-Himalayan plains in Eastern India. International Journal of Agricultural Technology, 17(2): 535-544. 2021
Subba R, Sharma B C and Saha A	Isolation and characterisation of phosphate solubilising bacteria from rhizospheric soil of orange trees of Darjeeling hills, India.

Name of the Author(s)	Publication Details
	Plant archives. 21(1): 915-920. 2021.
Mangar P, Barman P, Kumar A, <b>Saha A</b> and Saha D	Detection of Virulence Associated Genes and <i>in vitro</i> Gene Transfer From Aeromonas sp. Isolated From Aquatic Environments of SubHimalayan West Bengal. <i>Frontiers in Veterinary Science</i> , 9:887174. doi: 10.3389/fvets.2022.887174. 2022.
Ray A, Shaw N and <b>Saha A</b>	Substrate based mass production of mycorrhiza towards sustainable development in Plant - A Valuable Resource of Sustainable Agriculture, Food and Medicine <i>EDS</i> . Dwaipayana Sinha Rajendra Prasad De PP. 107-122. ABS BOOKS Delhi-110086. 2021.
Sarkar I, P Kar, G Sen, S. Chhetri, M Bhattacharya, S Bhattacharyya, <b>A Sen</b>	Metagenomic outlooks of microbial dynamics influenced by organic manure in tea garden soils of North Bengal, India. <i>Archives of Microbiology</i> . DOI: 10.1007/s00203-021-02635-6. )
Gueddou A, I Sarker, <b>A Sen</b> , F Ghodhbane-Gtari, D R Benson, J Armengaud, M Gtari	Effect of actinorhizal root exudates on the proteomes of <i>Frankia soli</i> NRRL B-16219, a strain colonizing the root tissues of its actinorhizal host via intercellular pathway. <i>Research in Microbiology</i> . DOI: <a href="https://doi.org/10.1016/j.resmic.2021.103900">https://doi.org/10.1016/j.resmic.2021.103900</a>
Nandi S, P Upadhyay, A Roy, A Dasgupta, <b>A Sen</b> , A Adhikary, K Acharya.	A natural derivative from ethnomedicinal mushroom potentiates apoptosis, autophagy and attenuates cell migration, via fine tuning the Akt signaling in human Lung Adenocarcinoma Cells (A549). <i>Environmental Toxicology</i> . <a href="https://doi.org/10.1002/tox.23377">https://doi.org/10.1002/tox.23377</a> .
Banerjee S, S Islam, A Chatterjee, <b>A Sen</b> and P Kar.	Synthesis of silver nanoparticles using underutilized fruit <i>Baccaurea ramiflora</i> (Latka) juice and its biological and cytotoxic efficacy against MCF-7 and MDA-MB 231 cancer cell lines. <i>South African J. Bot.</i> <a href="https://doi.org/10.1016/j.sajb.2021.09.016">https://doi.org/10.1016/j.sajb.2021.09.016</a> .
Bhattacharjee S, I Sarkar, P Kar, <b>A Sen</b> (2021).	Biochemical and microbial profiling establish “Eu” (a traditional fermented beverage of Toto people) as a probiotic health drink. <i>J Ethnic Food</i> <a href="https://doi.org/10.1186/s42779-021-00093-5">https://doi.org/10.1186/s42779-021-00093-5</a>
Naidoo D, P Kar, A Roy, T Mutanda, J Bwapwa, <b>A Sen</b> , A Anandraj	Structural insight into the binding of cyanovirin-N with the spike glycoprotein, Mpro and PLpro of SARS-CoV-2: protein-protein interactions, dynamics simulations and free energy calculations. <i>Molecules</i> <a href="https://doi.org/10.3390/molecules26175114">https://doi.org/10.3390/molecules26175114</a> .
Banerjee S, Kar P, Sarkar I, Chhetri A, Mishra DK, Dutta A, Kumar A, Sinha B, <b>Sen A</b>	Structural elucidation and chemical characterization of underutilized fruit silverberry ( <i>Elaeagnus pyriformis</i> ) silver nanoparticles playing a dual role as anti-cancer agent by promoting apoptosis and inhibiting ABC transporters. <i>South African J. Bot.</i> <a href="https://doi.org/10.1016/j.sajb.2021.06.029">https://doi.org/10.1016/j.sajb.2021.06.029</a> .
Kar P, Banerjee S, Chhetri A, <b>Sen A</b>	Synthesis, physicochemical characterization and biological activity of synthesized Silver and Rajat Bhasma nanoparticles using medicinally important Clerodendrum inerme. <i>Journal of</i>

Name of the Author(s)	Publication Details
	<i>Phytology</i> . 13: 64-71. DOI:https://doi.org/10.25081/jp.2021.v13.7026
Sarkar I, G Sen, M Bhattachariya, S Bhattacharyya and A Sen	<i>In silico</i> inquest reveals the efficacy of Cannabis in the treatment of Post-Covid-19 related neuro-degeneration. <i>Journal of Biomolecular Structure and Dynamics</i> , https://doi.org/10.1080/07391102.2021.1905556.
Lunghi P, S Bhattacharjee, R Labar, A V Singh, C Ghosh, AP Das, A Sen	'Bitter the Better' – A comprehensive evaluation of pharmacological compounds in the bitter tea Phalap-khah of the Tangsa tribe in Arunachal Pradesh (India). <i>J. Botanical Soc. Ben.</i> 76(2) : 62-69.
Bhattacharya S, C Ghosh, A Sen, M Lala	Characterization of <i>Firmania colorata</i> (Roxb.) leaf extract and its silver nanoparticles reveal their Antioxidative, Anti-microbial, and Anti-inflammatory properties.
Sarkar I, G Sen, MA Ali, SM Almutairi, J Lee, A Sen	Detection of the peptidyl epitope for vaccine development against MPV. <i>Journal of King Saud University-Science</i> . doi: 10.1016/j.jksus.2022.102458.
Fernandes I, OS Paulo, I Marques, I Sarkar, A Sen, I Graça, K Pawlowski, JC. Ramalho, AI. Ribeiro-Barros	Salt stress tolerance in <i>Casuarina glauca</i> : insights from the branchlets transcriptome. <i>Plants</i> DOI: 10.3390/plants11212942
Banerjee, S., Kar, P., Islam, R., Naidoo, D., Roy, A., Sarkar, I., Sen, G., Saha, T., Yasmin, H. and Sen, A.	Synthesis of silver nanoparticles from secondary metabolites of star gooseberry fruit ( <i>Phyllanthus acidus</i> ) and their nephroprotective efficiency. <i>South African Journal of Botany</i> , 151, pp.385-395. DOI: 10.1016/j.sajb.2022.10.021
Kar, P., Banerjee, S., Saleh-E-In, M. M., Anandraj, A., Kormuth, E., Pillay, S., ... & Choi, Y. E.	$\beta$ -sitosterol conjugated silver nanoparticle-mediated amelioration of CCl4-induced liver injury in swiss albino mice. <i>Journal of King Saud University-Science</i> , 102113. DOI: 10.1016/j.jksus.2022.102113
Sarkar I, G Sen, S Bhattacharyya, M Gtari, A Sen	Inter-cluster competition and resource partitioning may govern the ecology of <i>Frankia</i> . <i>Archives of Microbiology</i> . DOI: 10.1007/s00203-022-02910-0
Kar P, Saleh-E-In MM, Jaishee N, Anandraj A, Kormuth E, Vellingiri B, Angione C, Rahman PKSM, Pillay S, Sen A, Naidoo D, Roy A, Choi	Computational profiling of natural compounds as promising inhibitors against the spike proteins of SARS-CoV-2 wild type and the variants of concern, viral cell-entry process, and cytokine storm in COVID-19. <i>J Cell Biochem</i> . DOI: 10.1002/jcb.30243



Name of the Author(s)	Publication Details
YE.	
Lala M, S Bhattacharya, A Sen, I Sarkar	<i>In-silico</i> studies on wild orange ( <i>Citrus macroptera</i> Mont.) compounds against COVID-19 pro-inflammation targets. <i>Journal of Biomolecular Structure and Dynamics</i> , DOI:10.1080/07391102.2022.2051744.
Datta S, I Sarkar, G Sen and A Sen.	Neem and Turmeric in the management of Covid associated Mucormycosis (CAM) derived through network pharmacology. <i>Journal of Biomolecular Structure and Dynamics</i> , <a href="http://dx.doi.org/10.1080/07391102.2022.2048077">http://dx.doi.org/10.1080/07391102.2022.2048077</a>
Sen G, I Sarkar, S Chettri, P Kar, A Roy, A Sen, M Bhattacharya	Rhizospheric soil metabarcoding analysis of <i>Alnus nepalensis</i> from Darjeeling hills reveals the abundance of nitrogen-fixing symbiotic microbes. <i>J Forest Res</i> . DOI: : 10.1080/13416979.2022.2037813
Sarkar I, A Sen	Niche adaptation of <i>Frankia</i> do not drastically influence their metabolic profiling. <i>J Forest Res</i> . <a href="http://dx.doi.org/10.1080/13416979.2022.2028707">http://dx.doi.org/10.1080/13416979.2022.2028707</a> .
Dey M. and Bhandari J. B.	Diversity and Ethnomedicinal Pteridophytes of Jalpaiguri District West Bengal, India. <i>Indian Fern J</i> . Vol. 39, Issue 1, pp- 100-114, 2022
Singh P and Bhandari J.B.	Phytochemical evaluation and antioxidant properties of two species of Pteris L. from Darjeeling District of West Bengal, India. <i>Pleione</i> , Vol. 16, Issue 2, pp- 166-174, 2022
Saha M. and Bhandari J. B.	Comparative Preliminary Screening of Heavy Metal Tolerant Rhizobacteria Isolated from the Two Ferns <i>Tectaria coadunata</i> (J. Sm.) C. Chr. And <i>Phymatosorus cuspidatus</i> (D. Don) Pic. Serm. Of Darjeeling District, <i>Indian Fern Journal</i> , Vol. 39, Issue 2, pp. 217-221, 2022
K Modak, M Chowdhury	Morphological study of <i>Nyctanthes arbor-tristis</i> L. fruit and seed in different growth stages, <i>Plant Science Today</i> 8 (4), 778–785, 2021
A Pal, MM Sardesai, M Chowdhury	Transfer of <i>Torenia gracilis</i> Benth. to <i>Bonnaya</i> as <i>Bonnaya gracilis</i> sp. nov. (Linderniaceae), <i>Nordic Journal of Botany</i> , 39 (8), 2021
P Paul, M Chowdhury	Foliar micromorphology as a tool for identification of Indian taxa of Polygonaceae, <i>Journal of Asia-Pacific Biodiversity</i> , 14 (4), 569-589, 2021
A Pal, M Chowdhury	<i>Torenia siliguriensis</i> (Linderniaceae), a new species from India, <i>Annales Botanici Fennici</i> , 58 (4-6), 237-241, 2021
DMallick, S Dasgupta, P Paul, S Mondal, A Pal, &M Chowdhury	Diversity of Arboreal Spermatophytes in three MPCAs of India: With Special Reference to West Bengal, <i>Indian Forester</i> , 147(12), 1145-1154, 2021

Name of the Author(s)	Publication Details
Chowdhury, R, Chowdhury, A & <b>Chowdhury, M</b>	Taxonomic identity and distributional record of <i>Syngonium podophyllum</i> Schott., in naturalized condition from India. <i>International Journal of Current Research</i> . 13. 10.24941/ijcr.41088.04.2021, 2021
Sarkar A, Gogoi N, <b>Roy S</b>	Bisphenol-A incite dose-dependent dissimilitude in the growth pattern, physiology, oxidative status, and metabolite profile of <i>Azolla filiculoides</i> , <i>Environmental Science and Pollution Research</i> , Vol. 29, Issue 60, pp. 91325-91344, 2022.
Chakraborty R, <b>Roy S</b> , Chellappan DR, Mandal V	In vivo and network pharmacological analysis of the antidiabetic and antihyperlipidemic metabolites of <i>Litsea cubeba</i> fruits, <i>South African Journal of Botany</i> , Vol. 149, pp. 516-529, 2022.
<b>Mathur P, Roy S</b> , Mukherjee S	Hydrogen sulphide (H <sub>2</sub> S) in the hidden half: Role in root growth, stress signalling and rhizospheric interactions, <i>Plant Biology</i> , Vol. 24, pp. 559-568, 2022.
Karmakar B, Miya FU, Chakraborty R, <b>Roy S</b>	Comparative analyses of the starch quality isolated from a local red potato and a commercial non-pigmented potato cultivar, <i>Vegetos</i> , Vol. 35, pp. 723-735, 2022.
<b>Roy S</b> , Chakraborty AP, Chakraborty R	Understanding the potential of root microbiome influencing salt-tolerance in plants and mechanisms involved at the transcriptional and translational level, <i>Physiologia Plantarum</i> , Vol. 173, pp. 1657-1681, 2021.
Chakraborty R, <b>Roy S</b>	Angiotensin-converting enzyme inhibitors from plants: A review of their diversity, modes of action, prospects, and concerns in the management of diabetes-centric complications, <i>Journal of Integrative Medicine</i> , Vol. 19, pp. 478-492, 2021.
Paul B, Sarkar A, <b>Roy S</b>	Appraising the stress responses in <i>Azolla filiculoides</i> elicited by short-term exposure of phenol, <i>Plant Stress</i> , Vol. 2, pp. 100032, 2021.
<b>Roy S, Mathur P</b>	Delineating the mechanisms of elevated CO <sub>2</sub> mediated growth, stress tolerance and phytohormonal regulation in plants, <i>Plant Cell Reports</i> , Vol. 40, pp. 1345-1365, 2021.
<b>Mathur P, Roy S</b>	Insights in to the plant responses to drought and decoding the potential of root associated microbiome for inducing drought tolerance, <i>Physiologia Plantarum</i> , Vol. 172, pp. 1016-1029, 2021.
Kundu C, Rai B, Subba R, <b>Mathur P</b>	Disease Management in Brassicaceae family through various biocontrol agents: A review. <i>NBU Journal of Plant Sciences</i> 2021

**Research Projects Details:**

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Herbarium Dizitalization Facility (HDF)	NBU	2022	1 year	6,70,000	Prof. Monoranjan Chowdhury
	NBU	2021	1 Year	1,50,000	Dr. Swarnendu Roy
Identification and Characterization of Endophytic Fungi Associated with Important Medicinal Plant of North Bengal Region	NBU	2021	1 Year	1,50,000	Dr. Piyush Mathur

**Placement Details:**

<b>Name of the Student</b>	<b>Name of the Employer</b>
Mr. Biswajit Paul, M.Sc.(Research assistant), 2022	Regional Ayurveda research institute for drug development, Gwalior, MP.
Dr. Hrishikesh Mandal, Ph.D. (Block epidemiologist). 2022	CMOH, Uttar Dinajpur, Govt. of West Bengal.
Dr. Arnab Saha, Ph.D. (Technical officer, NVHCP), 2022	North Bengal Medical college, Siliguri, W.B.
Mrs. Arkamita Das, M.Sc. (Public Health Manager), 2022	CMOH, Malda, Govt. of West Bengal.
Dr. Payel Paul	North Bengal St. Xavier's College, Rajganj - 735134, Dist. Jalpaiguri, West Bengal, INDIA

**Miscellaneous Events:**

The Department of Botany in collaboration with UGC-Human Resource Development Center, University of North Bengal has organized TWO DAYS NATIONAL SEMINAR (ONLINE MODE) on “Advancement of Plant Sciences For Food Diversity and Nutritional Security” held on 30th September, 2021 and 1st October, 2021

## DEPARTMENT OF CHEMISTRY

### About the Department:

The Department of Chemistry, University of North Bengal was established in 1963 and presently provides M. Sc., M. Phil and Ph. D. Programmes. The academic programmes are so designed as to enable the students to acquire a good understanding of classical Chemistry as well as its latest developments.

The Department was selected by the UGC for Special Assistance Programme (SAP) under Departmental Research Support (DRS) category. The Department has also received assistance from the Department of Science and Technology under its FIST programme.

The Department is well equipped with modern instruments for conducting advanced research. With a blend of experienced and young teachers, the Department is serving the students quality education in addition to innovative research activities.

### Courses Offered:

- M. Sc.
- Ph. D.

### Research Focus:

- Solution thermodynamics
- Supramolecular Assembly
- Nanoparticles
- Magnetic and spintronic applications
- Synthesis of functionalized heterocycles
- Metal catalyzed directed C-H bond activation
- Metal free C-H bond functionalization
- Catalysis
- Molecular Recognition
- Natural Product Synthesis
- Electro and photocatalyzed hydrogen evolution reaction with first row transition metal based molecular catalysts
- Ru-catalyzed C(*sp*<sup>3</sup>)-H hydroxylation, halogenation and azidation
- Electrocatalyzed oxidative functionalization of olefins
- Synthesis of Functional Models
- Synthesis of Biocidal Compounds
- Computer Assisted Drug Design

### Sophisticated Instrument/Equipment:

- NMR ( 300 MHz/ 400 MHz)

- Fluorescence Spectrometer
- Glove Box
- HPLC
- DSC
- Particle Size Analyzer
- Gas Chromatography
- Atomic Absorption Spectrometer

#### Faculty Details:

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Sudhir Kr. Das	Ph. D.	Asst. Professor	sudhirkumardas@nbu.ac.in
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Satyapriya Bhandari	Ph. D.	DST-Inspire Faculty	satyapriya@nbu.ac.in

#### Details of Officers:

Name	Qualification	Designation	Email
Mayukh Deb	Ph. D.	Micro-Analyst.	microanalyst@nbu.ac.in
Gautam Gope	Ph. D.	Electro Instrumentation Officer	instofficer@nbu.ac.in
Prajnamita Dasgupta	Ph. D.	Scientific Officer	scientificofficer@nbu.ac.in

#### Details of Non-Teaching Staff:

Name	Qualification	Designation
Gurucharan Roy	VIII	Laboratory Attendant, Gr. II
Hiralal Tigga	VIII	Senior Peon

Name	Qualification	Designation
Yogendra Mandal	VIII	Laboratory Attendant, Gr. III
Subrata Roy	B.Sc. & B.Sc. (Hons.)	Technical Assistant, Gr. I
Dhruba Jyoti Roy	M.Sc.	Technical Assistant, Gr. I
Samit Mozumder	B.Sc.	Technical Assistant, Gr. I
Amit Sarkar	B.Sc.	Technical Assistant, Gr. I
Dhajen Ch. Singha	VIII	Senior Peon
Narayan Paul	M.A (Double)	Office Assistant (Contractual)

#### Details of Research Scholars:

Name	Fellowship Name	Supervisor's Name	Gender
Soumik Das	NET-JRF.	Prof. A. Misra	M
Sriparna Roy	NET-JRF	Prof. A. Misra	F
Prokash Ghosh	University Fellow	Prof. A. Misra	M
Shatarupa Basak	CSIR –SRF	Prof. M. N. Roy	F
Salim Ali	CSIR –SRF	Prof. M. N. Roy	M
Modhusudan Mandal	UGC-SRF	Prof. M. N. Roy	M
Kangkan Mallick	UGC-JRF	Prof. M. N. Roy	M
Priyanka Roy	UGC-JRF	Prof. M. N. Roy	F
Mantu Dey	UGC-JRF	Prof. M. N. Roy	M
Doli Roy	UGC-JRF	Prof. M. N. Roy	F
Ankita Shome	UGC-JRF	Prof. M. N. Roy	F
Manishita Nandi	CSIR, JRF	Prof. P. Ghosh	F
Sharmistha Das	State JRF	Prof. P. Ghosh	F
Pranesh Rai	SVMCM	Prof. B. Sinha	M
Anmol Chettri	CSIR –JRF	Prof. B. Sinha	M
Sudarshan Pradhan	SVMCM	Prof. B. Sinha	M
Pritika Gurung	SVMCM	Prof. B. Sinha	F
Debadrita Roy	SVMCM	Prof. B. Sinha	F
Shreya Mahato	SVMCM	Prof. B. Biswas	F
Rajani Kanto Mahato	WB State Fellowship	Prof. B. Biswas	M
SubhajitSaha	UGC-JRF	Prof. B. Biswas	M
Subhankar Kundu	SVMCM	Prof. B. Biswas	M
NilankarDiyali	SVMCM	Prof. B. Biswas	M
Meena Chettri	UGC -SJPFSGC	Prof. B. Biswas	F
Ananya Debnath	SVMCM	Prof. B. Biswas	F
Anirban Mandal	UGC-SRF	Prof. S. Das	M
Kingkar Ghosh	SVMCM	Dr. Kinkar Biswas	M
Mans Mahato	SVMCM	Dr. S. K. Das	M
Tuhina Sultana	SVMCM	Dr. S. K. Das	F
Najmin Tohora	SVMCM	Dr. S. K. Das	F
Sabbir Ahamed	SVMCM	Dr. S. K. Das	F

Name	Fellowship Name	Supervisor's Name	Gender
Arindam Das	JRF-State Fellow	Dr. Md. F. Hossain	M
Sovan Dey	CSIR –JRF	Dr. Md. F. Hossain	M
Sandip Ghosh	SVMCM	Dr. Md. F. Hossain	M
KrishnenduParamanik	CSIR –JRF	Dr. H S Das	M
Gayetri Sarkar	SVMCM	Dr. H S Das	F
SoumenKuila	DST-INSPIRE	Dr. J Nanda	M
SukanthaDey	SERB-SRG	Dr. J Nanda	M
Aniruddha Paik	WBSCST	Dr. S. Rana	M
Sabarni Paul	DST-Inspire	Dr. S. Rana	F
Kaushik Sarkar	UGC-JRF	Dr. R. K. Das	M
Deboshmita Mukherjee	SVMCM	Dr. R. K. Das	F
Dilip Sarkar	SVMCM	Dr. R. K. Das	M
SahinReja	SVMCM	Dr. R. K. Das	M

#### Details of Project Scholar:

Name	Project Name	Supervisor's Name	Gender	Date of Joining
Sangharaj Diyali	Design and synthesis of coordination-driven hydrogen evolution reaction (HER)	Dr. B. Biswas	M	07-05-2021
Nilaj Bandopadhyay	SERB-EMEQ (EEQ/2019/000374)	Dr. H. S.Das	M	10.12.2019

#### Details of PhD Students (Without Fellowship):

Name	Supervisor Name	Gender	Date of Registration
Aritra K Nandi	Prof. S. Das	M	04. 12. 2020
Tapas Das	Prof. S. Das	M	17. 12. 2020
Gautam Chhetri	Prof. S. Das	M	30. 12. 2021
Sanjay Roy	Prof. S. Das	M	Pending
Arun Hajra	Prof. S. Das	M	Pending
Subrata Basak	Dr. Kinkar Biswas	M	Pending
Ziaur Rahman	Dr. S. K. Das	M	02-00-2020
Madan Rajbanshi	Dr. S. K. Das	M	02.01.2019
Pallobi Sarkar	Dr. S. K. Das	F	02.01.2019
Anupama Rani Das	Dr. S. K. Das	F	14.02.2022
SouvikChatterjee	Dr. Hari Sankar Das	M	12.03.2021

Name	Supervisor Name	Gender	Date of Registration
Chanchal Kr. Pal	Dr. Bhaskar Biswas	M	22-01-2020
Suvojit Roy	Dr. Bhaskar Biswas	M	02-12-20
Subham Mukherjee	Dr. Bhaskar Biswas	M	13-05-22
Dhruba Jyoti Roy	Prof. Biswajit Sinha	M	19-03-2019
Uttam Kumar Singha	Prof. Biswajit Sinha	M	27-11-2020
Subhankar Paul	Prof. P Ghosh	M	10/02/2022
Passang Tshering Lepcha	Prof. P Ghosh	M	12/03/2021
Kumaresh Datta	Prof. P Ghosh	M	01/02/2020
Tandra Kundu	Prof. P Ghosh	F	02/01/2019
Koushik Chakraborty	Prof. P Ghosh	M	10/02/2022
Aminul Islam	Prof. P Ghosh	M	04/01/2019
Lokesh Rai	Dr. Sujoy Rana	M	Not yet done

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars/Conferences / Webinar	Date	Title of the Paper Presented
Dr. Hari Sankar Das	One day National Seminar on “Women Scientist in Chemical Science” Organised by Chemical Research Society of India North Bengal Local Chapter, West Bengal in collaboration with Department of Chemistry, University of North Bengal	05.11.2020	<i>Convener</i>
Prof. Anirban Misra	Theoretical Chemistry Symposium	December 2021	
PROF. BISWAJIT SINHA	Wiley Webinar on “Winning the game of publishing research papers, raising your profile, and extending the impact of your publications’ organized by Research Marketing APAC.	07-09-2021	<i>Attended</i>
Dr. Jayanta Nanda	International Conferences (virtual Mode) ‘Advanced Materials for Better Tomorrow (AMBT 2021)’, organised by Society for Interdisciplinary Research in Materials and Biology, IIT-BHU	13.07.2021	<i>Amino-acid and Short-peptide Based Functional Materials</i>
Prof. Mahendra Nath Roy,	12 <sup>th</sup> International Conference on PHARMACEUTICAL CHEMISTRY & 2 <sup>nd</sup> EUROPEAN PATHOLOGY CONGRESS at	2019	<i>Study to explore subsistence of host-guest</i>



Name	Details of Seminars/Conferences / Webinar	Date	Title of the Paper Presented
	Berlin, Germany		<i>inclusion complexes of significant drug molecules with <math>\alpha</math> and <math>\beta</math>-cyclodextrins and their applications in pharmaceutical science</i>
Prof. Mahendra Nath Roy, FRSC (London)	The Indian Chemical Society at Pt. Rabishankar Shukla University, Raipur	2020	<i>Enhancement of Fire Resistivity &amp; Conversion into Bio-Degradable Pollutant to Minimize Environmental Pollution Explored by Physicochemical Contrivance</i>
Prof. Mahendra Nath Roy, FRSC (London)	International Conference on Chemistry for Human Development (ICCHD-2020)	2020	<i>Probing Host-Guest Inclusion Complexes of Significant Drug Molecules with Cyclodextrins for enhancing Innovative Applications.</i>
Prof. Mahendra Nath Roy, FRSC (London)	International Conference on COVID-19 Causes, Effect and Controlling Management at Alipurduar University	2021	<i>Paper on COVID-19</i>
Prof. Mahendra Nath Roy, FRSC (London)	Causes of Diverse Environmental Pollution and their Remedial Measures at Alipurduar University	2020	<i>Application of Nanoparticles for reducing Environmental Pollution</i>
Prof. Mahendra Nath Roy, FRSC (London)	International Conference on “ <b>Advances in Plants, Microbes and Agricultural Sciences</b> ” in Department of Botany, NBU.	2022	<i>Assembly Of A Thermoplastic Polymer (Bpa) With B-Cyclodextrin As The Controlled Release Complex</i>

Name	Details of Seminars/Conferences / Webinar	Date	Title of the Paper Presented
			<i>For Diminishing Environmental Hazards</i>
Prof. Mahendra Nath Roy, FRSC (London)	FAT-2022, (Food, Science and Technology) Paris, France	2022	<i>Inclusion of an antiplatelet agent inside into <math>\beta</math>-cyclodextrin for biochemical applications with diverse authentications</i>
Dr. R.K. Das	International Conference entitled “Recent innovations and modern advancements in the field of pharmaceutical technology” organized by SCPM College of Pharmacy HaripurGonda in association with Indian Pharma Education Society.	30.05.2021	<i>“Role of Various Descriptors in Drug Design”</i>
Dr. R.K. Das	International Conference on the title DFT Tools and Protocols for Drug Design, organized by Expert Pharmacy Association	16.05.2021	<i>Modern techniques in Drug Design</i>
Dr. S. Bhandari	<i>A one day State Level Webinar 2021 (Sep); Recent Trends in Chemistry,</i> Prabhat Kumar College, Contai, West Bengal.	<b>2021</b> (Sep)	<i>Thinking Big Working Small: Nanoscience &amp; Nanotechnology,</i>
Dr. S. Bhandari	<i>Nanoinformatics for Biomedical Applications (NBA-2021),</i> Indian Institute of Information Technology Allahabad, Deoghat, Jhalwa, Prayagraj, Uttar Pradesh, India. <i>A one day State Level Webinar,</i>	<b>2021</b> (Aug)	<i>Luminescence of Quantum Dots for Biomedical Applications.</i>
Dr. S. Bhandari	Department of Chemistry, Mugberia Gangadhar Mahavidyalaya, Bhupatinagar, East Midnapur, West Bengal, India	<b>2021</b> (June)	<i>The Impact of Nanotechnology in Our Lives.</i>
Dr. Sujoy Rana	Three Day International Webinar on “Recent Advances in Condensed Matter and Materials Science” Organized by Department of Chemistry and Physics Cooch Behar Panchanan Barma University, Cooch Behar-736101	12/08/2021 to 14/08/2021	<i>Bio-inspired Synthetic Models for C-H and Olefin Functionalization</i>

**Publications:**

Name of the Author(s)	Publication Details
<b>Prof. Mahendra Nath Roy</b>	
<b>M N Roy</b> , N Roy, P Bomzan, B Ghosh,	A Combined Experimental and Theoretical Study on p-Sulfonatothiocalix [4] arene Encapsulated Sulisobenzone
<b>M N Roy</b> , S Basak, S Sikdar, S Ali, M Mondal,	Green synthesized copper assisted iron oxide nanozyme for the efficient elimination of industrial pollutant via peroxodisulfate activation
<b>M N Roy</b> , S Ali, S Sikdar, S Basak, M Mondal, K Mallick, MS Haydar, S Ghosh,	Assemble multi-enzyme mimic tandem Mn <sub>3</sub> O <sub>4</sub> @ g-C <sub>3</sub> N <sub>4</sub> for augment ROS elimination and label free detection
<b>M N Roy</b> , B Ghosh, N Roy, D Roy, S Mandal, M Mondal, VK Dakua,	Exploring inclusion complex of an antithyroid drug (PTU) with $\alpha$ -Cyclodextrin for innovative applications by physicochemical approach optimized by molecular docking
<b>M N Roy</b> , S Majumder, A Sinha, D Roy, B Ghosh, NN Ghosh, T Ray,	Exploration of Diverse Interactions of L-Methionine in Aqueous Ionic Liquid Solutions: Insights from Experimental and Theoretical Studies
<b>M N Roy</b> , A Sharma, P Bomzan, D Roy, A Chhetri, S Choudhury,	Molecular Assembly of Rhodanine with Torus-Shaped Cyclodextrins and Their Innovative Applications by Physicochemical Contrivance Simultaneously Optimized by Computational Study
<b>M N Roy</b> , B Ghosh, N Roy, S Mandal, S Ali, P Bomzan, D Roy, M Salman Haydar,	Host–Guest Encapsulation of RIBO with TSC4X: Synthesis, Characterization, and Its Application by Physicochemical and Computational Investigations
<b>M N Roy</b> , M Mondal, S Basak, S Ali, D Roy, MS Haydar, K Sarkar, NN Ghosh, K Roy,	Assembled Bisphenol A with cyclic oligosaccharide as the controlled release complex to reduce risky effects
<b>M N Roy</b> , B Rajbanshi, K Das, D Roy, S Saha, MN Roy	Exploring 2: 1 inclusion complexes of cyclodextrins and antispasmodics, Alverine citrate for enhancing bioavailability and sustained discharge
<b>M N Roy</b> , P Bomzan, N Roy, B Ghosh,	Exploring inclusion complexes of amino acids with p-sulfonatothiocalix [4] arene by experimental and computational approach
<b>M N Roy</b> , S Ali, S Sikdar, S Basak, D Roy, D Das, MS Haydar, NN Ghosh, K Roy	Intrinsic Light-Activated Oxidase Mimicking Activity of Conductive Polyaniline Nanofibers: A Class of Metal- Free Nanozyme
<b>M N Roy</b> , P Bomzan, N Roy, B Ghosh,	Exploring inclusion complexes of amino acids with p-sulfonatothiocalix [4] arene by experimental and computational approach
<b>M N Roy</b> , PS Sikdar, P De, F Alam, B Ghosh, S Ali, A Hossain, A Sharma, P Bomzan,	Investigation of Solution Behaviour of Potassium Halides in Aqueous Solution of L-Proline at Different Temperatures: A Physicochemical Approach
<b>M N Roy</b> , T Ray, D Ekka, MC Roy, S Barman, D Roy, PK Roy, A Upadhyay	A Physicochemical Approach to Explore the Host Guest Inclusion Complex of - Cyclodextrin with an Ionic Liquid ([C <sub>4</sub> mpy]Cl) in Aqueous Media

Name of the Author(s)	Publication Details
M N Roy, H Rahaman, N Roy, A Roy, S Ray, B Saha, S Debnath, M Kundu,	Host-Guest Inclusion Complex of $\beta$ -Cyclodextrin of a Biologically Active Compound with the Manifestation of Diverse Interactions: An Advanced Study Approach
M N Roy, S Saha, S Barman, D Roy, A Datta, D Biswas, K Roy, VK Dakua, S Basak,	Study about Encapsulation of Vitamin C into $\beta$ -Cyclodextrin: An Approach towards Advancement and Regulatory Release
M N Roy, S Ali, S Sikdar, S Basak, D Roy, VK Dakua, P Adhikary,	High Visual Colorimetric Determination of F-Ions by Exploiting the Inhibition of Oxidase Mimicking Activity of FeMnO <sub>4</sub> @ GQD Nanocomposite
M. N. Roy, D. Das, D. Chouhan, D. Roy V. K. Dakua, R. Chakrabarty, J. Das, K. Roy, A. Barman, P. Mandal, S. Sikdar.	Synthesis, characterization, and applications with the manifestation of antifungal activity and seed germination properties of nickel doped zinc oxide nano platform by biochemical contrivance
M N Roy, V. Rai, S. V. Pogu, R. Bhatnagar, P. Bomzan, A. Dutta, A. Mandal, A. Kumar, S. Ghosh	Biological evaluation of a natural steroid ester, Stigmasta-5 (6), 22 (23)-dien-3-beta-yl acetate isolated from the Himalayan herb Astilbe rivularis as potential antitumor agent
M N Roy, S. Ali.	Synthesis of $\beta$ -Cyclodextrin Grafted Rhombohedral-CuO Antioxidant Nanozyme for Detection of Dopamine and Hexavalent Chromium through off-on Strategy of Peroxidase Mimicking activity
M. N. Roy, S. Ray, N. Roy, B. K. Barman, P. Karmakar, P. Bomzan, B. Rajbanshi, V. K. Dakua, A. Dutta, A. Kumar	Synthesis and Characterization of an Inclusion Complex of DL- Aminoglutethimide with $\beta$ -Cyclodextrin and Its Innovative Application in a Biological System: Computational and Experimental Investigations
M N Roy, P. Bomzan, N. Roy, V. Rai, D. Roy, S. Ghosh, A. Kumar, K. Roy, R. Chakrabarty, J. Das, V. Kumar Dakua, K. Basnet	Inclusion of an antiplatelet agent inside into $\beta$ -cyclodextrin for biochemical applications with diverse authentications
M. N. Roy, D. Das, S. Ali, B. Rajbanshi, S. Ray, S. Barman, D. Chouhan S. Haydar, P. Mandal, K. Roy	Investigation of Synthesis of Biogenic Hematite Nanocubes for environmental Assessment and its innovative Applications associated with Antibacterial, Antifungal, and antioxidant activity
M. N. Roy	Physicochemical and Biological Investigations of Inclusion complex of Tertiary Leucine with Cyclic oligosaccharides Pervading in Liquid Environments
M N Roy, B Ghosh, A Sinha, N Roy, B Rajbanshi, M Mondal, D Roy, A Das	Molecular Interactions of Some Bioactive Molecules Prevalent in Aqueous Ionic Liquid Solutions at Different Temperatures Investigated by Experimental and Computational Contrivance
M N Roy, P. Karmakar, D. Das, B. Rajbanshi, D. Roy, S. Ray, N. N. Ghosh, A. Roy, S. Ghosh, D. Ekka, A. Sharma	Physicochemical and computational investigations of some food chemicals prevalent in aqueous 1-butyl-1-methyl-pyrrolidinium chloride solutions with the manifestation of solvation consequences
M N Roy, S. Majumder, L. Sarkar,	Subsistence of Assorted Molecular Interactions of

Name of the Author(s)	Publication Details
M. Mondal, D. Roy, K. Roy, A. Barman, N Roy	Substantial Amino Acids Prevalent in Aqueous Solutions of Ionic Liquid (TBMS) Probed by Experimental and Computational Investigations
<b>M N Roy</b> , M Mondal, S Basak, D Roy, S Saha, B Ghosh, S Ali, NN Ghosh, A Dutta, A. Kumar,	Cyclic oligosaccharides as controlled release complexes with food additives (TZ) for reducing hazardous effects
<b>M N Roy</b> , S Ali, S Sikdar, S Basak, B Rajbanshi, M Mondal, D Roy, A Dutta, A Kumar, V. K. Daku, R. Chakrabarty, A. Roy, A. Barman, A. Datta, P. K. Roy, Chakraborty,	$\beta$ -Cyclodextrin-Stabilized Biosynthesis Nanozyme for Dual Enzyme Mimicking and Fenton Reaction with a High Potential Anticancer Agent
<b>Prof. Pranab Ghosh</b>	
Singha, R., Islam, A. & <b>Ghosh, P.</b>	One-pot three-component tandem annulation of 4-hydroxycoumarine with aldehyde and aromatic amines using graphene oxide as an efficient catalyst. <i>Sci Rep</i> 11, 19891 (2021). <a href="https://doi.org/10.1038/s41598-021-99360-3">https://doi.org/10.1038/s41598-021-99360-3</a>
Singha, R., Chettri, S., Brahman, D. Sinha, B., <b>Ghosh, P.</b>	Environmentally benign approach towards C–S cross-coupling reaction by organo-copper (II) complex. <i>Mol Divers</i> (2021). <a href="https://doi.org/10.1007/s11030-020-10180-5">https://doi.org/10.1007/s11030-020-10180-5</a>
G. C. Pariyar and <b>P. Ghosh</b>	Enzyme-catalyzed synthesis of bioactive heterocycles, <i>Physical Sciences Reviews</i> , <a href="https://doi.org/10.1515/psr-2021-0103">https://doi.org/10.1515/psr-2021-0103</a>
G. Karmakar, K. Dey, <b>P. Ghosh</b> , B. K. Sharma, S. Z. Erhan	A Short Review on Polymeric Biomaterials as Additives for Lubricants, <i>Polymers</i> 2021, 13(8), 1333; <a href="https://doi.org/10.3390/polym13081333">https://doi.org/10.3390/polym13081333</a>
B. Mitra and <b>P. Ghosh</b>	Microwave-assisted C-C and C-Heteroatom Bond Formations in an Aqueous Medium, <i>Volume 8</i> , Issue 2, 2021, 128 – 136.
Basak P., <b>Ghosh P.</b>	Green Organocatalysis. In: Anilkumar G., Saranya S. (eds) <i>Green Organic Reactions. Materials Horizons: From Nature to Nanomaterials</i> . Springer, Singapore. <a href="https://doi.org/10.1007/978-981-33-6897-2_9">https://doi.org/10.1007/978-981-33-6897-2_9</a> .
B. Mitra, <b>P. Ghosh</b>	Humic acid: A Biodegradable Organocatalyst for Solvent-free Synthesis of Bis(indolyl)methanes, Bis(pyrazolyl)methanes, Bis-coumarins and Bis-lawsones, <i>Volume 6</i> , Issue 1, 2021, 68-81.
B. Saha, B. Mitra, S. Mukherjee, R. Subba, D. Brahmin, B. Sinha and <b>P. Ghosh</b> ,	Organo-Cu (II) Catalyst: An Efficient Synthesis Of Substituted N-Heterocycles Via Double Condensation/Tandem Oxidationcyclization/Elimination-Cyclization Reactions From Easily Accessible Precursors, <i>Rasāyanj. Chem.</i> , Vol. 14, No.3, 2021.
P. Basak, S. Dey and <b>P. Ghosh</b>	Convenient one-pot synthesis of 1,2,4-oxadiazoles and 2,4,6-triarylpyridines using graphene oxide (GO) as a metal-free catalyst: importance of dual catalytic activity, <i>RSC Adv.</i> , 2021, <b>11</b> , 32106-32118.
P. Basak and <b>P. Ghosh</b> ,	Green Organic Transformations: Novelty of Graphene

Name of the Author(s)	Publication Details
	Oxide (GO) and Sulfonated Graphene Oxide (SGO), Volume 8, Issue 1 ,2021, 28 – 45.
Mitra B., Pariyar G. C., <b>Ghosh P.</b>	Environmentally Benign Organic Solvent: A Green Approach. In: Anilkumar G., Saranya S. (eds) Green Organic Reactions. Materials Horizons: From Nature to Nanomaterials. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-33-6897-2_10">https://doi.org/10.1007/978-981-33-6897-2_10</a> .
K. Dutta, B. Mitra, B. S. Sharma and <b>P. Ghosh</b>	One-pot Three-component Solvent-free Tandem Annulations for Synthesis of Tetrazolo[1,2- <i>a</i> ]pyrimidine and [1,2,4]triazolo[1,5- <i>a</i> ]pyrimidine, ChemistrySelect 2022, 7, e202103602 (1 of 6). <a href="https://doi.org/10.1002/slct.202103602">doi.org/10.1002/slct.202103602</a>
<b>Prof. Anirban Misra</b>	
P. Mondal, R. Pal, A. K. Pal, S. Das, <b>A. Misra</b> and A. Datta	Understanding the Regioselectivity of Ion-pair Assisted meta-selective C(sp <sup>2</sup> ) – H Activation in Conformationally Flexible Arylammonium Salts, <i>J. Org. Chem.</i> 87, 9222-9231(2022).
S. Sarkar and <b>A. Misra,</b>	Spin-thermoelectric properties and giant tunneling magnetoresistance of boron-substituted graphene nanoribbon: a first principle study, <i>J. Phys. Cond. Mat.</i> 34, 345802 (2022).
R. K. Mahato, S. Das, M. Joshi, A. Roy Choudhury, <b>A. Misra</b> and B. Biswas	Biomimics of phenazine oxidase activity of a cobalt (III)-dipyridylamine complex: Spectroscopic, structural, and computational studies, <i>Appl. Organomet. Chem.</i> , DOI: 10.1002/aoc.6483 (2021).
B. Sinha, T. Goswami, S. Paul and <b>A. Misra</b>	Spectral Tuning of 11-cis retinal in conjugation with Au <sub>14</sub> cluster and concomitant effect on isomerization: a theoretical outlook, <i>J. Photochem. Photobiol</i> , 7, 100051-9 (2021).
P. Sarbadhikaryand <b>A. Misra,</b>	Magnetic Modulation in Heteroallene and Heterocumulene Based tert-butyl Nitroxide Diradicals: Spin Delocalization and Conformation Play Crucial Roles, <i>Chem. Phys. Chem</i> , 22, 1379-1388 (2021).
T. Sutradhar and <b>A. Misra</b>	Theoretical Study on the Nonlinear Optical Property of Boron Nitride Nanoclusters Functionalized by Electron Donating and Electron Accepting Groups, <i>J. Phys. Chem A</i> , <i>J. Phys. Chem. A</i> , 125, 2436–2445 (2021).
<b>Prof. Biswajit Sinha</b>	
D. Roy, S. Majumder, B. Rajbanshi, S. Saha, <b>B. Sinha</b>	Physicochemical investigation of L-Asparagine in green solvent arrangements with the manifestation of solvation consequences. <i>World Journal of Advanced Research and Reviews</i> , 2022, 13(02), 401–428.
<b>B. Sinha</b> , M. Bhattacharya, S. Saha, S. Saha	Spectroscopic Studies and Antimicrobial Evaluation of New Mixed Ligand Mn(II), Ni(II), Cu(II) Complexes Synthesized from an Ionic Liquid-Supported Schiff Base and 1-Methyl Imidazole. <i>Polycyclic Aromatic Compounds</i> . 1-13.
K. Das, S. Sengupta, A.	JCBPAT Research Article 452 JCBPS; Section A.

Name of the Author(s)	Publication Details
Bhattacharjee, D. Roy, <b>B. Sinha</b> , P. Roy, A. Datta, R. Chakrabarty, J. Das, <b>M. N. Roy</b>	<i>Journal of Chemical, Biological and Physical Sciences.</i> 4. 452-470.
A. Kamath, D. Brahman, S. Chettri, P. Mcardle, <b>B. Sinha</b>	[Diaquo{bis(p-hydroxybenzoato-κ1O )}(1-methylimidazole- κ1N1)}copper(II)]: Synthesis, crystal structure, catalytic activity and DFT study. <i>Journal of Molecular Structure.</i> 1247. 131323.
S. Banerjee, P. Kar, I. Sarkar, A. Chhetri, D. Mishra, A. Dutta, A. Kumar, <b>B. Sinha</b> , A. Sen	Structural elucidation and chemical characterization of underutilized fruit silverberry ( <i>Elaeagnus pyriformis</i> ) silver nanoparticles playing a dual role as anti-cancer agent by promoting apoptosis and inhibiting ABC transporters. <i>South African Journal of Botany.</i>
<b>Prof. Bhaskar Biswas</b>	
Prafulla Kumar Mudi, NilajBandopadhyay, Mayank Joshi, Madhusudan Shit, Suwendu Paul, Angshuman Roy Choudhury, and <b>Bhaskar Biswas,(Corresponding Author)</b>	Schiff Base Triggering Synthesis of Copper(II) Complex and its Catalytic Fate towards Mimics of Phenoxazinone Synthase Activity, <i>InorganicaChimica Acta</i> , 505 (2020) 119468 (I.F. 2.85)
M. Karar, P. Paul, <b>B. Biswas</b> , T. Majumdar, A. Mallick,	Excitation wavelength as logic operator, <i>Journal of Chemical Physics (AIP)</i> , 152 (2020) 075102.
Chanchal Kumar Pal, Shreya Mahato, Mayank Joshi, Suwendu Paul, Angshuman Roy Choudhury, <b>Bhaskar Biswas*,(Corresponding Author)</b>	Transesterification Activity by a Zinc(II)-Schiff Base Complex with Theoretical Interpretation, <i>InorganicaChimica Acta</i> 506 (2020) 119541 (I.F. 2.85)
Subham Mukherjee,Suvojit Roy,Shirshendu Mukherjee, <b>Bhaskar Biswas*, (Corresponding Author)</b>	Oxidative Dimerisation of 2-Aminophenol by a Copper(II) Complex: Synthesis, Non-covalent interactions and Bio-mimics of Phenoxazinone Synthase Activity, <i>Journal of Molecular Structure</i> , 1217 (2020) 128348
Shreya Mahato, Nishith Meheta, K. Muddukrishnaiah,Mayank Joshi, Prasanta Ghosh, Madhusudan Shit, Angshuman Roy Choudhury, <b>Bhaskar Biswas,(Corresponding Author)</b>	Ligand Directed Synthesis of a Unprecedented Tetragonal bipyramidal Copper(II) Complex and its Catalytic Role in Oxidative Dimerisation of 2-Aminophenol, <i>Applied Organometallic Chemistry</i> , 34 (2020) e5935 <a href="https://doi.org/10.1002/aoc.5935">https://doi.org/10.1002/aoc.5935</a> (I.F. 4.05)
Dhananjay Dey, Afnan Al-Hunaiti,G. Vinothini, Balaji Perumalsamy, Gowdhami Balakrishnan, Thirumurugan Ramasamy, DhanasekaranDharumadurai, and <b>Bhaskar BiswasCorresponding Author)</b>	C-H Functionalization of Alkanes, bactericidal and antiproliferative studies of a gold(III)-phenanthroline Complex, <i>Journal of Molecular Structure</i> , 1222 (2020) 128919
Subrata Das, SangharajDiyali, G. Vinothini, Balaji Perumalsamy, Gowdhami Balakrishnan, Thirumurugan Ramasamy, DhanasekaranDharumadurai, <b>Bhaskar</b>	Synthesis, Morphological Analysis, Antibacterial Activity of Iron Oxide Nanoparticles and the Cytotoxic Effect on Lung Cancer Cell line, <i>Heliyon</i> , 06 (2020) e04953.

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<b>Biswas*,(Corresponding Author)</b>	
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#### Research Projects Details:

Title of the Project	Funding Body	Duration	Budget (Rs.)	Name of PI
Designing of Smart Molecules and Materials by Correlating Optical, Magnetic and Transport Properties through Electronic Structure Analysis	SERB	3 yrs	3625670	Prof. A. Misra
Synthesis, characterization and performance evaluation of pour point depression (PPD) for lubricating oil.	CSIR		39.0 Lakh	Prof. P. Ghosh

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Development of Greener reaction methodology for C-hetero bond formation.	CSIR	5 yrs	26.0 Lakh	Prof. Pranab Ghosh
Transformative reactions of carbocyclic compounds.	UGC	5 yrs	25.0 Lakh	Prof. Pranab Ghosh
Explorative studies on benign synthesis of heterocyclic compounds.	CSIR	5 yrs	25.0 Lakh	Prof. Pranab Ghosh
Design and synthesis of coordination driven smart functional molecules and their bio-mimetic and electrocatalytic aspects in hydrogen evolution reaction.	SERB	3 yrs	47.6 Lakh	Prof. Bhaskar Biswas
Peptide-based Self-assembling And Self-Synthesizing Materials	SERB	2 yrs	32.39 lakh	Dr. Jayanta Nanda

**Placement Details:**

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Dr. Subhadeep Saha	Assistant Professor, WBES
Sri Pranish Bomzan	Assistant Professor, WBES
Dr. Abdul Ashik Khan	Assistant Professor, WBES
Dr. Kanak Roy	Assistant Pofessor, Alipurduar University
Smt. Tandra Kundu	TGT, Army Public School Binnaguri
Dr. Soumik Bardhan	Assistant Professor, Rampurhat College, Birbhum
Dr. Tanusree Ray	Assistatnt Professor, Siliguri College, Darjeeling
Sri Passang Tshering Lepcha	Assistant Professor, Ananda Chandra College, Jalpaiguri
Sri Hridoy Kr. Basak	Assistant Professor, Govt. Gen. Degree College, Kushmandi, South Dinajpur
Dr. Biraj Barman	Assistant Professor, Parimal Mitra Smriti Mahavidyalaya, Malbazar, Jalpaiguri
Dr. Satadal Paul	Assistant Professor, Bangabasi Morning College, Kolkata
Dr. Sushovan Ghosh	Assistant Professor, Alipurduar College, Alipurduar

Md Sabir	Cleark, Punjab National Bank, Malda
Smt. Priya Das	Project Fellow, TCGLS, Kolkata
Smt. Souparna Bhattacharya	Project Fellow, TCGLS, Kolkata
Sri Subhankar Maiti	Trainee Reserch Associate, Jubilant Biosys Ltd.,Kolkata
Sri Satyam Paul	Siliguri Govt. Polytechnic
Smt. Sampa Barman	Assistant Teacher, Jyotirmoy Colony Pry School, Rajganj, Jalpaiguri
Dr. Gulmi Chakraborty	Assistant Professor, CV Raman Global University, Bhubeneshwar
Pranay Chandra Mandal	Assistant Teacher, Netaji Pry School, Kholachad Fafri, Rajganj, Jalpaiguri
Sri Rahul Das	Scientist, Aurigene Pharmaceutical Services Limited, Hyderabad, Telengana
Sri Biswajit Shil Sharma	Assistant Teacher, Guaval Primary School, Falakata, Alipurduar
Smt. Raktima Saha	Assistant Manager, Bangiya Gramin Vikash Bank, Kumarganj, South Dinajpur
Sri Gautam Chhetri	PG Teacher in Chemistry, Army Public School, Bengdubi
Sri Dipankar Kumar	TGT, Army Public School, Bengdubi
Sri Shib Nath Saha	Medicinal Chemistry, Aurigene Pharmaceutical Services Limited, Hyderabad, Telengana

#### **Awards and Recognitions:**

- a) Prof. Mahendra Nath Roy has received the following awards –
- Fellow of Royal Society of Chemistry (FRSC) award from London, UK
  - Banga Bhushan award from Govt. of West Bengal. 2022
  - Vidyasagar Sanmanana award from Govt. of West Bengal. 2021
  - Panchanan Barma Sadbhabona Sanman from SODAR Social Organization
- b) Dr. Rajesh Kr. Das has received "Best Researcher Award" from the International Scientist Awards on Engineering, Science and Medicine, 2021.
- c) Dr. Satyapriya Bhandari has received Outstanding Reviewer Award (2020; RSC Advances) by Royal Society of Chemistry.
- d) Independent research works of Dr. Bhandari's (at Department of Chemistry, University of North Bengal) has recently been highlighted by Department of Science & Technology (DST)-Government of India, Ministry of Science & Technology Press, DD News and India Education.



## DEPARTMENT OF COMPUTER SCIENCE AND APPLICATION

### About the Department:

The Department of Computer Science and Application, NBU started imparting instructions with the most modern curricula and syllabus to the students of Post Graduate Diploma in Computer Application Course in the year 1983 initially. In 1998, the Department started MCA Course in the year 1998. The Department is the oldest Department among all other Universities, which started imparting MCA Course in West Bengal. Presently the Department is successfully running MCA & M.Sc. Computer Science Courses.

The Department of Computer Science & Application has been one of the pioneering academic institutions for higher education, research, and innovation in key areas of computer science and application. The mission and vision of the Department is to enable excellences in the world of computer science and application through imparting higher education and research. Students of this Department showed their potentiality in their respective services and placed in various reputed industries.

The Department maintains an excellent teaching/learning and research environment with dedicated, qualified and dynamic faculties and well equipped laboratories. Apart from the teaching, faculties are very much active developing, guiding and conducting research oriented projects, articles related to Computer Science & Information Technology, books. The faculties also participate in various International and national Seminars, workshops, Symposiums and conferences of repute. Presently the Department is having Three Professors, five Asst. Professors and Seven Non-Teaching staffs constitute the faculty and non-teaching strength of the department.

### Courses Offered:

- M. Sc. in Computer Science
- MCA
- Ph. D.

### Research Focus:

- Artificial Intelligence
- Image Processing
- Artificial Neural Network
- Soft Computing
- Data Mining
- GIS
- Character Recognition
- Expert Decision Support System
- Cryptography & Steganography
- High Performance Computing

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Ardhendu Mandal	Ph.D.	Associate Professor	am.csa.nbu@nbu.ac.in
Dr. Rakesh Kumar Mandal	Ph.D.	Associate Professor	rakeshmandal@nbu.ac.in
Dr. Swarup Das	Ph.D.	Assistant Professor	sd.csa@nbu.ac.in
Dr. Sharad Sinha	Ph.D.	Assistant Professor	ssinha@nbu.ac.in

Name	Qualification	Designation	Email
Dr. Mukta Majumder	Ph.D.	Assistant Professor	mukta@nbu.ac.in
Mr. JKM Sadique Uz Zaman	Ph.D.	Assistant Professor	jkmsadique@nbu.ac.in
Mr. Md. Ajij	M.Tech.	Assistant Professor	mdajij@nbu.ac.in
Mr. Anil Tudu	M.E.	Assistant Professor	aniltudu@nbu.ac.in
Dr. Mili Ghosh	Ph.D	Assistant Professor	mili.ghosh@nbu.ac.in

#### Details of Non-Teaching Staff:

Name	Qualification	Designation
Dr. Arghya Das	MCA, Ph.D.	Program Assistant
Mr. Tapan Chakraborty	M.P	Record Supplier
Mr. Manabendra Sarkar	H.S.	Office Assistant (Offc. Asst-C)
Mr. Chanchal Kumar Jha	H.S.	Lab Attendant (Lab. Attdt-C)

#### Research Scholar Details:

Name	Fellowship	Supervisor's Name	Gender	Date of Joining
Subhro Sarkar	Univ. Fellowship	Dr. Ardhendu Mandal	M	05-05-2017
Shankar Roy	JRF	Dr. Ardhendu Mandal	M	02-01-2019
Sumon Dey	JRF	Dr. Swarup Das	M	01/01/2020
Dipanjan Bhowmik	JRF	Dr. Sharad Sinha	M	NA
Avijit Datta		Dr. Sharad Sinha	M	NA

#### Research Scholar Details (without Fellowship):

Name and Email	Supervisor's Name	Gender
Manas Sarkar	Dr. Ardhendu Mandal	M
Dipanjan Moitra	Dr. Rakesh Kumar Mandal	M
Pooja Yadav	Dr. Rakesh Kumar Mandal	F
Susreeti Sur	Dr. Rakesh Kumar Mandal	F
Debanil Chanda	Dr. Rakesh Kumar Mandal	M
Payel Saha	Dr. Rakesh Kumar Mandal	F
Arnob Sur	Dr. S. Das	M
Dechen Doma Bhutia	Dr. S. Das	F
Rakesh Dutta	Dr. Mukta Majumder	M
Debangshu Chakraborty	Dr. I. Ghosh	M
Arpita Das	Dr. I. Ghosh	F

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

<b>Name</b>	<b>Seminar/Conference Details</b>
Dr. Ardhendu Mandal	Cosmic Ray Group of Astronomy (CRAGA) Online Colloquium Series, organized by High Energy & Cosmic Ray Research Centre (HECRRC), University of North Bengal on 21.09.2021
Dr. Ardhendu Mandal	18th IEEE India Council Annual International Conference (INDICON-2021) , organized by IIT Guwahati on 19.12.2021 to 21.12.2021
Dr. Mili Ghosh	Two Day National Webinar on "Application of Computational Statistics in modern era", organized by Department of Computer Centre, Vidyasagar University on 02.09.2021 to 03.09.2021
Dr. Mili Ghosh	International Webinar on Emerging Trends in Computational Technologies (IWETCT) , organized by Department of Computer Science & Application, University of North Bengal on 01 to 03.10.2021
Dr. Mukta Majumder	International Webinar on Emerging Trends in Computational Technologies (IWETCT) , organized by Department of Computer Science & Application, University of North Bengal on 01.10..2021 to 03.10.2021
Dr. Sharad Sinha	International Webinar on Emerging Trends in Computational Technologies (IWETCT) , organized by Department of Computer Science & Application, University of North Bengal on 01.10..2021 to 03.10.2021
Dr. Swarup Das	International Webinar on Emerging Trends in Computational Technologies(IWETCT) , organized by Department of Computer Science & Application, University of North Bengal on 01.10..2021 to 03.10.2021
J.K.M. Sadique Uz Zaman	International Webinar on Emerging Trends in Computational Technologies (IWETCT) , organized by Department of Computer Science & Application, University of North Bengal on 01.10..2021 to 03.10.2021
MD. AJIJ	Emerging Trends in Computational Technologies (IWETCT) , organized by Department of Computer Science & Application, University of North Bengal on 01.10..2021 to 03.10.2021
Sri Anil Tudu	International Webinar on Emerging Trends in Computational Technologies (IWETCT) , organized by Department of Computer Science & Application, University of North Bengal on 01.10..2021 to 03.10.2021

**Publications:**

<b>Author</b>	<b>Name of the Book/Journal/Volume</b>	<b>Year</b>
Dr. Ardhendu Mandal	A. K. Das, S. K. Biswas, A. Mandal and M. Chakraborty, "A Neural Expert System to Identify Major Risk Factors of Breast Cancer," 2020 IEEE International Conference for Innovation in Technology (INOCON), November 06 <sup>th</sup> -08 <sup>th</sup> , 2020, pp. 1-4, DOI: 10.1109/INOCON50539.2020.9298261 [Print ISBN: 978-981-16-5077-2 (Part of the Lecture Notes in Electrical Engineering book series (LNEE, volume 796))	Conf. Date: November 06 <sup>th</sup> -08 <sup>th</sup> , 2020, First Online: 11 November 2021

Author	Name of the Book/Journal/Volume	Year
	Das A.K., Biswas S.K., Mandal A., “Transparent Decision Support System for Breast Cancer (TDSSBC) to Determine the Risk Factor.”, In: Bajpai M.K., Kumar Singh K., Giakos G. (eds) Machine Vision and Augmented Intelligence—Theory and Applications. (Springer in Lecture Notes in Electrical Engineering, Series Volume-796), <a href="https://doi.org/10.1007/978-981-16-5078-9_23">https://doi.org/10.1007/978-981-16-5078-9_23</a> , [Print ISBN: 978-981-16-5077-2; Online ISBN: 978-981-16-5078-9; Publisher Name: Springer, Singapore] [IIITDM JABALPUR]	First Online: 11 November 2021
Dr. Rakesh Kumar Mandal	Dipanjan Moitra and Rakesh Kumar Mandal, “Classification of Malignant Tumors by a Non-Sequential Recurrent Ensemble of Deep Neural Network Model”, <i>Multimedia Tools and Applications</i> (January 2022) (Springer). (Impact Factor: 2.98). [SCI]	January 2022
	Praveen Mukhia Titimus and Rakesh Kumar Mandal, “An Application of Artificial Neural Network (ANN) for Landslide Hazard Mapping, Susceptibility and Early Warning System: A Review”, <i>International Journal of Computer and Communication Technology</i> , Vol 8 Issue 3 (2022),	2022/01
Dr. Mukta Majumder	Saha, B., & Majumder, M. (2021). An optimized knight traversal technique to detect multiple faults and Module Sequence Graph based reconfiguration of microfluidic biochip. <i>IET Computers &amp; Digital Techniques</i> , 15(1), 1-11, Wiley.	2021/1
	Maity, S., Das, N., Majumder, M., & Dasadhikary, D. R. (2021). Word Embedding and String-Matching Techniques for Automobile Entity Name Identification from Web Reviews. <i>EAI Endorsed Transactions on Scalable Information Systems</i> , 8(33), e1-e1.	2021/5/14
	Das, B., Majumder, M., Phadikar, S., & Sekh, A. A. (2021). Multiple-choice question generation with auto-generated distractors for computer-assisted educational assessment. <i>Multimedia Tools and Applications</i> , 80(21-23), 31907-31925.	2021/9
	Das, B., Sekh, A. A., Majumder, M., & Phadikar, S. (2021). Can deep learning solve a preschool image understanding problem?. <i>Neural Computing and Applications</i> , 33(21), 14401-14411.	2021/11
	Das, B., Majumder, M., Phadikar, S., & Sekh, A. A. (2021). Automatic question generation and answer assessment: a survey. <i>Research and Practice in Technology Enhanced</i>	2021/12

Author	Name of the Book/Journal/Volume	Year
	<i>Learning</i> , 16(1), 1-15.	
	Dutta, R., & Majumder, M. (2022). Attention-based bidirectional LSTM with embedding technique for classification of COVID-19 articles. <i>Intelligent Decision Technologies</i> , 16(1), 205-215.	2022/1/1
	Das, B., Majumder, M., Sekh, A. A., & Phadikar, S. (2022). Automatic question generation and answer assessment for subjective examination. <i>Cognitive Systems Research</i> , 72, 14-22.	2022/3/1
Anil Tudu	"Personalized query recommendation system: A genetic algorithm approach." <i>Journal of Interdisciplinary Mathematics</i> 23, no. 2 (2020): 523-535.	2020
Md. Ajij	Ajij M, Pratihar S, Nayak SR, Hanne T, Roy DS. Off-line signature verification using elementary combinations of directional codes from boundary pixels. <i>Neural Computing and Technologys</i> .	March, 2021
	Ajij, M., Pratihar, S., Roy, D. S., & Hanne, T. (2022). Robust detection of Tables in documents using scores from Table cell cores. <i>SN Computer Science</i> , 3(2), 161.	March, 2022

## DEPARTMENT OF FOOD TECHNOLOGY

### About the Department:

To meet the vision of generating trained human resources and skilled intellectuals in various aspects of food technology to meet the needs of food industry sector, economic growth and to provide health and safety that would support the prosperity and wellness of people, the Department of Food Technology, NBU started its journey in 2<sup>nd</sup> August, 2019.

Food Technology is one of the major streams in the branch of science that deals with the novel techniques involved in producing, bioprocessing, preservation, fermentation, packaging, labelling, quality management, safety assessment, marketing and entrepreneurship of food products. It involves an amalgamation of physical, chemical or microbiological processes and the techniques of transforming raw ingredients into food and also other forms in the food processing industry.

Apart from the scheduled academic activities, the Department also organizes seminar, symposium, conferences and training programs for students and research scholars in near future to disseminate and gain knowledge.

### Courses Offered:

- M. Sc.
- Ph. D.

### Research Focus:

- Extraction and phytochemical profiling from edible medicinal plants and their application
- Exploration of health benefiting properties of some beneficial bacteria, and Value addition of Foods

### Research Laboratory:

- Analytical Food Biochemistry Laboratory
- Food Microbiology Laboratory

### Sophisticated Instrument/Equipment:

- UV-VIS spectrometer
- Gradient PCR machine
- Remi Orbital Shaking Incubator
- Lyophilizer/Freeze Drying machine, Eyla
- Gel Documentation Unit EZ system, Bio Rad
- Remi Centrifuge machine

**Faculty Details:**

Name	Qualification	Designation	Email
Dr. Kriti Ghatani	M.Sc., M.Phil., Ph. D.	Asst. Professor	ghatanik@nbu.ac.in
Dr. Gyan Chandra Pariyar	M.Sc, CSIR-JRF, Ph.D	Asst. Professor	pariyarg@nbu.ac.in

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Mr. Biswarup Singha	H.S.	Office Assistant (Casual)
Mr. Soumen Das	Madhyamik	Peon (Mandays)

**Details of Research Scholars:**

Name	Fellowship Status	Supervisor's Name	Gender
Arpan Rai	SVMCM	Dr. Gyan Chandra Pariyar	Male
Priya Chakraborty	SVMCM	Dr. Kriti Ghatani	Female
Sagnik Sarkar	SVMCM	Dr. Gyan Chandra Pariyar	Male
Kirti Rai	NA	Dr. Kriti Ghatani	Female
Rituporna Das	SVMCM	Dr. Gyan Chandra Pariyar	Female

**Details of Project Scholar**

Name	Projects	Supervisor's Name	Gender	Date of Joining
Subarna Thapa	DST-SERB Project	Dr. Kriti Ghatani	Female	19.03.2020

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars/Conferences / Webinar	Date	Title of the Paper Presented
Dr. Gyan Chandra Pariyar	One day National Seminar (Virtual mode) on "Recent Trends in research and Food, Nutrition and Food," Organized by Department of Food Technology, NBU	19.03.2021	Organized and Attended
	National Seminar on "Food Science and Technology", Organized by Department of Food Technology, University of North Bengal	25.04.2022	Organized and Attended
Dr. Kriti Ghatani	International conference on COVID 19	13, 14 and 15 <sup>th</sup> Sept	Paper presented "Corona second

Name	Details of Seminars/Conferences / Webinar	Date	Title of the Paper Presented
	second wave challenges for sustainable development (CCSD 2021) organized by Asian Biological Research Foundation, Prayagraj, U.P, India.	2021	wave and food security”
	One day National Seminar (Virtual mode) on “Recent Trends in research and Food, Nutrition and Food,” Organized by Department of Food Technology, University of North Bengal.	19.03.2021	Organized and Attended
	National Seminar on “Food Science and Technology”, Organized by Department of Food Technology, University of North Bengal	25.04.2022	Organized and Attended

#### Publications:

Name of the Author(s)	Publication Details
Bijeta Mitra, <b>Gyan Chandra Pariyar</b> , Pranab Ghosh*,	$\beta$ -Cyclodextrin: A supramolecular catalyst for metal-free approach towards the synthesis of 2-amino-4,6-diphenylnicotinonitriles and 2,3-dihydroquinazolin-4(1H)-one in water, <i>RSC Advances</i> , 2021, 11,1271-1281
Bijeta Mitra, <b>Gyan Chandra Pariyar</b> and Pranab Ghosh*.	Environmentally Benign Organic solvent: A Green Approach. “Green Organic Reactios”, <i>Springer</i> . 2021, 165-180. ISBN: 978-981-336-896-5.
<b>Gyan Chandra Pariyar</b> and Pranab Ghosh*	Enzyme-catalyzed synthesis of bioactive heterocycles, <i>Physical Sciences Reviews</i> , December 16, 2021
<b>Kriti Ghatani</b> , Subarna Thapa, Shankar Prasad Sha, Sagnik Sarkar, Debabrata Modak, and Soumen Bhattacharjee	Revealing Probiotic Potential of Enterococcus Strains Isolated From Traditionally Fermented <i>Chhurpi</i> and Healthy Human Gut. <i>Front. Microbiol.</i> 13:909987.doi: 10.3389/fmicb.2022.909987
Monika Devi and <b>Kriti Ghatani</b>	The use of coconut in rituals and food preparations in India: a review. <i>Journal of Ethnic Foods</i> 9:37 <a href="https://doi.org/10.1186/s42779-022-00150-7">https://doi.org/10.1186/s42779-022-00150-7</a>
<b>Kriti Ghatani</b> , Subarna Thapa and Priya Chakraborty	Hypolipidemic and hypoglycemic nature of lactobacillus strains in fermented vegetable and dairy products. <i>Front. Food. Sci. Technol.</i> 2:955990. doi: 10.3389/frfst.2022.955990
Buddhiman Tamang, Lalit Kumar Chaurasia, <b>Kriti</b>	Fermented Soybean Products and Their Health Benefits in Bioactive compounds in Fermented Foods Health Aspects



<b>Name of the Author(s)</b>	<b>Publication Details</b>
<b>Ghatani, Ranjan Kaushal</b> Tirwa	edited by Amit Kumar Rai, Anu Appaiah K. A. Published by CRC Press, Taylor and Francis ISBN 9780367136000, Page No: 10 - 34
<b>Kriti Ghatani</b>	A text book of General Microbiology, Kripa Drishti Publishers, Pune, April 2021, ISBN 978-93-90847-42-6

#### Research Projects Details:

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Production of functional pickle by probiotic strain isolated from plant based fermented foods	DST - SERB	29.01.2020	3 years	45.66144 lakh	Dr. Kriti Ghatani
Molecular identification of enzyme producing bacteria	University Research Grant	23.07.2021	1 year	1.5 Lakh	Dr. Kriti Ghatani
Approach towards the Construction of Biologically Active Heterocyclic Compounds and Study of Their Biological Applications	UGC BSR Start-up Grant	16.12.2021	3 years	10 lakh	Dr. Gyan Chandra Pariyar
Solvent Mediated Protocol for the Synthesis of Heterocyclic Compounds	Departmental Research Grant	06.09.2021	1 year	1.5 lakh	Dr. Gyan Chandra Pariyar

#### Placement Details:

<b>Name of the Student</b>	<b>Name of the Employer</b>
Papia Pal	Department of Industries and Commerce, MOFPI
Tanny Das Paul	Roligt Foods Pvt. Ltd
Roupya Debnath	Agro Tech Foods Ltd. (a brand of Conagra)
Monica Devi	Digiversal Pvt Ltd.

**Awards and Recognitions:**

- Dr. Kriti Ghatani has received National and West Bengal Young Scientist Award from Microbiological Society of India.
- Dr. Kriti Ghatani has received 6<sup>th</sup> Venus International Women Award (VIWA) 2021 by Venus International Foundation, Chennai.

## **DEPARTMENT OF GEOGRAPHY AND APPLIED GEOGRAPHY**

### **About the Department:**

The Department of Geography and Applied Geography, North Bengal University was established in the year 1962 along with the establishment of the University. The Department offers teaching in the post graduate level and also offers M.Phil. and Ph. D programme.

The Department caters to a huge peripheral hinterland from where large number of students and research scholars come to gain knowledge and research experience from the expertise of esteemed faculty members. The students from varied geographical regions comprising of the foothill as well as hilly terrain of Darjeeling-Sikkim Himalaya in the north, alluvium hill shade of Brahmaputra valley of Assam in the east, undulating topographic variation formed by Gangetic depositional alluvium of Bihar and Jharkhand tract in the west and flat type topographical situation ranging from Gangetic delta to Jangalmahal of southern part of West Bengal come to this Department.

The new syllabus under CBCS System has been introduced since the 2018-19 and special attention has been given to the different emerging and application oriented aspects in the new syllabus under the semester system including Geographical Information System, Remote Sensing and Disaster Management. The Department at present offers Post Graduate students' special courses in Applied Pedology, Cartography, Fluvial Geomorphology, Population Geography, and Urban Geography.

The Department of Geography and Applied Geography at Jalpaiguri Campus of North Bengal University was started from 2013-14 session. Teachers from the main campus extends teaching to the students of the Department at Jalpaiguri Campus.

### **Courses Offered:**

- M.A. / M. Sc.
- Ph. D.

### **Research Focus:**

- Geomorphology
- Urban and Rural Geography
- Social Geography

### **Research Laboratory:**

- GIS Laboratory
- Pedology Laboratory

**Faculty Details:**

Name	Qualification	Designation	Email
Dr. Subir Sarkar	Ph. D	Professor	subirsnbu@yahoo.co.in
Dr. Sushma Rohatgi	Ph. D	Professor	rohatgisushma@gmail.com
Dr. Deepak Kumar Mandal	Ph. D	Professor	deepakkrmandal@nbu.ac.in
Dr. Ranjan Roy	Ph. D	Professor	ranjanroygeog@nbu.ac.in
Dr. Indira Lepcha	Ph. D	Assoc. Professor	indiralepchanbu@nbu.ac.in
Dr. S K Bhattacharya	Ph. D	Asst. Professor	skbhatt2002@yahoo.co.in
Dr. Snehasish Saha	Ph. D	Asst. Professor	snehonbugeo09@nbu.ac.in
Dr. Arindam Basak	Ph. D	Asst. Professor	aribasak@nbu.ac.in
Dr. I Roy Chowdhury	Ph. D	Asst. Professor	irchowdhury_geo@nbu.ac.in
Dr. Rupak Kumar Paul	Ph. D	Asst. Professor	rupak@nbu.ac.in
Dr. Riti Moktan	Ph. D	Asst. Professor	driritimoktan@gmail.com
Dr. Surjapada Paul	Ph. D	Asst. Professor	surjapada@gmail.com

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Mr. Bhanu Basak	B.Com	Junior Superintendent
Mr. Kalyan Roy	B. Sc.	Tech. (Superintendent)
Mr. Pawan Kamtpi	VIII	Record Supplier
Mr. Surja Das	VIII	Lab. Attendant; Grade II
Mr. Biman Bagchi	VIII	Lab. Attendant, Grade II
Mr. Sumit Bhowmik	VIII	Junior Peon

**Details of Research Scholars:**

Name	Fellowship Name	Supervisor's Name	Gender
Biswajit Paul	UGC-JRF	Prof. Subir Sarkar	Male
Abhisek Sarkar	UGC-JRF	Prof. D K Mandal	Male
Golap Hossain	UGC-JRF	Prof. D K Mandal	Male
Piu Saha	SVMCM	Prof. D K Mandal	Male
Jiarul Alam	UGC-JRF	Prof. D K Mandal	Male
Amit Sarkar	UGC-NFSC	Prof. D K Mandal	Male
Dipesh Roy	UGC-JRF	Prof. D K Mandal	Male
Goutam Mandal	UGC-JRF	Prof. D K Mandal	Male
Sankar Roy	UGC-NFSC	Prof. D K Mandal	Male
Sova Rani Das	UGC-JRF	Prof. D K Mandal	Female
Miman Islam	SVMCM	Prof. D K Mandal	Male
Roni Sarkar	UGC-JRF	Prof. D K Mandal	Male
Pompi Ghosh	SVMCM	Prof. D K Mandal	Female
Bandana Sarkar	SVMCM	Prof. D K Mandal	Female

<b>Name</b>	<b>Fellowship Name</b>	<b>Supervisor's Name</b>	<b>Gender</b>
Jagriti Nandi	SVMCM	Prof. D K Mandal	Female
Faruk Hossain	SVMCM	Prof. D K Mandal	Male
Mantu Das	UGC JRF	Dr. Snehasish Saha	Male
Saidur Rahaman	UGC-NET JRF (NFOBC)	Dr. Snehasish Saha	Male
Debanjan Basak	UGC-JRF	Dr. I Roy Chowdhury	Male
Arghadeep Bose	UGC-JRF	Dr. I Roy Chowdhury	Male
Suranjan Majumder	UGC-JRF	Dr. I Roy Chowdhury	Male
Prosenjit Kayal	UGC-JRF	Dr. I Roy Chowdhury	Male
Subham Roy	UGC-JRF	Dr. I Roy Chowdhury	Male
Guneswar Barman	UGC-JRF	Dr. I Roy Chowdhury	Male
Mousumi Pal	UGC-JRF	Dr. Riti Moktan	Female
Amar Nath	UGC-JRF	Dr. Riti Moktan	Male
Angana Roy	SVMCM	Dr. Riti Moktan	Female
Priyanka Paul	UGC-JRF	Dr. Riti Moktan	Female
Sushmita Singh	UGC-JRF	Dr. Arindam Basak	Female
Purbasha Paul	UGC-JRF	Dr. Arindam Basak	Female
Arkadip Bhowmik	ICSSR	Dr. Arindam Basak	Male
Subham Dey Sarkar	STATE JRF	Dr. Arindam Basak	Male
Parangama Chowdhury	SVMCM	Dr. Arindam Basak	Female
Anasua Poddar	SVMCM	Dr. Arindam Basak	Female
Tannistha Saha	UGC-JRF	Dr. I L N Lama	Female
Dipankar Chakraborty	UGC-JRF	Dr. I L N Lama	Female
Harikala Chettri	SVMCM	Dr. I L N Lama	Female
Swarna Kamal Karmakar	SVMCM	Dr. Rupak Kumar Paul	Male
Mousami Roy	UGC-NFSC	Dr. Rupak Kumar Paul	Female
Shuva Das	UGC-NFSC	Dr. Rupak Kumar Paul	Male
Punama Sen	UGC NET-JRF	Prof. Ranjan Roy	Female
Arjun Saha	UGC NET-JRF	Prof. Ranjan Roy	Male
Sangita Karmakar	UGC NET-JRF	Prof. Ranjan Roy	Female
Tapan Debnath	UGC NET-JRF	Prof. Ranjan Roy	Male
Krishna Barman	UGC-NFSC	Prof. Ranjan Roy	Male
Maitreyee Roy	UGC-NFSC	Prof. Ranjan Roy	Female
Abdul Halim Miah	UGC NFOBC-NFPWD	Prof. Ranjan Roy	Male
Pallabi Singha	UGC NET-JRF	Prof. Ranjan Roy	Female
Barsha Roy	SVMCM	Prof. Ranjan Roy	Female

#### **Details of Project Scholar**

<b>Name</b>	<b>Project</b>	<b>Supervisor's Name</b>	<b>Gender</b>
Kunal Chakraborty	DSTBT, West Bengal	Dr. Snehasish Saha	Male

Name	Project	Supervisor's Name	Gender
Manabindra Barman	Understanding Quality of life (QoL) of the Tribes in the Hilly Region of Darjiling – Kalimpong District, West Bengal: A Future Road Map for the Sustainable Development sponsored by ICSSR	Dr. Indrajit Roy Chowdhury	Male

**Details of Ph. D Students (Without Fellowship):**

Name	Supervisor Name	Gender
Partha Pratim Roy	Prof. D K Mandal	Male
Rajib Mitra	Prof. D K Mandal	Male
Sanjoy Biswas	Prof. D K Mandal	Male
Baidurya Biswas	Dr. Snehasish Saha	Male
Tanmay Thokdar	Dr. Snehasish Saha	Male
Subrata Ghosh	Dr. Snehasish Saha	Male
Tapash Mandal	Dr. Snehasish Saha	Male
Debarati Chowdhury	Dr. Indrajit Roy Chowdhury	Female
Tuhin Dey Roy	Dr. Arindam Basak	Male
Jennifer Lama	Dr. Arindam Basak	Female
Anwasha Saha	Dr. Indira Lepcha Nee Lama	Female
Nisha Tamang	Dr. Indira Lepcha Nee Lama	Female
Bijayata Chettri	Dr. Indira Lepcha Nee Lama	Female
Dewki Limbu	Dr. Indira Lepcha Nee Lama	Female
Sinor Lama	Dr. Indira Lepcha Nee Lama	Female
Subrata Mondal	Dr. Rupak Kumar Paul	Male
Suchitra Roy	Prof. (Dr.) Ranjan Roy	Female
Anandananda Bera	Prof. (Dr.) Ranjan Roy	Male
Sampa Saha	Prof. (Dr.) Ranjan Roy	Female
Dipankar Das	Prof. (Dr.) Ranjan Roy	Male

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Prof. D K Mandal	ICSSR sponsored two-day national webinar on "Population Growth, Resource Utilization & Environmental Sustainability" November 14-15, 2021.	14-15.11.2021	Resource Utilization & Environmental Sustainability

<b>Name</b>	<b>Details of Seminars / Conferences / Webinar</b>	<b>Date</b>	<b>Title of the Paper Presented</b>
	Acted as Resource Person		
Dr. Snehasish Saha	National e-Seminar, focal theme of the webinar was 'Geographies of Sustainable Development', Department of Geography, School of Earth Science, Central University of Tamil Nadu, Thiruvarur in Association with the Indian Geographical Society (IGS), Chennai	07-08.04.2022	Assessing livelihood vulnerability of riparian Settlements in Kaljani River Basin in the Sub-Himalayan North Bengal
	21 <sup>st</sup> APG Meet and international E-Conference focal theme of the seminar was 'Agriculture, Food, Security, Health and Wellbeing', Department of Geography, Kurukshetra university, Kurukshetra, Haryana, India	30-31.12.2021	Block-wise changing pattern of cropping intensity in Malda: A case statistical approach
	32 <sup>nd</sup> Annual Conference of the Indian Institute of Geomorphologists (IGI) focal theme of the Conference was 'Geomorphology for Human Adaptation to Changing Environment', Department of Geography, West Bengal State University	21 – 23.01.2021	Identification of the bank erosion signatures and its sub-types factorizing change in channel width: A case study of River Ganga in Malda District, West Bengal, India
	One-day DSTBT, WB Research Project assisted Webinar focal theme of the webinar was "Bank Erosion of River Ganga in Malda District, West Bengal", Department of Geography & Applied Geography, University of North Bengal	19.02.2022	Convener and Principal Investigator (PI)
	A Webinar focal theme of the webinar was "Hydrological Modeling with HEC-HMS", Albedo Foundation	09.01.2022	Participated
	A Webinar focal theme of the webinar was "Digital Farming in Irrigation and Fertigation", Albedo Foundation	23.05.2021	Participated
	Dr. Ranjan Roy	Society, Economy and Development, organised by Department of Geography, and Department of Sociology, Birpara College,	24.08.2021

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
	Climate, People & Sustainability, organised by Department of Geography, Dhupguri Girls' College	29.09.2021	Fundamental Issues Related to Problems of Indian Farmers and the Future of Indian Agriculture
	Bank Erosion of River Ganga in Malda District, West Bengal, organised by Department of Geography & Applied Geography, NBU	19.02.2022	Management of River Bank Erosion: An Analysis
	Refresher Course on "Sustainability of earth: Challenges and mitigation strategies", organised by UGC-HRDC-NBU	26.02.2022	Sustainable Development

**Details of Seminar/Conferences /Webinar Attended by Students:**

Name	Name of the Seminars/Conferences	Date
Goutam Mandal	Participated in the Webinar on "Bank Erosion of River Ganga in Malda District, West Bengal" organized by the Department of Geography & Applied Geography, University of North Bengal and sponsored by the DSTBT West Bengal (Research Project).	19.02.2022
	Successfully completed online workshop on "Training Remote Sensing of Soil Erosion" Organized by Indaca Institute of Skills, Kolkata	18.12.2022
	Successfully completed five days online workshop on "International Workshop on SCOPUS, Peer Reviewed Journal and UGC CARE List Free Publication Process" organized by Eudoxia Research University, ERU-USA & Eudoxia Research Centre, ERC- India.	27.09.2022 – 01.10.2022
	Successfully completed a state level workshop on "How to Write a Research Paper" organized by Department of Geography, Birpara College in collaboration with IQAC.	26.09.2022
Kunal Chakraborty	'Climate, People and Sustainability', organised by Department of Geography in collaboration with IQAC, Dhupguri Girls' College	29.09.2021
	'Hydrological Modeling with HEC-HMS', organised by Albedo Foundation	09.01.2022
	'Bank Erosion of River Ganga in Malda District, West Bengal', organised by Department of Geography & Applied Geography, University of North Bengal and sponsored by the DSTBT West Bengal (Research Project)	19.02.2022



<b>Name</b>	<b>Name of the Seminars/Conferences</b>	<b>Date</b>
Mantu Das	'Climate, People and Sustainability', organised by Department of Geography in collaboration with IQAC, Dhupguri Girls' College	29.09.2021
	'Bank Erosion of River Ganga in Malda District, West Bengal', organised by Department of Geography & Applied Geography, University of North Bengal and sponsored by the DSTBT West Bengal (Research Project)	19.02.2022
Tapash Mandal	Current Trends in Geography and its Application, organised by Department of Geography, Rampurhat college in collaboration with IQAV	23.09.2021
Saidur Rahaman	'Climate, People and Sustainability', organised by Department of Geography in collaboration with IQAC, Dhupguri Girls' College	29.11.2021
	'Bank Erosion of River Ganga in Malda District, West Bengal', organised by Department of Geography & Applied Geography, University of North Bengal and sponsored by the DSTBT West Bengal (Research Project)	19.02.2022
	"e-Training on "Basics of Geographical Information System and its Applications", organised by CGMT Division of GSI Training Institute, Hyderabad	
	2nd Intensive Training Programme for the Young Geomorphologists, organised by IGI-Young Geomorphologists Forum	01-02.11.2021
Sujoy Kr. Malo	'Bank Erosion of River Ganga in Malda District, West Bengal', organised by Department of Geography & Applied Geography, University of North Bengal and sponsored by the DSTBT West Bengal (Research Project)	19.02.2022
Prosenjit Kayal	Participation in one-day National Level Webinar on "Science, Technology & Women Empowerment" organized by South Asian Institute for Advanced Research and Development (SAIARD)	12.03.2022
	Successfully completed One week Online International Workshop on "Advance Statistical Data Analysis using SPSS" organized by Science Tech Institute (Run by MKS Educational Society), Lucknow, UP India during	21-27.01.2022
	Successfully completed two days e-workshop on "Qualitative Data-Analysis with NVivo" organized by Commacad, held from	08-09.01.2022
	Participated in the Webinar on "Bank Erosion of River Ganga in Malda District, West Bengal" organized by the Department of Geography & Applied Geography, University of North Bengal and sponsored by the DSTBT West Bengal (Research	19.02.2022

<b>Name</b>	<b>Name of the Seminars/Conferences</b>	<b>Date</b>
	Project)	
Arghadeep Bose	Participated in the Webinar on “Bank Erosion of River Ganga in Malda District, West Bengal” organized by the Department of Geography & Applied Geography, University of North Bengal and sponsored by the DSTBT West Bengal (Research Project).	19.02.2022
Subham Roy	Participated in the Webinar on “Bank Erosion of River Ganga in Malda District, West Bengal” organized by the Department of Geography & Applied Geography, University of North Bengal and sponsored by the DSTBT West Bengal (Research Project).	19.02.2022
Debanjan Basak	Participated in the Webinar on “Bank Erosion of River Ganga in Malda District, West Bengal” organized by the Department of Geography & Applied Geography, University of North Bengal and sponsored by the DSTBT West Bengal (Research Project).	19.02.2022
Mousumi Pal	Participated in the Webinar on “Climate, People and Sustainability” organized by Department of Geography, Dhupguri Girls’ College.	29.09.2021
	Participated in the Webinar on “Bank Erosion of River Ganga in Malda District, West Bengal” organized by the Department of Geography & Applied Geography, University of North Bengal and sponsored by the DSTBT	29.02.2022
Angana Roy	Participated in the Webinar on “Vulnerability of Rural Communities of Costal West Bengal” organized by the Department of Rural Studies, West Bengal State University by the DSTBT West Bengal (Research Project).	28.06.2021
	Participated in the webinar on “Application of Space Technology and Artificial Intelligence for Climate Resilient Agriculture and Disaster Management” organized by Leads Connect Services Pvt Ltd and BIT Mesra.	29-30.10.2021
Arjun Saha	Participation in Three Days National Level Capacity Building Programme on “Smart Transport and Urban Mobility” organized by South Asian Institute for Advanced Research and Development (SAIARD) and National Institute of Urban Affairs (NIUA).	18.06.2021 to 20.06.2021
	Participation in Three Days Online Training programme on “Capacity Building Program on Urban Flood in Kolkata and Storm Surge Impact by YASS 2021” organized by National Institute of Disaster Management (NIDM)	07.07.2021 to 09.07.2021
	Participation in Two Days National Workshop on “Methods and Approaches in Health Research in Social Sciences”	26.06.2021 and

<b>Name</b>	<b>Name of the Seminars/Conferences</b>	<b>Date</b>
	organized by Indian Council of Medical Research (ICMR), Central University of Karnataka, and VIT-AP University	27.06.2021
	Participation in Two Days Conference on “ESRI India User Conference” organized by ESRI	28.07.2021 and 29.07.2021
	Participation in one Day National Level Webinar on “Women, Environment and Sustainable Development” organized by Cluny Women’s College.	17.10.2021
Tapan Debnath	Participation in Two Days National Workshop on “Methods and Approaches in Health Research in Social Sciences” organized by Indian Council of Medical Research (ICMR), Central University of Karnataka, and VIT-AP University	26.06.2021 and 27.06.2021
	Participation in Two Days Workshop on “Qualitative Analysis with NVivo” organized by Commacad	24.04.2021 to 25.04.2021
	Participation in Three Days National Level Capacity Building Programme on “Smart Transport and Urban Mobility” organized by South Asian Institute for Advanced Research and Development (SAIARD) and National Institute of Urban Affairs (NIUA).	18.06.2021 to 20.06.2021
	Participation in One Week International Workshop on “Biostatistics” organized by Science Tech Institute, Lucknow	21 -27.11. 2021
Sangita Karmakar	Participation in one Day State Level Webinar on “Climate, People and Sustainability” organized by Dhupguri Girls College.	29.09.2021
	Participation in one Day State Level Webinar on “Future and Our Environment” organized by Shree Agrasen Mahavidyalaya.	05.06.2021
	Participation in one Day National Level Webinar on “Women, Environment and Sustainable Development” organized by Cluny Women’s College	17.10.2021
	Participation in Webinar series on “Geography in Contemporary World” organized by Raidighi College, Bhugol O Paribesh, and Geographical Society of Sunderbans	09.09.2021 to 29.09.2021
Krishna Barman	Participation in Two Days national Seminar on “Self-reliance (Atmanirbhar), Sustainable Development and Environment” Organized by Serampore Girls’ College	25.03.2022 and 26.03.2022

**Publications:**

<b>Author(s)</b>	<b>Publication Details</b>
<b>D K Mandal, J.</b>	Drought investigation using Standard Precipitation Index (SPI) in

<b>Author(s)</b>	<b>Publication Details</b>
Alam, P. Saha and S. K. Bhattacharya	Birbhum District, Geographical Thoughts, University of North Bengal, Vol. 19, pp. 12-23, ISSN 2229-466X
<b>D K Mandal,</b> R. Mitra	<a href="#">Analysis of the Flood-induced Livelihood Vulnerability of the Riparian Villages along the Tista River in West Bengal</a> (with R. Mitra) in Indian Journal of Spatial Science, Kolkata, Vol. 13, No. 4, Spring issue, pp. 23-30 EISSN: 2249-4316, ISSN: 2249-3921
<b>D K Mandal,</b> S. Biswas, D. Roy & R. Mitra	2022: A study on causes and impacts of flash floods in Alipurduar District of West Bengal, India (with S. Biswas, D. Roy & R. Mitra), in Shodh Sarita, Vol. 8, Issue 29, pp. 38-43, ISSN 2348-2397
<b>S Saha</b>	2021: ‘A retrospect on Global Case-distribution pattern of COVID-19 Pandemics, the most Unrelenting Fate’, Editor: Madhusudan Karmakar, ISBN 978-93-95427-451-0, Book Title: The COVID-19 Pandemic
<b>S Saha, M Das</b>	2021: ‘Restoration of natural environment towards sustainability in Pandemic COVID-19: A special reference to city Area of West Bengal, India’, Editor: Madhusudan Karmakar, ISBN 978-93-95427-451-0, Book Title: The COVID-19 Pandemic
<b>S Saha, M Das</b>	2021: ‘Observation on the Health of Himalayan Lakes in order to Physico-Chemical Properties of Fresh Water in Darjiling District, West Bengal, India’, Book: Population, Development and Environmental Sustainability: Challenges and Opportunities, Editor: Dr. Indrajit Roy Chowdhury, Pub. Rajesh Publication, New Delhi, Joint Paper
<b>S Saha, M Das</b>	2021: “Spatiotemporal Detection and Delineation of Bhagirathi-Hooghly River Bank Erosion Using GIS Analytics, West Bengal, India”, Book: Geospatial Technology for Environmental Hazards. Advances in Geographic Information Science, Editors: Shit P.K., Pourghasemi H.R., Bhunia G.S., Das P., Narsimha A., Pub. Springer, Cham., DOI: <a href="https://doi.org/10.1007/978-3-030-75197-5_23">https://doi.org/10.1007/978-3-030-75197-5_23</a> , Joint paper
<b>S Saha, D Ghosh</b>	2021: ‘Determining the spatio-temporal response of downstream coarse sediment sorting process in the Chel river (North Bengal, India) using cluster analysis’, Joint paper, Pub.: Modeling Earth Systems & Environment (Springer), DOI: <a href="https://doi.org/10.1007/s40808-020-01028-w">https://doi.org/10.1007/s40808-020-01028-w</a>
<b>S Saha, T Mandal</b>	2021: ‘Spatio-temporal changes of cropping intensity in Maldah district, West Bengal, India’, Pub.: Shodh Sanchar Bulletin, Vol. 11, Issue 41, p. 54-59, Joint paper
<b>S Saha, T Mandal</b>	2021: ‘Characterization of Spatial Variability of Soil Properties of Malda District, West Bengal, India’, Editors: Rukhsana & Asraful Alam, Doi : <a href="https://doi.org/10.1007/978-3-030-69333-6_4">https://doi.org/10.1007/978-3-030-69333-6_4</a> , Book Title: Agriculture, Food and Nutrition Security, Chapter: 04, Pub.: Springer Nature Switzerland AG, 2021, Joint paper
<b>S Saha, Tapash Mandal</b>	2022: Groundwater depletion susceptibility zonation using TOPSIS model in Bhagirathi river basin, India. Modeling Earth Systems and Environment, 8(2), 1711-1731.
<b>S Saha, T Thokdar</b>	2021: Spatial distribution of Bed-load of the Upper Mahananda Basin in the Sub-Himalayan North Bengal of West Bengal, India’. In I. R. Chowdhury (Ed.), ‘Population, Development and Environmental Sustainability: Challenges and Opportunities’ (pp. 347 – 358). Rajesh

<b>Author(s)</b>	<b>Publication Details</b>
	Publications.
<b>S Saha, K Chakraborty</b>	2021: “Monitoring Channel Migration : A Case Study of River Ganga in Diara Region of Malda District, West Bengal” Geographical Thoughts, Vol. XIX ISSN 2229-466X.
<b>S Saha, K Chakraborty</b>	2021: “Detecting Land Use and Land Cover Changes in Diara Region of West Bengal Inaia Using Spatio-temporal Landsat Data from 1977-2019”, Book Chapter: Edited by Dr. Indrajit Roy Chowdhury, ISBN: 978-93-91139-21-6, 2021, Page No.: 278-296
<b>S Saha, K Chakraborty</b>	2022: “Assessment of bank erosion and its impact on land use and land coverdynamics of Mahananda River basin (Upper) in the Sub-HimalayanNorth Bengal, India”, Journal:SN Applied Sciences4, 20 (2022), DOI: <a href="https://doi.org/10.1007/s42452-021-04904-x">https://doi.org/10.1007/s42452-021-04904-x</a> , Springer Nature
<b>S Saha, S Rahaman</b>	2022: “Active Death Cases and Recovery rates of the COVID-19 pandemic: A Comparative Study of the Developed, Developing and Least Developed Countries of the World” (ISBN : 978-93-91550-73-8)
<b>I R Chowdhury, A Bose, D Basak, S Roy</b>	Salem, M., Bose, A., Bashir, B., Basak, D., Roy, S., Chowdhury, I. R., ... & Tsurusaki, N. (2021). Urban expansion simulation based on various driving factors using a logistic regression model: Delhi as a case study. Sustainability, 13(19), 10805. <a href="https://www.mdpi.com/2071-1050/13/19/10805">https://www.mdpi.com/2071-1050/13/19/10805</a>
<b>I R Chowdhury, S Roy, A Bose, D Basak</b>	Roy, S., Bose, A., Singha, N., Basak, D., & Chowdhury, I. R. (2021). Urban waterlogging risk as an undervalued environmental challenge: An Integrated MCDA-GIS based modeling approach. Environmental Challenges, 4, 100194. <a href="https://www.sciencedirect.com/science/article/pii/S2667010021001736?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S2667010021001736?via%3Dihub</a>
<b>I R Chowdhury, S Roy, A Bose</b>	Roy, S., Bose, A., & Chowdhury, I. R. (2021). Flood risk assessment using geospatial data and multi-criteria decision approach: a study from historically active flood-prone region of Himalayan foothill, India. Arabian Journal of Geosciences, 14(11), 1-25 <a href="https://link.springer.com/article/10.1007/s12517-021-07324-8">https://link.springer.com/article/10.1007/s12517-021-07324-8</a>
<b>I R Chowdhury, D Basak, S Roy, A Bose</b>	Basak, D., Bose, A., Roy, S., Chowdhury, I. R., & Sarkar, B. C. (2021). Understanding sustainable homestay tourism as a driving factor of tourist's satisfaction through structural equation modelling: A case of Darjeeling Himalayan region, India. Current Research in Environmental Sustainability, 3, 100098.
<b>I R Chowdhury, P Kayal</b>	Kayal, P., Chowdhury, I.R. (2021). “Sundarbane Chingri Casher Somossa ebong Somadhaner Bicolpo Babosthapona: Akti Vougolik Dristivongi”, Prosongo Sundarban (Vol-II), Bhugol O Paribesh, Kolkata, West Bengal, ISBN: 978-81-940447-1-0, Article No. 18, pp. 151-160.
<b>R Muktan &amp; M. Pal</b>	2021: “A Study on Female Work Participation in the Rural Areas of Dakshin Dinajpur District, West Bengal” (with M. Pal) in an Edited Book entitled Population, Development and Environmental Sustainability Challenges and Opportunities, pp. 73-96, ISBN: 978-93-91139-21-6
<b>A Basak</b>	“Demographic Characteristics and infrastructural facilities in Alipurduar Municipality, West Bengal.”, Sodhsamhita, Vol. IX, IssueII(VII),

<b>Author(s)</b>	<b>Publication Details</b>
	ISSN:2277-7067, February 2022, pp. 8-16.
<b>A Basak</b>	A ward level study of basic census data from Alipurduar Municipality, Sodhsamhita, Vol. IX, IssueII(VII), ISSN:2277-7067, February 2022, pp. 24-30.
<b>A Basak &amp; A Bhowmik</b>	Bhowmik, A., Basak A. (2021), A Spatial and Categorical study of gender differentials among the workers of West Bengal, based on Census 2011 Data, The Journal of Oriental Research Madras, Vol. XCII-XXXIV, June 2021, ISSN: 0022-3301, pp. 33-39.
<b>A Basak &amp; A Bhowmik</b>	Bhowmik, A., Basak, A. (2022), Child Labour: A Study on Prevailing Conditions Across the Districts of West Bengal in 2011, Journal of The Asiatic Society of Mumbai, Vol. 96 No. 02 (1) February 2022, ISSN: 0972-0766, pp. 1-7.
<b>A Basak, T D Roy, A Bhowmik &amp; S D Sarkar</b>	Dey Roy, T., Bhowmik, A., Dey Sarkar, S. & Basak, A. (2022), Temporal Changes in Land Use and Land Cover: A Case Study of Alipurduar Town, West Bengal; Journal of The Asiatic Society of Mumbai, Vol. 96 No. 02 (1) February 2022, ISSN: 0972-0766, pp. 39-46.
<b>A Basak, T D Roy, S Singh &amp; A Bhowmik</b>	Dey Roy, T., Singh, S., Bhowmik, A. & Basak, A. (2021), People's Perception, Behavior and Condition because of Lockdown Arising due to Covid-19 in Different areas of North Bengal, Geographical Thoughts, Vol. XIX, 2021, ISSN: 2229-466X, pp. 113-139.
<b>A Basak &amp; S D Sarkar</b>	Dey Sarkar, S & Basak, A. (2022). A District Level Analysis on Disparity in Literacy Rate among the Scheduled Tribe and Non-Scheduled Tribe Population in West Bengal, Journal Of the Asiatic Society of Mumbai, Vol.96, No 02(I), Feb 2022, ISSN 0972-0766.
<b>A Basak, I L N Lama &amp; P Chowdhury</b>	Chowdhury, P., Lepcha, I & Basak, A. (2021). A Vulnerability Assessment of Residents in Landslide Prone Area: A Study of Chibo Pashyor, Kalimpong District, West Bengal, Journal of Oriental Research Madras, Vol. XCII-XXXIV, ISSN: 0022-3301, pp. 40-46.
<b>Indira Lepcha Nee Lama &amp; Chandrima Sarkar</b>	Sarkar, C & Lepcha, I. (2021). Asssment of the use of Contraceptive Pattern Among Women of Singha Jhora Tea Estate in Darjiling District, West Bengal, Journal of Women's Studies, University of North Bengal, Volume X, ISSM- 2320-3625.
<b>I L N Lama Arindam Basak &amp; Parangama Chowhury</b>	Chowdhury, P., Lepcha, I & Basak, A. (2021). A Vulnerability Assessment of Residents in Landslide Prone Area: A Study of Chibo Pashyor, Kalimpong District, West Bengal, Journal of Oriental Research Madras, Vol. XCII-XXXIV, ISSN: 0022-3301, pp. 40-46.
<b>I L N Lama &amp; Parangama Chowdhury</b>	Chowdhury, P. & Lepcha, I (2021). Demographic Characteristics of the Socially Vulnerable Residents in Landslide Prone Area: A Study of Chibo Pashyor, Kalimpong District, West Bengal, Geographical Thoughts, Volume: XIX, 2021, ISSN: 2229-466X.
<b>I L N Lama &amp; Nisha Tamang</b>	Tamang, N. & Lepcha, I (2021). Social Perception and Attitudes Towards Domestic Solid Waste Practices in Darjeeling Municipality, West Bnegal, The Journal of Oriental Research Madras, Vol. XCII-XXXIV, ISSN:0022-3301, pp. 47-57.
<b>I L N Lama</b>	Comparison of Maternal and Child Health in the Districts of North Bengal Using Index of Relative Dissimilarity: A Study From National Family Health Survey-5.

<b>Author(s)</b>	<b>Publication Details</b>
<b>R Roy &amp; P Sen</b>	Educational Status And Dropout Among Tribal Woman: A Case Study of Naxalbari C.D. Block, Darjiling District, West Bengal, IOSR Journal of Humanities And Social Science, E-Issn: 2279-0837, P-Issn: 2279-0845, Vol. 26, Issue. 6
<b>R Roy, P Das, T Das &amp; T B Roy</b>	Prevalence And Change Detection Of Child Growth Failure Phenomena Among Under-5 Children: A Comparative Scrutiny From Nfhs-4 And Nfhs-5 In West Bengal, India, Clinical Epidemiology And Global Health, E-Issn: 2213-3984, Vol. 12, Issue 4
<b>R Roy, T Das &amp; T B Roy</b>	Reintegration With Family And Intimate Partner Violence (Ipv) Against Women Among The Returnee Migrant Worker's Family During Covid-19 Induced Lockdown: A Block-Level Analysis Using Multinomial Logistic Regression Model, Children And Youth Services Review, E-Issn: 0190-7409, Vol. 130
<b>R Roy &amp; B Roy</b>	The Working Age People: Role Of Age Growth And Health Variation In Uttar Dinajpur, West Bengal, India, Population, Development And Environmental Sustainability: Challenges And Opportunities, Isbn 978-93-91139-21-6,
<b>R Roy, B Sarkar, P Das, N Islam, A Basak &amp; M Debnath</b>	Land Suitability Analysis For Paddy Crop Using Gis-Based Fuzzy-Ahp (F-Ahp) Method In Koch Bihar District, West Bengal, Geocarto International.
<b>R Roy, C Nad, &amp; T B Roy</b>	Human Elephant Conflict In Changing Land-Use Land-Cover Scenario In And Adjoining Region Of Buxa Tiger Reserve, India, Environmental Challenges, Vol. 7
<b>R Roy, T Debnath, A Saha, &amp; B Hembram</b>	Maternal Health Care Services At Primary And Community Health Care Centre: A Comparative Study Between North And South Bengal, West Bengal, India
<b>R Roy, M Sarkar &amp; T B Roy</b>	An Assessment Study on Hierarchical Integrity of Road Connectivity and Nodal Accessibility of Maternal Health Care Service Centres in Itahar Block, Uttar Dinajpur District, West Bengal, Livelihood Enhancement Through Agriculture, Tourism and Health, ISBN 978-981-16-7310-8,

#### **Research Projects Details:**

<b>Title of the Project</b>	<b>PI</b>	<b>Sponsored by</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>
Documentation of channel migration and land loss with special reference to bank soil characteristics: a case study of River Ganga in Malda District, West Bengal	Dr. Snehasish Saha	DSTBT	2019	3 years	9, 45, 800
A Comparative Study on Surface Soil Characteristics and Changing Land Use Land Cover Scenario of Dhupguri	Dr. Snehasish Saha	NBU	2021	1 year	1,50,000

<b>Title of the Project</b>	<b>PI</b>	<b>Sponsored by</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>
and Maynaguri blocks of Jalpaiguri, West Bengal, India					
Understanding Quality of life (QoL) of the Tribes in the Hilly Region of Darjiling – Kalimpong District, West Bengal: A Future Road Map for the Sustainable Development”	Dr. I Roy Chowdhury	ICSSR	2021	2 years	6,50,000

**Placement Details:**

<b>Name of the Student</b>	<b>Name of the Employer</b>
1. Koushik Raha	SI, West Bengal
2. Sahadev Barman	Jail Warder, West Bengal
3. Anju Barman	Jail Warder, West Bengal



## DEPARTMENT OF GEOLOGY

### About the Department:

The Department of Geology was established in 2018 to promote higher studies in the field of Geological Sciences under the University of North Bengal. This Department is offering post graduate studies and doctoral/ post-doctoral research for the first time in the North Bengal sector. The Department also offers three-year (CBCS) undergraduate (B.Sc) course in the University main campus at Siliguri, Darjeeling.

In spite of being in extremely young, the department has already demonstrated its presence in national forum. Faculty members are engaged in advanced research of various fundamental earth science problems. The department regularly invites stalwarts of the field as guest faculties to provide highest possible learning experience to the students. The department already established a front-line geochemical laboratory and regular geological laboratory facilities including high-resolution microscope facility (petrology and micro-paleontology), computer laboratory. It regularly organize geological field training program as a part of curriculum in various important parts of the Indian peninsula and extra-peninsular region. Students of the department are always encouraged to think independently in terms of their master's dissertation and regular interactive sessions.

Students of the department made the University proud by winning prizes in various national competitions. Being strategically located at the foothills of the Himalayas, the department has immense scope to grow further and flourish to become a leading earth science research and teaching institution in the region. With a combined effort from the University, expert faculty members and most importantly enthusiastic students of this department is certainly on the right track.

### Courses Offered:

- B. Sc. (Geology Honours)
- M. Sc.
- Ph. D.

### Research Focus:

- Sedimentology
- Geochemistry
- Petrology
- Quaternary Geology

### Research Laboratory:

- Geochemical laboratory

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Pradip Samanta	Ph.D.	Asst. Professor	geolps@nbu.ac.in
Koushik Saha	M.Sc.	Asst. Professor	saha@nbu.ac.in

Name	Qualification	Designation	Email
Subhadeep Majumder	M.Sc.	Asst. Professor (Contractual)	subhadeep@nbu.ac.in

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Anita Roy	M.A.	Sr. Assistant
Kumar Darjee	8 <sup>th</sup> passed	Sr. Peon
Bimalendu Singha	M.Lib.	Group-D (Mandays)

**Details of PhD Students (Without Fellowship):**

Name	Supervisor's Name	Gender
Madhurya Roy	Dr. Pradip Samanta	Female

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar	Title of the Paper Presented
Pradip Samanta	American Geophysical Union (AGU) International Annual Meeting, 2022	Biogenic Sulphide Mineralization and Incipient Uranium Enrichment within Microbially Induced Neoproterozoic Marine Sediments, Cave-Temple Arenite Member, Badami Group, Karnataka, India.
	Goldschmidt International Conference, 2022	Understanding the environment of Early life: Divergence, and environment using stable isotope of Badami sediments, Southern India
	IAS Seminar, 2022	From shallow marine siliciclastics to deep water Banded Iron Formations (BIFs)- sequence architecture and paleogeographic framework along with antiquity of Archean microbial life from Kushtagi-Hungund Schist Belt (KHSB) of Eastern Dharwar Craton (EDC), India.
	International Sedimentological Congress, Beijing, 2022	Bio-geochemical and depositional framework of siliciclastic sediments from an oxygenated Neoproterozoic shelf under warm and humid climate in the backdrop of Neoproterozoic Oxygenation Event (NOE).
	International AGU 2021 Fall Meeting (14.12.2021)	Micro-Facies Analysis and Geochemistry of Shaley-Banded Iron Formations (S-Bifs) from Late-Archaean Kushtagi-Hungund Schist Belt (KHSB), Karnataka, South Indian Shield (SIS).

**Publications:**

<b>Name of the Author(s)</b>	<b>Publication Details</b>
Mukhopadhyay, S., and <b>Samanta, P.</b>	The controlling factors of lateral variability in coastal marine sequence building pattern. Journal of Earth System Science, Springer, 131 (4), 245. <a href="https://doi.org/10.1007/s12040-022-01987-x">https://doi.org/10.1007/s12040-022-01987-x</a>
<b>Samanta, P.</b> , Mukhopadhyay, S., Sen, A., Ghosh, N., Bumby, A.,	Precambrian fans on opposite margins of an intracratonic rift basin; palaeogeography, palaeoclimate and provenance: Neoproterozoic Badami Group, Karnataka, India. Sedimentary Geology, 428, 1 – 27. <a href="https://doi.org/10.1016/j.sedgeo.2021.">doi.org/10.1016/j.sedgeo.2021.</a>
Mukhopadhyay, S., Sen, A., Koley, A., <b>Samanta, P.</b> ,	Evaluating the formative and shape-controlled dispersive mechanisms of mud balls in a low-energy coastal setting: New insights. Geological Journal, 1-25, <a href="https://doi.org/10.1002/gj.4310">doi.org/10.1002/gj.4310</a>
<b>Koushik Saha</b> ; Prasanta Sanyal; Swarnadip Saha	Source assessment of tropical-marshland sediment for evaluating seawater intrusion in Chandipur, India: An integrated granulometric and stable isotope approach, Estuarine, Coastal and Shelf Science, <a href="https://doi.org/10.1016/j.ecss.2022.108096">10.1016/j.ecss.2022.108096</a>
<b>Koushik Saha</b> ; Subhajit Sinha, 2021	Grain Size Analysis and Characterization of Sedimentary Process in Tidal Flat of Chandipur Region, East Coast of India, Marine Geodesy, <a href="https://doi.org/10.1080/01490419.2021.1922554">10.1080/01490419.2021.1922554</a>

**Research Projects Details:**

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Sedimentology and sequence stratigraphy in the lower two Members, viz., Kendur Conglomerate and Cave Temple Arenite, of the Badami Group, Kaladgi Supergroup, Karnataka with special emphasis on the control of Uranium mineralization.	UGC-Start-up Grant	2019	2019 – 2021 (Extended upto 2022)	Rs. 10 lakh	Dr. Pradip Samanta
A multiproxy approach to trace the effects of sea level rise and climate change in the coastal wetland ecosystem of West Bengal	DSTBT	2019	2019 – 2021 (Extended upto 2022)	Rs. 2.85 lakh	Koushik Saha

## DEPARTMENT OF MATHEMATICS

### About the Department:

The Department of Mathematics, NBU came into existence in 1962 with the major objective of developing a centre for excellence in the region of North Bengal in Mathematical Sciences and Applications and to provide facilities for training, study, research in these areas. Pioneering research contributions have come from the faculty members in the field of Real Analysis, Complex Analysis, Topology, Relativity & Astrophysics, Graph Theory, Dynamical Systems and Geometry.

The Department has the distinction of having on its staff Fullbright Fellow, Erasmus International Fellow, TWAS-UNESCO visiting Professor JSPS Scholar, Ramanujan Fellow, etc. The Department has a record of almost 100% employments at various levels, starting from High Schools, Colleges and Universities to Research Laboratories like DRDO, CSIR Labs and others.

### Courses Offered:

- M. Sc.
- Ph. D.

### Research Focus:

- Considerably good research work has been done in the area of Topology, Algebra and Number Theory leading to some excellent publications.
- Some works on the area on Complex Analysis; particularly on Meromorphic Functions and Complex Linear Differential Equation are also done successfully.
- Effects have been given towards developing research motivation on the areas of Differential Geometry, Fluid Mechanics and Mathematical Modelling.
- Apart from the above mentioned works attempts have been taken towards the study of topics in some interdisciplinary research area like Biomath etc.

### Faculty Details:

Name	Qualification	Designation	Email
Prof. Suparna De Sarkar	Ph.D.	Professor	suparnamath@nbu.ac.in
Prof. Manorajan Singha	Ph.D.	Professor	manoranjan.math@nbu.ac.in
Dr. Sanjoy Kumar Ghosal	Ph.D.	Assoc. Professor	sanjoykumarghosal@nbu.ac.in
Dr. Dilip Chandra Pramanik	Ph.D.	Asst. Professor	dcpramanik_math@nbu.ac.in
Dr. Nita Tamang	Ph.D.	Asst. Professor	nita_math@nbu.ac.in
Dr. Siddhartha Biswas	Ph.D.	Asst. Professor	siddhartha.math@nbu.ac.in

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Email</b>
Dr. Paltu Sarkar	Ph.D.	Asst. Professor	pal2_math_796@nbu.ac.in
Dr. Bibaswan Dey	Ph.D.	Asst. Professor	bibaswandey@nbu.ac.in
Shri. Kalyan Saha	M.Sc.	Asst. Professor	kalyansaha@nbu.ac.in
Dr. Sujay Kumar Biswas	Ph.D.	Asst. Professor	sujay.math@nbu.ac.in
Dr. Samten Tamang	Ph.D.	Asst. Professor	stamang@nbu.ac.in

**Details of Non-Teaching Staff:**

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>
Smt. Sonali Sarkar	B.A., CIT (Computer)	Jr. Assistant (Casual)
Smt. Rahenu Banu	H.S.	Sr. Peon

**Details of Research Scholars:**

<b>Name</b>	<b>Fellowship Name</b>	<b>Supervisor's Name</b>	<b>Gender</b>
Sourav Mandal	UGC-JRF	Dr. Sanjoy Kr. Ghosal	Male
Tamim Aziz	CSIR – JRF	Dr. Sanjoy Kr. Ghosal	Male
Rinki Paul	INSPIRE - JRF	Dr. Paltu Sarkar	Female
Debkumar Barman	UGC – JRF	Dr. Paltu Sarkar	Male
Ujjal Kumar Hom	UGC – JRF	Prof. Manoranjan Singha	Male
Abdush Salam Pramanik	UGC – JRF	Dr. Bibaswan Dey	Male
Ruchira Ray	SJSGC	Dr. Bibaswan Dey	Female
Nandita Kundu	UGC – JRF	Dr. Bibaswan Dey	Female
Sanjukta Sarkar	NFSC	Dr. Bibaswan Dey	Female
Bishal Tamang	UGC – JRF	Dr. Nita Tamang	Male
Pitu Sarkar	UGC – JRF	Dr. Nita Tamang	Female
Kapil Roy	CSIR – JRF	Dr. D C Pramanik	Male
Nimai Dey	SVMCM	Dr. D C Pramanik	Male
Apurba Sarkar	CSIR – JRF	Dr. D C Pramanik	Male
Chandra Sekhar Mahato	UGC - JRF	Dr. Siddhartha Biswas	Male
Abhishek Mallick	UGC - NET NFSC	Dr. Siddhartha Biswas	Male
Ismail Haque	UGC – JRF	Dr. Siddhartha Biswas	Male
Goutam Mandal	NFSC	Dr. Sujay Kr. Biswas	Male
Sujoy Bhanja	UGC – JRF	Dr. Sujay Kr. Biswas	Male
Tanushree Roy	UGC – JRF	Dr. Samten Tamang	Female

**Details of PhD Students (Without Fellowship):**

Name	Supervisor Name	Gender	Date of Registration
Sima Roy	Prof. Manoranjan Singha	Female	27.11.2020
Kousik Das	Prof. Manoranjan Singha	Male	07.01.2016

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Dr. Samten Tamang	Exploring the Cosmos 22: An International Conference on Relativistic Universe organized by High Energy and Cosmic Ray Research Centre, University of North Bengal, West Bengal, India.	March 15-16, 2022	Attended
Dr. Bibaswan Dey	7 <sup>th</sup> Siksha 'O' Anusandhan Weekly Academic Lecture (SOAWAL), organized by Centre for Applied Mathematics & Computing (CAM&C), Faculty of Engineering & Technology, Siksha 'O' Anusandhan (Deemed to be University)	11.09.2021	Endothelial Cell Glycocalyx as Electrokinetic Transport Regulator (Invited Talk)

**Details of Seminar/Conferences /Webinar Attended by Student:**

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Sourav Mandal	International Seminar entitled '87 <sup>th</sup> Annual Conference of the Indian Mathematical Society', organized by (Department of Applied Sciences, JNEC, MGM University)	04-07.12.2021.	Rough weighted $I - \alpha\beta$ -statistical convergence by neighborhood approximation.
Sourav Mandal	International Seminar entitled 'International Conference on Recent Developments in Mathematics and Mathematical Sciences', organized by the Calcutta Mathematical Society	09-11.12.2021.	When asymmetric metric space forms an approximate metric space.
Abdush Salam Pramanik	87th Annual Conference of the Indian Mathematical Society - An International Meet (IMS-2021), Department of Applied Sciences, MGM University,	December 4-7, 2021	A Two-Phase Model of Fluid Injection Inside

<b>Name</b>	<b>Details of Seminars / Conferences / Webinar</b>	<b>Date</b>	<b>Title of the Paper Presented</b>
	Aurangabad, Maharashtra, India		Subcutaneous Tissue
Abdush Salam Pramanik	International Conference on Recent Developments in Mathematics and Mathematical Sciences (ICRDMMS 2021), Calcutta Mathematical Society, Kolkata, India	December 9-11, 2021	Modeling Fluid Injection Inside Subcutaneous Layer of Skin
Abdush Salam Pramanik	67th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM-2022)- an International Conference, Department of Mathematics, Indian Institute of Technology Mandi, Himachal Pradesh, INDIA	December 14-16, 2022	A Mathematical Model of Plaque Growth in Early Stage of Atherosclerosis
Abdush Salam Pramanik	Workshop: Hands-on-Training on Solving Differential Equations in Engineering Sciences, Department of Mathematics, National Institute of Technology Uttarakhand,	June 21-25, 2022	Attended
Abdush Salam Pramanik	Workshop: National Intellectual Property Awareness Mission (NIPAM), Intellectual Property Office, India	April 27, 2022	
Abdush Salam Pramanik	Workshop: Various Sophisticated Scientific Instruments and Techniques (STUTI), University of North Bengal, West Bengal, India with Shivaji University, Maharashtra, India	November 22-28, 2022	
Ms. Ruchira Ray	Workshop: Hands-on-Training on Solving Differential Equations in Engineering Sciences, Department of Mathematics, National Institute of Technology Uttarakhand, Uttarakhand, India	June 21-25, 2022	Attended
	Workshop: National Intellectual Property Awareness Mission (NIPAM), Intellectual Property Office, India	April 27, 2022	
Ms. Sanjukta Sarkar	Workshop: Hands-on-Training on Solving Differential Equations in Engineering Sciences, Department of Mathematics, National Institute of Technology Uttarakhand, Uttarakhand, India	June 21-25, 2022	Attended
Ms. Sanjukta	Workshop: National Intellectual Property	April 27,	Attended

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Sarkar	Awareness Mission (NIPAM), Intellectual Property Office, India	2022	
Ms. Nandita Kundu	Workshop: Hands-on-Training on Solving Differential Equations in Engineering Sciences, Department of Mathematics, National Institute of Technology Uttarakhand, Uttarakhand, India	June 21-25, 2022	Attended
	Workshop: National Intellectual Property Awareness Mission (NIPAM), Intellectual Property Office, India	April 27, 2022	

#### Publications:

Name of the Author(s)	Publication Details
<b>Biswas S.</b> and Mahato C S.	Eigenvalue approach to study Rayleigh waves in nonlocal orthotropic layer lying over nonlocal orthotropic half-space with dual-phase-lag model, Journal of Thermal Stresses, Vol. 45, Issue 12, pp. 937-959, 2022
<b>Biswas S.</b> and Abo-Dahab S M.	Reflection of p waves in porous thermoelastic medium with three phase lag model, Waves in Random and Complex Media, Vol. 32, Issue 5, pp. 2105- 2123, 2022.
<b>Biswas S.</b> and Abo-Dahab S M.	Electro-magneto-thermoelastic interactions in initially stressed orthotropic medium with Green-Naghdi model type-III, Mechanics Based Design of Structures and Machines, Vol. 50, Issue 10, pp. 3649-3664, 2022.
Pramanik A S. and <b>Biswas S.</b>	Eigenvalue approach to hyperbolic thermoelastic problem in porous orthotropic medium with Green-Lindsay model, Mechanics Based Design of Structures and Machines, Vol. 50, Issue 12, pp. 4229-4245, 2022.
Pramanik A S. and <b>Biswas S.</b>	Surface waves in porous thermoelastic medium with two relaxation times, Mechanics Based Design of Structures and Machines, Vol. 50, Issue 12, pp. 4297-4315, 2022.
Haque I. and <b>Biswas S</b>	State space approach to characterize Rayleigh waves in a layer lying over a half-space with nonlocal thermoelasticity, Waves in Random and Complex Media, 2021
<b>Biswas S.</b>	Rayleigh waves in porous orthotropic medium with phase lags, Structural Engineering and Machines, Vol.80, Issue 3, pp. 265-274, 2021.
<b>Biswas S.</b>	Memory Response in Thermoelastic Plate with ThreePhase-Lag Model, Journal of Solid Mechanics, Vol. 13, Issue. 3, pp. 366-383,



Name of the Author(s)	Publication Details
	2021.
<b>Biswas S.</b>	The propagation of plane waves in nonlocal visco-thermoelastic porous medium based on nonlocal strain gradient theory, <i>Waves in Random and Complex Media</i> , 2021.
<b>Biswas S.</b>	Surface waves in piezothermoelastic transversely isotropic layer lying over piezothermoelastic transversely isotropic half-space. <i>Acta Mech</i> , Vol. 232, Issue 2, pp. 373–387, 2021.
<b>Biswas S.</b>	Rayleigh waves in a magneto- thermoelastic anisotropic half space, <i>Journal of Thermal Stresses</i> , Vol. 44, Issue 2, pp. 197-213, 2021.
<b>Biswas S.</b>	Three dimensional vibration analysis of porous cylindrical panel with a three-phase-lag model, <i>Waves in Random and Complex Media</i> , Vol. 31, Issue 6, pp. 1879-1904, 2021.
<b>Biswas S.</b>	Eigenvalue approach to magneto-thermoelastic problem in transversely isotropic hollow cylinder: Comparison of three theories, <i>Waves in Random and Complex Media</i> , Vol. 31, Issue 3, pp. 403-419, 2021.
<b>Nita Tamang</b>	A simple observation on decomposition of Multiple zeta values, <i>Indian Journal of Pure and applied Mathematics</i> , 51(4): 1269-1284, December 2020.
Mandal M, <b>Tamang N</b> and Das S	On primary hyperideals of ternary Hypersemiring, <i>Journal of Hyperstructures</i> 10 (1) (2021), 22-37
Mandal M, Das S and <b>Tamang N</b>	Left Bi-quasi and Minimal Left Bi-quasi Ideals of Ternary Semiring, <i>Southeast Asian Bulletin of Mathematics</i> (2021) 45: 217–226.
Sánchez Ruiz, L.M.; Datta, S.K.; <b>Tamang, S.</b> ; Biswas, N.	On the Growth of Higher Order Complex Linear Differential Equations Solutions with Entire and Meromorphic Coefficients, <i>Mathematics</i> , Vol. 9, 58, pp. 1-10, (2021).
Md Adud, <b>S.Tamang</b>	$\phi$ -Relative order and $\phi$ -relative type of meromorphic functions in $\mathbb{C}$ , <i>The Journal of Analysis</i> , Vol. <b>30</b> , pp. 1143–1155, (2022); <a href="https://doi.org/10.1007/s41478-022-00398-x">https://doi.org/10.1007/s41478-022-00398-x</a>
R. P. Agarwal, S. K. Datta, N. Biswas, <b>S. Tamang</b>	On the comparative growth analysis of solutions of complex linear differential equations with entire and meromorphic coefficients of $[p, q] - \phi$ order, <i>Int. J. Nonlinear Anal. Appl.</i> , Vol. 13 No. 2, pp. 2175–2183, (2022); <a href="http://dx.doi.org/10.22075/ijnaa.2021.22306.2348">http://dx.doi.org/10.22075/ijnaa.2021.22306.2348</a>
A. Shaw and <b>S. Tamang</b>	On the entire solutions of Complex Nonlinear Difference-Differential Equations, <i>Annals of Mathematics and Computer Science</i> , Vol. 13, pp. 1-11, (2023).
<b>Ghosal S.</b> and Mandal S.	Rough weighted $I - \alpha\beta$ –statistical convergence in locally solid Riesz spaces, <i>Journal of Mathematical Analysis and Applications</i> , Vol. 506, Issue 2, Article no 125681.

Name of the Author(s)	Publication Details
<b>Ghosal S.</b> and Mandal S.	The degree of roughness, <i>Topology and its application</i> , Vol. 307, Article no 107988.
<b>Ghosal S.</b> , Mandal S., and Banerjee. M.	Approximity of asymmetric metric spaces, <i>Mathematica Slovaca</i> , Vol. 72, Issue 5, pp. 1227-1244.
<b>Pramanik D. C.</b> and. Roy J.	Results on Uniqueness of Meromorphic Functions Weighted-Sharing a Set of Roots of Unity, <i>Journal of Interdisciplinary Mathematics</i> , Vol. 25, No. 1, pp. 45–62, 2022
<b>Pramanik D. C.</b> and. Roy J.	Uniqueness of Non-Homogeneous Differential Polynomials of Meromorphic Functions Sharing a Small Function, <i>Journal of Classical Analysis</i> , Vol. 19, No. 1, pp. 65-81, 2022
<b>Pramanik D. C.</b> and. Roy J.	Some results on uniqueness of homogeneous differential polynomials of meromorphic functions, <i>Italian Journal of Pure and Applied Mathematics</i> , No. 46, pp. 259-271, 2021
<b>Pramanik D. C.</b> and. Roy J.	Linear Differential Polynomials Weighted-Sharing a Set of Roots of Unity, <i>Facta Universitatis(NIS) Ser. Math. Inform.</i> , Vol. 36, No. 2, pp. 333-347, 2021
<b>Pramanik D. C.</b> and Roy K.	Further study on the Bruck conjecture and some non-linear complex differential equations, <i>Arab Journal of Mathematical Sciences</i> , Vol.27, No. 2, pp.130-138, 2021
<b>Pramanik D. C.</b> and. Roy J.	Weighted sharing and uniqueness of homogeneous differential polynomials of meromorphic functions, <i>Southeast Asian Bulletin of Mathematics</i> , Vol. 45, No. 2, pp.227-240, 2021
<b>Pramanik D. C.</b> and Biswas M.	Growth of solutions of non-homogeneous linear differential equations and its applications, <i>Korean J. Math.</i> , 29, No. 1, pp. 65-73, 2021
<b>Pramanik D. C.</b> and. Roy J.	Uniqueness of Meromorphic Functions Sharing Values with Their $n$ -th Derivatives, <i>Electronic Journal of Mathematical Analysis and Applications</i> , Vol. 9, No. 1, pp. 191-200, 2021
<b>Bibaswan Dey</b> and G. P. Raja Sekhar	Mathematical modeling of electrokinetic transport through endothelial-cell glycocalyx, <i>Physics of Fluids</i> , Vol. 23, No./Issue. 8, pp. 081902, 2021.
<b>M. Singha</b> and K. Das	A variant of Birkhoff-Kakutani theorem on topological polygroups, <i>Palestine J. Math.</i> , 11(3) (2022), 598-603. <a href="https://drive.google.com/file/d/1rycqj21df8eQIHgMMCc-wcmM5Z6YCTmr/view?usp=sharing">https://drive.google.com/file/d/1rycqj21df8eQIHgMMCc-wcmM5Z6YCTmr/view?usp=sharing</a>
<b>M. Singha</b> and K. Das	Topological Krasner hyperrings with special emphasis on isomorphism theorems, <i>Appl. Gen. Topol.</i> , 23(1) (2022), 201-212. doi: <a href="https://doi.org/10.4995/agt.2022.14778">https://doi.org/10.4995/agt.2022.14778</a>

**Research Projects Details:**

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Role of Density and Ideals of Natural Numbers in the Theory of Convergence	N.B.U.	2021-2022	1 Year	1,50,000/-	Prof. Manoranjan Singha
Investigation on the Theories of Meromorphic Functions and their Applications	N.B.U.	2021-2022	1 Year	1,50,000/-	Dr. Samten Tamang

**Placement/Higher Education Details:**

<b>SL No.</b>	<b>Year</b>	<b>Name of the Student</b>	<b>Name of the Employer/HEI</b>
1.	2020	Monalisa Paul	Customer Associate, SBI
2.	2021	Tamal Debnath	Sub-Inspector, West Bengal Police
3.	2021	Bishal Sonar	Assistant Professor, Salesian College, Siliguri
4.	2021	Sainee Sultana	SWO-A, Punjab National Bank
5.	2022	Gobinda Saha	Probationary Officer, SBI
6.	2022	Madhumita Chakraborty	Assistant Professor, Surendra Institute of Engineering and Management
7.	2022	Bikiran Das	Assistant Professor, Salesian college, Siliguri
8.	2022	Mousumi Roy	Assistant Manager, Bangiya Gramin Vikash Bank
9.	2022	Manika Sarkar	Assistant Manager, Bangiya Gramin Vikash Bank
10.	2022	Subhajit Kundu	SWO-A, Punjab National Bank
11.	2022	Shwetashri Das	SWO-A, Central Bank of India
12.	2023	Riya Nath	Office Assistant, UBKGB
13.	2020	Animesh Sarkar	PhD Scholar, IIT (BHU), Varanasi
14.	2020	Subham Paul	PhD Scholar, IIT Patna
15.	2020	Bishal Tamang	PhD Scholar, University of North Bengal
16.	2020	Ujjal Kumar Hom	PhD Scholar, University of North Bengal

<b>SL No.</b>	<b>Year</b>	<b>Name of the Student</b>	<b>Name of the Employer/HEI</b>
17.	2021	Bisham Dewan	PhD Scholar, Banaras Hindu University
18.	2021	Chandrasekhar Mahato	PhD Scholar,NBU
19.	2021	Rinki Paul	PhD Scholar, NBU
20.	2021	Bapan Ali Miah	PhD Scholar, NIT Silchar
21.	2021	Shiba Biswas	PhD Scholar, IIT Kharagpur
22.	2021	Pitu Sarkar	PhD Scholar, NBU
23.	2021	Anuj Kumar Bhagat	PhD Scholar, IIT Delhi
24.	2022	Sanchita Pramanik	PhD Scholar, NITMeghalaya
25.	2022	Tanusree Roy	PhD Scholar, NBU
26.	2022	Ruchira Ray	PhD Scholar, NBU
27.	2022	Biswajit Mandal	PhD Scholar, IISER Bhopal
28.	2023	Arup Mazumder	Project Associate, IISER Bhopal
29	2022	Sanchita Pramanik	Ph.D. Scholar, NIT Meghalaya
30	2022	Tanushree Roy	Ph.D. Scholar, NBU
31	2022	Ruchira Ray	Ph.D. Scholar, NBU
32	2022	Biswajit Mandol	Ph.D. Scholar, IISER
33	2022	Abhishek Mallick	Ph.D. Scholar, NBU
34	2022	Gobinda Saha	Probationary Officer, SBI
35	2022	Madhumita Chakrabarty	Assistant Professor, Surendra Institute of Engineering and Mangement
36	2022	Bikiran Das	Assistant Professor, Salesian College, Siliguri
37	2022	Mousumi Roy	Assistant Manager, Bangiya Gramin Vikash Bank
38	2022	Manika Sarkar	Assistant Manager, Bangiya Gramin Vikash Bank
39	2022	Shwetashri Das	SWO-A, Central Bank of India
40	2022	Soumita Das	Station Master
41	2022	Mahamaya Pal	Train Manager
42	2022	Jharna Mandal	ICDS Supervisor

**Miscellaneous Events:**

- 1) A special seminar lecture was organized by the Department on 19<sup>th</sup> and 20<sup>th</sup> September, 2022 -  
Title of the Topic:     Generating topologies & distinguishing different topological spaces: a brief overview  
Resource Person:     Prof. Pratulananda Das  
                                  Department of Mathematics, Jadavpur University
  
- 2) NBHM -2022 Doctoral Scholarship Test was held in the Department of Mathematics, N.B.U. on 18.06.2022 (Saturday) from 10.30 a.m. to 1.30 p.m.

## DEPARTMENT OF MICROBIOLOGY

### About the Department

The Department of Microbiology, NBU was established in 2005 as a self-financed Department with an aim to train the next generation of leaders in Microbiology. In 2008, the Department was shifted to new building with superior facilities. The Department was regularized by the Government of West Bengal in 2012.

Presently, five faculty members are trying to achieve its mission to impart knowledge and carry out high impact research on pathogenesis of microbes and their role in environment, food safety and industry.

### Courses Offered:

- M. Sc.
- Ph. D.

### Research Focus:

- Redox Biology
- Industrial Microbiology
- Microbial Biotechnology
- Food Microbiology
- Environmental Microbiology

### Research Laboratory:

- Environmental and Stress Biology Laboratory

### Sophisticated Instrument/Equipment:

- UV Vis Spectrophotometer
- Thermal Cycler

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Shyama Prasad Saha	Ph.D.	Asst. Professor	shyamaprasad@nbu.ac.in
Ms. Khusboo Lepcha	M.Sc.	Asst. Professor	khusboolepcha88@nbu.ac.in
Dr. Arindam Bhattacharjee	Ph.D.	Asst. Professor	abmicrobio@nbu.ac.in
Dr Payel Sarkar	Ph.D.	Asst. Professor	payalsarkar@nbu.ac.in
Dr Sarita Kumari	Ph.D.	Asst. Professor	saritamicro@nbu.ac.in

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Mrs. Madhumita Ghosh	Higher Secondary	Junior Superintendent
Mr. Satya Ranjan Das	Higher Secondary	Record Supplier
MrSudipta Das	B. Sc.	Lab Technician (Contractual)
Mr. Subir Sarkar	IX	Group D casual (Casual)

**Details of Research Scholars:**

Name	Fellowship Name	Supervisor's Name	Gender	Date of Registration
Swarnab Sengupta	University Fellowship	Dr. A Bhattacharjee	Male	18.03.2018
Aditi Rai	DST - INSPIRE	Dr. A Bhattacharjee	Female	29.12.2014
Rohan Nath	SVMCM	Dr. A Bhattacharjee	Male	03.01.2019
Pratima Sarkar	SVMCM	Dr. A Bhattacharjee	Female	N/A
Madhushree Hui	SVMCM	Dr. A Bhattacharjee	Female	N/A

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars/Conferences / Webinar	Date
Dr. Sarita Kumari	Two Days National Seminar (Online Mode) on Advancement of Plant Sciences for Food Diversity and Nutritional Security	31/9/21-01/10/21

**Details of Seminar/Conferences /Webinar Attended by Student:**

Name	Details of Seminar	Title of the Paper Presented
Mr. Rohan Nath	Two Days National Seminar (Online Mode) on Advancement of Plant Sciences for Food Diversity and Nutritional Security, 30.09.2021-01.10.2021	“Analyzing the effect on growth of <i>Saccharomyces cerevisiae</i> in ethanol under nitrosative stress”

**Publications:**

Name of the Author(s)	Publication Details
Kumar G, Saha S P, Ghosh S and Mondal P K	Artificial neural network-based modelling of optimized experimental study of xylanase production by <i>Penicilliumcitrinum</i> xym2, <i>Journal of Process Mechanical Engineering</i> , DOI: 10.1177/09544089211064153, 2021
Mazumdar D, Saha S P,	RSM based optimization of plant growth promoting

<b>Name of the Author(s)</b>	<b>Publication Details</b>
and Ghosh S	rhizobacteria and nitrogen dosage for enhanced growth and yield of mustard ( <i>Brassica campestris</i> L.), <i>Journal of plant nutrition</i> , <a href="https://doi.org/10.1080/01904167.2021.1889585">https://doi.org/10.1080/01904167.2021.1889585</a> , 2021.
Gavande P V, Basak A, Sen S, <b>Lepcha K</b> , Murmu N, Rai V, Mazumdar D, <b>Saha S P</b> , Das V & Ghosh S	Functional characterization of thermotolerant microbial consortium for lignocellulolytic enzymes with central role of Firmicutes in rice straw depolymerization, <i>Scientific Reports</i> , <a href="https://doi.org/10.1038/s41598-021-82163-x">https://doi.org/10.1038/s41598-021-82163-x</a> , 2021.
<b>Saha S P</b> and Mazumdar D	Potential of Plant Growth Promoting Rhizobacteria for Enhancement of Plant Growth and Its Role in Improving Soil Health Under Abiotic Stress, <i>Plant Stress: Challenges and Management in the New Decade</i> , Springer Book, ISBN: 978-3-030-95364-5, <a href="https://doi.org/10.1007/978-3-030-95365-2">https://doi.org/10.1007/978-3-030-95365-2</a> , 2021
Rai A, <b>Saha S P</b> , Manvar T, and <b>Bhattacharjee A</b>	A shotgun approach to explore the bacterial diversity and a brief insight into the glycoside hydrolases of Samiti lake located in the Eastern Himalayas, <i>J Genet EngBiotechnol.</i> 20: 162. doi: 10.1186/s43141-022-00444-y, 2022
<b>Lepcha K</b> , Basak A, Kanoo S, Sharma P, Puja BK, Ghosh S	Thermoxylyanolytic and Thermosaccharolytic Potential of a Heat Adapted Bacterial Consortium Developed From Goat Rumen Contents, <i>Frontiers in Energy Research</i>
Sengupta S, Nath R, Bhuyan R, <b>Bhattacharjee A</b>	Variation in glucose metabolism under acidified sodium nitrite mediated nitrosative stress in <i>Saccharomyces cerevisiae</i> . <i>J. Appl. Microbiol.</i> 2022; 1-16. doi:10.1111/jam.15669
Nath R, Sengupta S, <b>Bhattacharjee A</b>	Enzymatic and non-enzymatic response during nitrosativestress in <i>Escherichia coli</i> . <i>Postępy Mikrobiologii – Advancements Of Microbiology.</i> 2022; 61: 81-93. DOI: 10.2478/am-2022-0008
Rai, <b>Bhattacharjee A</b>	Molecular profiling of microbial community structure and their CAZymes via metagenomics, from Tsomgo lake in the Eastern Himalayas. <i>Arch Microbiol.</i> 2021; 203:3135-3146. DOI:10.1007/s00203-021-02278-7

#### Research Projects Details:

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Studies on the cellulolytic and hemicellulolytic potential of microbial	NBU	2021	1 year	1,50,000	Ms. Khusboo Lepcha



Title of the Project	Funding Body	Year of Sanction	Duration	Budget (Rs.)	Name of PI
communities from goat rumen contents.					
Effect of ethanol and nitrosative stress on <i>Saccharomyces cerevisiae</i>	NBU	2021	1 year	1,50,000	Dr. Arindam Bhattacharjee

**Placement Details:**

Name of the Student	Employment Details
Swarnab Sengupta	Post-Doctoral Fellow, Department of Biology and Environment, University of Haifa, Israel
Bhaskar Roy	Microbiologist, DPHL, Malda MCH, West Bengal State Health & Family Welfare Samiti, Govt. of West Bengal
Durba Bhattacharyya	Block Epidemiologist, BPHU, Oodlabari RH, Mal Block, Jalpaiguri, District Health & Family Welfare Samiti, Govt. of West Bengal
Indrakshi Bhattacharjee	Clerk, Punjab National Bank,

**Miscellaneous Events:**

- The Department organized a plantation drive on 05/06/2022
- The Department organized Teacher's Day Programme on 05/9/2022
- The Department organised Women's Day Programme on 08/03/22

## DEPARTMENT OF PHARMACEUTICAL TECHNOLOGY

### About the Department:

The Department of Pharmaceutical Technology has started post graduate course in Pharmacy (specialization in Pharmaceutics and Pharmacognosy) and Ph.D. Program from 2019-20. The academic curricula and research programs have been designed with updated knowledge with the primary focus to basics and emerging fields of Pharmacy. Every year considerable numbers of students are completing the B. Pharm. course and will get the opportunity to take admission in this department through a specific admission process.

Research areas in the department mainly focus on various pharmaceutical drug delivery systems, novel drug delivery systems, phytochemistry, natural product chemistry, standardization and quality control of herbal drugs, and other thrust areas of pharmaceutical research. The department regularly organizes national and international seminars, conferences, symposia and lectures in order to give a focus on the emerging fields of research to our students and research scholars. The department is well equipped with various new and modern instrumental facilities. Faculty members regularly publish their research findings in reputed national and international journals.

### Courses Offered:

- Master of Pharmacy (specialization in Pharmaceutics and Pharmacognosy)
- Ph. D. in Pharmaceutical Technology

### Research Focus:

- Natural product, Nano-technology
- Novel drug delivery system, characterization of bioactive compounds
- Standardization, pharmacological screening etc

### Research Laboratory:

- Pharmacognosy
- Pharmaceutics

### Sophisticated Instrument/Equipment:

- HPTLC
- FT-IR
- Electronic Microscope,
- Particle size analyzer
- Dissolution apparatus

**Faculty Details:**

Name	Designation	Qualification	Email
Dr. Bapi Ray Sarkar	Assoc. Professor	Ph.D	brs2019@nbu.ac.in
Dr. Gouranga Nandi	Asst. Professor	Ph.D	gouranganandi@nbu.ac.in
Dr. Ranabir Sahu	Asst. Professor	Ph.D	ranabirsahu@nbu.ac.in
Dr. Prosanta Pal	Asst. Professor	Ph.D	prosanta@nbu.ac.in
Dr. Koushik Sen Gupta	Asst. Professor	Ph.D	koushikhpi@gmail.com
Dr. Tarun Kumar Dua	Asst. Professor	Ph.D	tarundua@nbu.ac.in
Dr. Paramita Paul (Dua)	Asst. Professor	Ph.D	paramita37@nbu.ac.in
Dr. Amitava Roy	Asst. Professor	Ph.D	aroy206ju@gmail.com
Dr. Dipika Mandal	Asst. Professor	Ph.D	dipikamandal08@gmail.com
Dr. Partha Pratim Maiti	Asst. Professor	Ph.D	parthamaiti@nbu.ac.in

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Shri Kali Sankar Sinha Babu	B.SC, D. Pharm	Laboratory Technician
Shri Malyaban Mitra	M. Pharm	Laboratory Technician
Shri Bivas Joardar	D. Pharm, B. Sc, D.P.T.	Store Keeper
Smt. Debashri Pal	Master in Arts	Jr. Asstt.-Cum-Typist
Shri Sanjay Kujur	Madhyamik	Peon

**Details of Research Scholars:**

Name	Fellowship Name	Supervisor's Name	Gender
Gouhar Jahan Ashraf	SVMCM	Dr. Ranabir Sahu	Female
Ankrita Thapa	SVMCM	Dr. Ranabir Sahu	Female
Suraj Mistri	SVMCM	Dr. Ranabir Sahu	Male
Simran Giri	SVMCM	Dr. Bapi Ray Sarkar	Female
Ganesh Dey	SVMCM	Dr. Bapi Ray Sarkar	Male
Saurav Sarkar	SVMCM	Dr. Gouranga Nandi	Male

**Details of Project Scholars:**

Name	Project	Supervisor's Name	Gender	Date of Joining
Priya Das	"In search of novel antidiabetic lead from <i>Asparagus racemosus</i> Willd. : A Sikkim and Darjeeling Himalayan regional Medicinal Plant"	Dr. Ranabir Sahu	Female	11.01.2021

**Details of PhD Students (Without Fellowship):**

Name	Supervisor Name	Gender	Date of Registration
Jugal Sutradhar	Dr. Bapi Ray Sarkar	Male	01.01.2020
Chandrika Sharma	Dr. Bapi Ray Sarkar	Female	05-10-2022
Arnab Bagchi	Dr. Bapi Ray Sarkar	Male	10.05.2022
Sudip Das	Dr. Bapi Ray Sarkar	Male	10.05.2022
Preksha Sharma	Dr. Bapi Ray Sarkar	Female	05-10-2022
Angila Theengh	Dr. Bapi Ray Sarkar	Female	10.05.2022
Rohan Pal	Dr. Gouranga Nandi	Male	-
Sanjukta Sen	Dr. Gouranga Nandi	Female	-
Swapan Kumar Pathak	Dr. Gouranga Nandi	Male	-
Partha Pratim Mahata	Dr. Gouranga Nandi	Male	02.01.2020
Sreejan Manna	Dr. Gouranga Nandi	Male	02.01.2020
Samir Das	Dr. Gouranga Nandi	Male	16.03.2021
Milan Kumar Maiti	Dr. Ranabir Sahu	Male	24.01.2022
Honey Jajo	Dr. Ranabir Sahu	Female	25.01.2022

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar	Title of the Paper Presented
Dr. Gouranga Nandi	National Seminar entitled “Individual and institutional measures to enhance the effective use of plants as nutraceuticals”, organised by Department of Pharmacognosy & Biotechnology, Pulla Reddy Institute of Pharmacy, Hyderabad, 26.02.2022	Extraction and characterization of taro ( <i>Colocasia esculenta</i> ) stolon polysaccharide
Dr. Paramita Paul (Dua)	Short term training Program on “Approaches to Teaching and Self-Efficacy Beliefs” organized by Columbia Institute of Institute of Pharmacy, Vill. Tekari, Raipur, 29.04.2021	Pulmonary administration of antifungal drug as nanoformulations: A novel approach to treat lung fungal infection
Dr. Paramita Paul (Dua)	DRPI 2021 (online), 10.7.2021	Valacyclovir loaded polycaprolactone nanoparticles for improved efficacy against Herpes Zoster virus infection: In vitro release
Jugal Sutradhar,	Paper presented (Oral) on National Conference on Integrated computational	The flowering buds of <i>Mesua ferrea</i> Linn n-hexane extract of

Name	Details of Seminars / Conferences / Webinar	Title of the Paper Presented
Bapi Ray Sarkar	biology for cancer vaccine research. Chaak Institute of Pharmacy, Khargone (MP)-4512, 17.02.2022	phytosome gels on DNCB-induced Atopic Dermatitis in Mice
Dr. Bapi Ray Sarkar	International Webinar on EMDT_2022 (virtual mode), organized by Centre for Nanoscience & Nanotechnology, International Research Centre, Sathyabama University (Deemed University), 27 – 28.01.2022	Phytosome: A novel drug delivery system with herbal support

**Details of Seminar/Conferences /Webinar Attended by Student:**

Name	Details of Seminars / Conferences / Webinar
Soyeb Mallick	Participated in the webinar titled "Sorrow – Depression - Joy", 24 <sup>th</sup> June 2021
Soyeb Mallick	International Day of Yoga 2021, 21 <sup>st</sup> June, 2021
Subhajit Mandol	International Virtual Webinar on “Emerging Materials for Diagnostic and Therapeutic” (EMDT-2022), 27 <sup>th</sup> and 28 <sup>th</sup> January, 2022
Subhajit Mandol	Webinar on the occasion of 60th National Pharmacy Week -2021 on “Pharmacist: An Integral Part of Health Care, 25 <sup>th</sup> Nov,2021
Tamalika Ray	World Environment Day 2021-Online quiz 2021, 5 <sup>th</sup> June, 2021
Pritam Karmakar, Moulik Bhattacharyya	To Take or Not to Take? : Myths and Facts about Covid-19 Vaccine, 7 <sup>th</sup> April, 2021
Pritam Karmakar, Moulik Bhattacharyya, Shaheen Parveen	Antibiotics Releasing Hydroxyapatite-Based Bone Implants for Osteomyelitis Treatment, 18 <sup>th</sup> June, 2021

**Publications:**

Name of the Author(s)	Publication Details
Sharma C and Sarkar B R	Phyto-Pharmacological Aspects of Ethnomedicinal Plants Found in Himalayan Region: A Systematic Approach Towards Drug Natural Resources, Der Pharma, 2021, 13(7): 27-35.
Sutradhar J, Sarkar B R.	Manifestations and risk factors of COVID-19 and mucormycosis: A mini-review. J Acute Dis, 2021, 10:221-6.
Sutradhar J & Sarkar B R	The Effect on the Immune System in the Human Body Due to COVID-19: An Insight on Traditional to Modern Approach as a Preventive Measure, J Pharmacopuncture 2021, 24(4): 165-172.
Bijay Sharma, Arnab	Formulation and Evaluation of Expectorant activity of Poly

Name of the Author(s)	Publication Details
Bagchi, Sonam Bhutia, <b>Bapi Ray Sarkar, Prosanta Pal</b>	Herbal Cough Syrup from Traditional Medicinal Plant extracts of North East India, Research J. Pharm. and Tech., 2022 15(3):949-953
Giri, S., <b>Sahu, R., Paul, P., Nandi, G., &amp; Dua, T.K.</b>	An updated review on <i>Eupatorium adenophorum</i> Spreng. [ <i>Ageratina adenophora</i> (Spreng.)]: traditional uses, phytochemistry, pharmacological activities and toxicity. <i>Pharmacological Research-Modern Chinese Medicine</i> , 100068, pp. 1-17, 2022
Giri, S., Sen, S., Singh, R., <b>Paul, P., Sahu, R., Nandi, G. and Dua, T.K.</b>	Current challenges in different approaches to control COVID-19: a comprehensive review, <i>Bulletin of the National Research Centre</i> , 46(1), pp.1-13, 2022
Ashraf, G. J., Das, P., <b>Dua, T.K., Paul, P., Nandi, G., &amp; Sahu, R.</b>	High-performance thin-layer chromatography based approach for bioassay and ATR–FTIR spectroscopy for the evaluation of antioxidant compounds from <i>Asparagus racemosus</i> Willd. aerial parts, <i>Biomedical Chromatography</i> , e5230, pp. 1-11, 2021. (Impact factor: 1.911)
Atanu Chatterjee, Ritu Khanra , Moitreyee Chattopadhyay, Santanu Ghosh , <b>Ranabir Sahu, Gouranga Nandi,</b> Himangshu Sekhar Maji, Pranabesh Chakraborty	Pharmacological studies of rhizomes of extract of <i>Cyperus tegetum</i> , emphasized on anticancer, anti-inflammatory and analgesic activity, 2022, 1-12, Journal of Ethnopharmacology, Elsevier. (Impact factor: 5.195)
Moumita Gangopadhyay, Anup Kumar Das, <b>Ranabir Sahu,</b> Arunima Saha, Sanjukta Dey, Subhendu Bandyopadhyay, Adinpunya Mitra	Evaluation of growth response for mass production and accumulation of 2-hydroxy-4-methoxybenzaldehyde in endangered <i>Hemidesmus indicus</i> by an aeroponic system, 2021, 1-9. Industrial Crops & Products, Elsevier. (Impact factor: 6.449)
Avinash Sethi, Murali Sharaff, <b>Ranabir Sahu</b>	Deciphering common temporal transcriptional response during powdery mildew disease in plants using meta-analysis, 2021, 1-12, 100307, Plant Gene, Elsevier. (Cite score:3.2)
Das R , <b>Pal P</b> and Bhutia S.	Pharmacognostical characterization and formulation of herbal-based low-cost mosquito repellents from <i>Elettaria cardamomum</i> (Linn.) seed by using natural binder, Future Journal of Pharmaceutical Sciences, Vol. 7, Issue 15, pp. 1-10, 2021.
Tapan Kumar Shaw, <b>Paramita Paul.</b>	Recent approaches and success of liposome-based nanodrug carriers for the treatment of brain tumor. Current drug delivery; Vol. 19, Issue 8, pp. 815-829, 2022.
Giri S, <b>Sahu R, Paul P,</b>	An updated review on <i>Eupatorium adenophorum</i> Spreng.

Name of the Author(s)	Publication Details
<b>Nandi G, Dua TK.</b>	[ <i>Ageratina adenophora</i> (Spreng.)]: traditional uses, phytochemistry, pharmacological activities and toxicity. <i>Pharmacological Research-Modern Chinese Medicine</i> , 100068, 2022
Ghosh S and <b>Maiti P P</b>	APPLICATIONS OF CHROMONES: RECENT TRENDS, <i>International Journal of Advance and Applied Research</i> Vol. 4, No.3 pp. (115-125). , 2023
Mauro Luisetto, Abu Md Ashif Iqbal, Paromita Dutta Choudhury, Amlanjyoti Rajkhowa, Kishan Paul, Rima Majumder, Kuntal Manna, Sarbani Debsarkar, Bikash Debnath, <b>Sucheta Sen</b> , Wael M. Aboulthana	TRPV1, PPAR and SGLT-2 as a Potential Therapeutic Target for diabetes mellitus :Current Status and challenges. <i>Pharmaceutical and Biosciences Journal</i> Vol. 9(5), 16-23, 2021.

#### Books/ Book Chapters:

<b>Dr. Prosanta Pal,</b> <b>Dr. Bapi Ray Sarkar</b>	<i>Ethnomedicinal plants of North East Himalayan Region: In search of anticancer potential</i> , LAP LAMBERT Academic Publishing, Republic of Moldova, 2021, [ISBN-10: 6203870188, ISBN-13: 978-6203870183]
<b>Bapi Ray Sarkar</b>	<i>Bioremediation: Ethnomedicinal Plants Used By The Tribes Of Northeast India To Treat Alzheimer's Disease</i> , book title- <i>Phytomedicine and Alzheimer's Disease</i> , CRC Press (Taylor & Francis Groups), 1st Edition, Page No-115-148. [ISBN No.- 9780429318429].
<b>Tarun Kumar Dua,</b> <b>Paramita Paul</b>	<i>Nutraceuticals: Role of food as medicine</i> , 2021, LAMBERT Academic Publishing, ISBN-978-620-4-20310-2.
<b>Paramita Paul,</b> Saikat Dewanjee, <b>Gouranga Nandi,</b> <b>Tarun Kumar Dua</b>	<i>Fundamentals of Biochemistry and Clinical Pathology</i> , 2022, Everest Publishing House, ISBN-978-0-12-821712-2.
<b>Paramita Paul,</b> Sanchita Mandal, <b>Tarun Kumar Dua,</b> <b>Dipika Mandal,</b> Manasa Deepa R	Smart multifunctional nanosystem: Next-generation drug delivery platform for drug-resistant breast cancer, <i>Multifunctional Theranostic Nanomedicines in Cancer</i> , Academic Press, 2021, ISBN-978-0-12-821712-2
<b>Dipika Mandal,</b> <b>Paramita Paul and</b>	Stimulus-responsive gold nanotheranostic platforms for targeting the tumor microenvironment. In <i>Multifunctional Theranostic</i>

Manas Bhowmik.	Nanomedicines in Cancer 2021 Jan 1 (pp. 201-232). Academic Press.
<b>Paramita Gouranga</b> , Mohammed Abosheasha, Bera	<b>Paul, Nandi, A. Hriday</b> Alginate based systems for protein and peptide delivery. In Tailor-Made and Functionalized Biopolymer Systems For Drug Delivery and Biomedical Applications. 2021 (pp. 85-113) Woodhead Publishing (Elsevier).
Arijit Mondal, <b>Paramita Paul,</b> Sabyasachi Banerjee.	Applications of metal oxide nanoparticles in cancer therapy. In: Advances in Nanotechnology-Based Drug Delivery Systems. 2022 (pp. 471-515) Matthew Deans (Elsevier).
<b>Paramita Paul*</b> , Tapan K Shaw, Ankita Mallick, Ankita Dhar, Aditya Kanu.	Lipid based nano cosmeceuticals with antiaging potential. In Nano cosmeceuticals: Innovation, Application and Safety. 2022 Jan 1 (pp. 277-305). Academic Press. (Elsevier). ISBN: 978-0-323-91077-4.

#### Research Projects Details:

Title of the Project	Funding Body	Year of Sanction	Duration	Budget (Rs.)	Name of PI
Green-fabrication, characterization and evaluation of chemically modified natural polysaccharide based extended release fisetin loaded peroral nanoparticles for enhanced bioavailability, antioxidant and hypoglycemic efficacy	UGC	2021	2 years	10 lakh	Dr. Gouranga Nandi
Taro ( <i>Colocasia esculenta</i> ) stolon polysaccharide-polyacrylamide graft copolymer: Synthesis, characterizations and application in sustained-release drug delivery	NBU	2021	1 year	1.5 lakh	Dr. Gouranga Nandi
'Preliminary Phytochemical screening and Evaluation of hepatoprotective activity of some unexplored medicinal plants found in North Eastern Himalayan region'	NBU	2021	1 year	1.5 lakh	Dr. Bapi Ray Sarkar



**Placement Details:**

<b>Name of the Student</b>	<b>Name of the Employer</b>
Adarsha Bachhar	Gupta College of Technological Sciences
Jotindranath Hembram	Pharmacist, West Bengal Health Recruitment Board
Nibir Das	Zakir Hossain Institute of Pharmacy
Shibangi Mukhopadhyay	Rai University, Jharkhand
Soumen Samanta	Micro labs Limited, Sikkim
Prajna Gupta	APJ Abdul Kalam Medical Institute
Sohana Samim	Pharmacist, West Bengal Health Recruitment Board
Rijusmita Patowary	Royal Global University, Assam
Piu Jana	Preparing for Higher Studies & Ph.D
Rajesh Roy	Hetero Health Care, Guwahati
Arup Kumar Gorai	Techno India University
Subhadip Bera	Gitanjali college of Pharmacy
Sangita Palai	Nirmala Foundation
Asutosh Banerjee	Gitanjali college of Pharmacy
Debajit Sikdar	Secom Pharmacy College
Poulami Ghosh	Bharat Technology
Tahid Alam	Pratiksha Educational Trust
Tanwi Garai	Techno India University
Pratyush Maity	Neotia University
Monalisha Das	Anand College
Abani Roy	BCDA college of pharmaceutical technology

## DEPARTMENT OF PHYSICS

### About the Department:

The Department of Physics is one of those Departments with which the University of North Bengal started its journey in the year 1962. At present there are eleven faculty members and seven non-teaching employees in the Department. The Department is very active in teaching as well as in research. The current research activities of the Department include Soft Condensed Matter Physics, Theoretical Condensed Matter Physics, High-energy Heavy-ion Interaction, Astrophysics, Cosmology and Astroparticle Physics and Cosmic-rays. Several research projects sponsored by the DST, DAE and UGC are running in the Department.

Currently the Department offers Post-Graduate (M.Sc. in Physics) and Ph.D. in Science (Physics) courses. A CBCS curriculum having several elective papers is followed by the Department. The teaching and research laboratories are well equipped with modern experimental and computational facilities. The Department has a well-maintained Library having a rich collection of text books and research materials. The Department also houses a data centre of the IUCAA Center for Astronomy Research and Development (ICARD). From time to time the Department organizes scientific programs like seminars, symposia, conferences, schools, refresher courses.

### Courses Offered:

- M. Sc.
- Ph. D.

### Research Focus:

- Astrophysics and Cosmology
- Condensed Matter Physics (Theory and Experiment)
- Nuclear and Particle Physics.

### Research Laboratory:

- IUCAA Center for Astronomy Research and Development (ICARD).
- Nuclear and Particle Physics
- Condensed Matter Physics

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Pradip Kumar Mandal	Ph. D.	Professor	mandalpk.phys@nbu.ac.in
Dr. Amitabha Mukhopadhyay	Ph. D.	Professor	amphys@nbu.ac.in
Dr. Malay Kumar Das	Ph. D.	Professor	mkdnbu@nbu.ac.in
Dr. Bikash Chandra Paul	Ph. D.	Professor	bcpaul@nbu.ac.in
Dr. Sripada Haldar	Ph. D.	Professor	nbushaldar@nbu.ac.in

Name	Qualification	Designation	Email
Dr. Suman Chatterjee	Ph.D. (Engg.)	Professor	suman@nbu.ac.in
Dr. Provash Mali	Ph. D.	Assoc. Professor	provashmali@nbu.ac.in
Dr. R. K. Dey	Ph. D.	Assoc. Professor	rkdey2007phy@nbu.ac.in
Dr. Tutul Biswas	Ph. D.	Asst. Professor	tbiswas@nbu.ac.in
Mr. Lakpa Tamang	M.Sc.	Asst. Professor	lakpatamang@nbu.ac.in
Dr. Prakriti Adhikary	Ph. D.	Asst. Professor	prakriti@nbu.ac.in

#### Details of Non-Teaching Staff:

Name	Qualification	Designation
Mr. Sudip Saha	B.Sc.	Jr. Super
Mr. Sankha Subhra Roy	B.Sc., Dip. in Elect. Engg.	Technical Assistant Gr. I
Mr. Subrata Hazra	B.Sc. Physics (Hons), Computer Hardware Course	Technical Assistant Gr. II
Mr. Rajesh Pradhan	B.Sc.	Technical Assistant Gr. II
Mr. Ayub Ahamad	H.S., Dip. in Elect. Engg.	Technical Assistant Gr. II
Mr. Amitava Roy	B.Sc.	Technical Assistant Gr. II
Mr. Lubai Hansda	Secondary pass, ITI	Sr. Peon

#### Details of Research Scholars:

Name	Fellowship Status	Supervisor's Name	Gender	Date of Joining
Priti Sundar Barman	SVMCM	Dr. P. Adhikary	Male	13.03.2021
Ruchi Tamang	CSIR	Prof. B. C. Paul	Female	05.01.2021
Manoj Ghising	UGC-MANF	Prof. B. C. Paul	Male	11.03.2021
Anirban Chanda	State Fellowship	Prof. B.C.Paul	Male	08.6.2017
Joy Sarkar	DST- INSPIRE	Dr. Suman Chatterjee	Male	03.01.2019
Pratik Debnath	UGC NET	Dr. Suman Chatterjee	Male	06.01.2020
Priyanta Barman	CSIR- UGC NET	Prof. M K Das	Female	02.01.2019
Avijit Talukdar	DST- INSPIRE	Dr. Suman Chatterjee	Male	01.01.2020
Joydeep Thakur	State Fellowship	Prof. A Mukhopadhyay	Male	02.01.2019
Apsari Parvin	NFOBC	Prof. M K Das	Female	01.01.2020
Smriti Mitra	UGC-DAE CSR	Prof. M K Das	Female	02.01.2019

#### Details of PhD Students (Without Fellowship):

Name	Supervisor Name	Gender	Date of Registration
AnimeshBasak	Dr. Rajat Kumar Dey	M	28-04-2022

Sabyasachi Ray	Dr. Rajat Kumar Dey	M	05-01-2022
Tanmay Chaki	Prof. Pradip Kumar Mandal	M	24-01-2022
Lakpa Tamang	Dr. Tutul Biswas	M	27-04-2022
Kishor Chaudhuri	Dr. R. K. Dey	M	Renewed on 07.01.2022
Alivia Sarker	P. Mali	F	Not yet
Priyanka Mandal	B. C. Paul	F	Not Yet
Bhaswati Mandal	B. C. Paul	F	Not yet

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars/Conferences / Webinar	Title of the Paper Presented
L. Tamang	International Seminar on Astrophysics and Cosmology organized by ICARD - NBU, 03.03.2022	Attended
	International Conference on Advanced Physics organized by 'Department of Basic Science and Humanities Institute of Engineering and Management, Kolkata, 22-24 Sept. 2022	Valley Hall Effect in a Symmetrically Biased Dice Lattice
	66 <sup>th</sup> DAE Solid State Physics Symposium organized by Birla Institute of Technology Mesra, Ranchi', 18-22 Dec 2022	Valley-Controlled transport in an optically driven dice lattice

**Details of Seminar/Conferences /Webinar Attended by Student:**

Name	Details of Seminars/Conferences / Webinar	Title of the Paper Presented
Animesh Basak	Webinar entitled '65th DAE Nuclear Physics Symposium', organised by BARC, Mumbai, 03.12.2021	(a) Extracting an asymmetry parameter in the lateral distribution of electrons in EAS (b) Estimating cosmic-ray shower core using weighted average method: A simulation study
Animesh Basak	Webinar entitled: 17 <sup>th</sup> International Conference on Topics in Astroparticle and Underground Physics, Organised by TAUP, Valencia, 01.09.2021	Probing the magnitude of asymmetries in the lateral density distribution of electrons in EAS
Sabyasachi Ray	Webinar entitled '65th DAE Nuclear Physics Symposium', organised by	(a) Extraterrestrial diffuse flux of PeV scale neutrinos from

Name	Details of Seminars/Conferences / Webinar	Title of the Paper Presented
	BARC, Mumbai, 01 - 05.12.2021	accretion disk regions of active galactic nuclei (b) PeV neutrinos from centrifugally accelerated electrons in extragalactic new born pulsars

### Publications:

Name of the Author(s)	Publication Details
<b>R. K. Dey</b> and A. Basak	Explaining the characteristics of lateral shower age of cosmic ray extensive air showers, <i>Pramana: J. of Phys.</i> 92, 1-9, (2022).
<b>R. K. Dey</b> , and A. Basak	Behaviour of the lateral shower age of cosmic ray extensive air showers, <i>J. Phys. Conf. Ser.</i> , 2156, 012174, (2022)
A. Basak and <b>R. K. Dey</b>	Probing the magnitude of asymmetries in the lateral density distribution of electrons in EAS, <i>J. Phys. Conf. Ser.</i> , 2156, 012193, (2022)
<b>R. K. Dey</b> , A. Basak, S. Ray and T. Sarkar	Newly born extragalactic millisecond pulsars as efficient emitters of PeV neutrinos <i>Braz. J. Phys.</i> , 51(5), 1406-1415, (2021).
<b>R. K. Dey</b> , A. Basak, and S. Ray	Diffuse flux of PeV neutrinos from centrifugally accelerated protons in active galactic nuclei <i>Europhys. Letts.</i> 136, 69001 (2021).
<b>R. K. Dey</b>	Probing the Mass Composition of Primary Cosmic Rays from the Effect of the Geomagnetic Field on EAS Muons: A Simulation Study, <i>Lecture Notes in Networks and Systems</i> , 287451 (2022).
<b>B. C. Paul</b> , Bikash Chandra Roy and A. Saha	Bianchi-I anisotropic universe with Barrow holographic dark energy, B. C. Paul, Bikash Chandra Roy and A. Saha, <i>The European Physical Journal C</i> 82, 76 (2022).
P. S. Debnath, Bikash Chandra Roy and <b>B. C. Paul</b> .	Hybrid expansion law in viscous braneworld gravity with Gauss–Bonnet terms, <i>Modern Physics Letters A</i> 37, 20(2022).
Bibhash Das, Sagar Dey, Shyam Das, <b>B C Paul</b>	Anisotropic compact objects with Finch–Skea geometry in EGB gravity, <i>European Physical Journal C</i> 82, 519 (2022).
R Tamang, M Ghising, M Tobrej, B Rai, <b>B C Paul</b>	Spectral and timing analysis of Be/X-ray binary EXO 2030+ 375 during its giant 2021 outburst, <i>Monthly Notices of the Royal Astronomical Society(MNRAS )</i> 515 (4), 5407-5415 (2022)
M Ghising, B Rai, M	A high-mass X-ray binary pulsar 4U 1907+ 09 with multiple

<b>Name of the Author(s)</b>	<b>Publication Details</b>
Tobrej, R Tamang and <b>B C Paul</b>	absorption-line features in the spectrum, <i>Monthly Notices of the Royal Astronomical Society (MNRAS)</i> 518 (4), 4861-4869 (2022)
M Ghising, B Rai, M Tobrej, R Tamang, and <b>B C Paul</b>	Spectral and timing analysis of BeXRBeRASSU J050810. 4–660653 recently discovered in the LargeMagellanic Cloud (LMC), <i>Monthly Notices of the Royal Astronomical Society (MNRAS)</i> 518 (1), 893-899 (2022)
M Ghising, B Rai, M Tobrej, R Tamang and <b>B C Paul</b>	NuSTAR observation of X-ray pulsar 1E 1145.1–6141, <i>Monthly Notices of the Royal Astronomical Society</i> 517 (MNRAS) (3), 4132-4137 (2022)
M Ghising, B Rai, M Tobrej, R Tamang and <b>B C Paul</b>	Spectral and timing properties of the recently discovered Be/X-ray pulsar eRASSUJ 052914.9–662446, <i>Monthly Notices of the Royal Astronomical Society (MNRAS)</i> 517 (3), 4092-4097 (2022)
A. Saha, S. Ghose, A. Chanda and <b>B. C. Paul</b>	Rényi holographic dark energy in higher dimension Cosmology, <i>Annals of Physics</i> , 426 (168403) 2021.
S. Dey, A. Chanda and <b>B. C. Paul</b>	Compact objects in $f(R, T)$ gravity with Finch-Skea geometry, <i>The European Physical Journal Plus</i> , 136 (228) 2021.
S. Ghosh, S. Dey, A. Das, A. Chanda and <b>B. C. Paul</b>	Study of gravastars in Rastall gravity, <i>Journal of Cosmology and Astroparticle Physics</i> , 07 (004) 2021.
A. Chanda, S. Dey and <b>B. C. Paul</b>	Morris-Thorne wormholes in modified $f(R, T)$ gravity, <i>General Relativity and Gravitation</i> , 53 (78) 2021.
A. Saha, A. Chanda, S. Dey, S. Ghose and <b>B. C. Paul</b>	Rényi Holographic dark energy models in multidimensional universe, <i>International Journal of Geometric Methods in Modern Physics</i> , 19 (03) 2250043, 2022.
<b>B. C. Paul</b> , A. Chanda, A. Beesham and S. D. Maharaj	Late time cosmology in $f(R, G)$ -gravity with interacting fluids, <i>Classical and Quantum Gravity</i> , 39 (6) 2022.
A. Chanda and <b>B. C. Paul</b>	Evolution of primordial black holes in $f(Q)$ gravity with non-linear equation of state, <i>The European Physical Journal C</i> , 82 (616) 2022.
Alivia Sarker and <b>Provash Mali</b>	Detrended multifractal characterization of Indian rainfall records, <i>Chaos, Solitons &amp; Fractals</i> 151, 111297 (2021).
I. Pal, J. Thakur, <b>P. Mali</b> , <b>A. Mukhopadhyay</b>	A simulation study on the forward-backward multiplicity correlation in Au+Au collision at 30A GeV, CBM Progress Report 2020, Page 206-207 (2021), ISBN 978-3-9815227-9-2
S. Ghosh, I. Pal, J. Thakur, A. Mukhopadhyay, and P. Mali	Dynamical particle ratio fluctuations in Au + Au interaction at $E_{lab} = 30$ A GeV using transport models, <i>J. Phys. G: Nucl. Part. Phys.</i> 48 125106 (2021)
T Chaki, A Shankar and <b>P K Mandal</b>	A first principle study of structural, opto-electronic and thermoelectric properties of Sm filled skutterudite $\text{SmRu}_4\text{Sb}_{12}$ , <i>Computational Condensed Matter</i> 26 (2021) e00535.

<b>Name of the Author(s)</b>	<b>Publication Details</b>
T Chaki and P. K. Mandal	Band structure engineering in Fe–Sb based lanthanide filled p-type skutterudites $RFe_4Sb_{12}$ (R= Nd, Sm) to enhance the Seebeck coefficient and thermoelectric figure of merit, <i>Journal of Applied Physics</i> 132.15 (2022) 155103.
L. Tamang, T. Nag, and T. Biswas	Floquet engineering of low-energy dispersions and dynamical localization in a periodically kicked three-band system, <i>Phys. Rev. B</i> 104, 174308 (2021).
S. Sarkar, P. Mali, A. Mukhopadhyay	System size dependence of harmonic flow parameters in a multiphase transport model at $Elab = 30A$ GeV, <i>Eur. Phys. J. A</i> 58, 136 (2022) (14 pages)
S. Sarkar, P. Mali, A. Mukhopadhyay	Transverse sphericity based event classification in Au+Au collision at $Elab = 30A$ GeV in a multiphase transport model, <i>Eur. Phys. J. A</i> 58, 139 (2022) (11 pages)

**Research Projects Details:**

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Searching for cosmic-ray sources through the measurement of TeV – PeV neutrinos and/or gamma-ray fluxes	NBU	2020-2021	1 year	1.5 lac	Rajat K. Dey

## DEPARTMENT OF TEA SCIENCE

### About the Department:

Department of Tea Science, University of North Bengal is a unique Department of its kind. The Department was initiated in the year 1995 to meet the long felt demand of well trained youngsters in Tea industry to serve in the Managerial cadre. The primary focus of the Department is to educate students to strengthen the backbone of the Tea Industries and to add performance for the overall growth of them in this northern part of West Bengal and other tea growing parts of the country. The course curriculum and research programmes have been introduced in an updated version of Tea Science to meet the present needs.

In 2012-13, the Department has introduced M. Sc. course in Tea Science in order to educate students for building their career in higher education and tea industry. Apart from highly experienced teachers, the Department has well equipped laboratories to train the students to handle the activities of tea industries. Over the times the Department has built up a strong University-Industry partnership and many alumins of this Department are well established in almost all multinational tea companies having their plantations in India.

Apart from regular teaching activities, Department of Tea Science has a Soil Testing Laboratory approved by the Tea Board of India. The laboratory is equipped with instruments for quantitative tests for macro and micronutrients. This laboratory serves the need of soil testing for tea gardens of West Bengal, Bihar, Assam and Sikkim and generates a good amount of revenue for the University.

### Courses Offered:

- Sc. in Tea Science
- M. Sc. in Tea Science
- PG Diploma in Tea Management
- M. Phil.
- Ph. D.

### Research Focus:

- Ethnobotany
- Environmental biology
- Tissue culture
- Biomolecules and soil microbiology
- Phytochemistry
- Metabolomics

### Details of Seminar/Conferences /Webinar Attended by Faculty:

Name	Seminar/Conference Name	Duration	Organiser
Dr. Chandra Ghosh	Regional-Cum-Facilitation Centre (RCFC) (Eastern Region)	24.11.2021	National Medicinal Plants Board, Government of India
Dr. Sonali Ray	National seminar on emerging trends in plant	29-30.03.2022	Dept of Botany, NEHU Shillong



Name	Seminar/Conference Name	Duration	Organiser
	sciences, NEHU		
Dr. Sonali Ray	National seminar on emerging trends in plant sciences, NEHU	29-30.03.2022	Dept of Botany, NEHU Shillong
Dr. Sonali Ray	National seminar on emerging trends in plant sciences, NEHU	29-30.03.2022	Dept of Botany, NEHU Shillong
Dr. Sonali Ray	One-day National Webinar on Impact of Climate Change on Hill Agriculture.	06.08.2021	UGC-HRDC-NEHU, Shillong
Dr. Sonali Ray	National seminar on emerging trends in plant sciences, NEHU, Shillong	29.03.2022	Dept of Botany, NEHU Shillong

### Publications:

Name	Title of the Publication	Journal/Book	ISSN/ISBN
Dr. Chandra Ghosh	Status of tree diversity of the Jaldapara National Park in West Bengal, India	Trees, Forests and People	( <a href="http://creativecommons.org/licenses/by-nc-nd/4.0/">http://creativecommons.org/licenses/by-nc-nd/4.0/</a> )
	Biochemical and microbial profiling establish "Eu" (a traditional fermented beverage of Toto people) as a probiotic health drink	Journal of Ethnic Foods	<a href="https://doi.org/10.1186/s42779-021-00093-5">https://doi.org/10.1186/s42779-021-00093-5</a>
	Allelopathic Effects of Some Dominant Weeds on Seed Germination and Seedling Growth of Tea	Research Journal of Agricultural Sciences	P- ISSN: 0976-1675 E- ISSN: 2249-4538
Dr. Malay Bhattacharya	In vitro antioxidant and antibacterial potential of tea leaves harvested from small tea plantations of sub-Himalayan Terai region	Nutrafoods	2240-5291
	In silico inquest reveals the efficacy of Cannabis in the treatment of post-Covid-19 related neurodegeneration	Journal of Biomolecular Structure and Dynamics	1538-0254
	Evolution of matK Gene among the Elite Tea Clones (Camellia sinensis) Revealed by Nucleotide Substitution within the Consensus Region	Journal of Applied Biology & Biotechnology	2455-7005
	Characterization of a mercury tolerant strain of Staphylococcus arlettae from Darjeeling hills with an account of its antibiotic resistance pattern and metabolome	Archives of Microbiology	0302-8933

<b>Name</b>	<b>Title of the Publication</b>	<b>Journal/Book</b>	<b>ISSN/ISBN</b>
	Gas Chromatography-Mass Spectrometry profiling, and evaluation of antioxidant and antibacterial activity of Albizia spp.	Nusantara Bioscience	2087-3948
	Production of fermented tea petal decoction with insights into in vitro biochemical tests, antioxidant assay and GC-MS analysis	Food production, processing and nutrition	2661-8974
	Insights into low biological activity of wax apple ( <i>Syzygium samarangense</i> ) juice by in vitro phytochemical investigation with special reference to metabolomics	Asian Journal of Natural Product Chemistry	1693-2242
	Metabolomics of potential contenders conferring antioxidant property to varied polar and non-polar solvent extracts of <i>Edgaria darjeelingensis</i> C.B.Clarke	Bulletin of the National Research Centre	2522-8307
	Leaves and barks of Albizia shade trees in tea plantation shows both insect attractant and pesticidal properties: a GC-MS based investigation	Asian Journal of Agriculture	2580-4537
	Metabolomics affirms traditional alcoholic beverage raksi as a remedy for high-altitude sickness. Journal of Ethnic Foods	Journal of Ethnic Foods	2352-6181
	Spectroscopic Studies and Antimicrobial Evaluation of New Mixed Ligand Mn (II), Ni (II), Cu (II) Complexes Synthesized from an Ionic Liquid-Supported Schiff Base and 1-Methyl Imidazole	Polycyclic Aromatic Compounds	1040-6638
	Comprehensive profiling of aroma imparting biomolecules in foliar extract of <i>Hibiscus fragrans</i> Roxburgh: a metabologenesis perspective	Journal of Biomolecular Structure and Dynamics	1538-0254
	The Rhythmic Growth Pattern of Microbes is Antithetical to Antioxidant Activity of Kombucha: A New Finding Food Biochemistry	Asian Journal of Biochemistry, Genetics and Molecular Biology	2582-3698
	Study of tolerance ability in phosphate solubilising microorganisms isolated from tea plantations soil of lower Darjeeling hills	Bulletin of the National Research Centre	2522-8307
Dr. Sonali	Assessment of shadeunshade	Cogent food and	1930424

<b>Name</b>	<b>Title of the Publication</b>	<b>Journal/Book</b>	<b>ISSN/ISBN</b>
Ray	condition and subsequently pesticide treatment on first flush tea leaf metabolites through GC/MS based metabolomics approach.	agriculture	
	Scope of black pepper piper nigrum l. Extract in pest control	International journal of pharmacognosy	2348-3962

## DEPARTMENT OF ZOOLOGY

### About the Department:

The Department of Zoology, University of North Bengal was established in 1984. The Department presently has six permanent faculty members and two secretarial and laboratory personnel. The Department had earned high accolades with the awards of DST-FIST and UGC-SAP supports apart from independent research projects sponsored by almost all funding of authorities of Government of India. The Department has identified itself in the specialized fields of (i) Insect pest management including resistance status of tea pests and bio pesticide development (ii) Ecology and impact of pollutants/pesticides on aquatic biota including fish fauna (iii) Molecular cell biology and genetics in study of human health at chromosomal and DNA levels (iv) Studies on fish disease mainly EUS (v) HLA and Tumour biology (vi) Immunological study & status of tea workers and population dependent on tea industry and so on.

The Department has produced more than fifty Ph.D. scholars; most of them have been placed in responsible positions in teaching, research, corporate and governmental services. The faculty members had been honoured by various awards such as FNA Sc, FZSEI, FZS (Calcutta), DBT National Associate ships, Overseas Associate ship, INSA Exchange Collaborate ship, State honours for book writing etc. Scientific contributions of the faculty members in terms of project investigation and publication have attained a prominent position. Central and State funded projects have been bagged by the Department from various authorities, such as UGC, CSIR, DST, DBT, DoEn & F, NTRF, ICMS, State DST and State Department of Fisheries. The Department has published large number of papers in reputed Foreign as well as National Journal. Department of Zoology is proud of having today a sophisticated laboratory equipped to carry out advance level researches.

### Courses Offered:

- M. Sc.
- Ph. D.

### Research Focus:

- Genotoxic effects of pesticides, effect of synthetic chemical pesticides and entomopathogens on immune response on insects.
- Molecular characterization of Dengue virus and human Polyomavirus JC (JCV)
- Anti-inflammatory drug screening from herbal resources
- Screening of multi drug resistance bacteria from environmental source
- Impact of pesticides on tea garden workers
- Vector Biology.
- Biochemical and molecular studies on insecticide resistance in mosquito vectors.

- Phytochemical analysis of medicinal plants and its implementation on mosquito vector control.
- Host microbiome interaction
- Metabolic Disorder
- Phytotherapy
- Functional implications of endogenous gut melatonin in digestive functions, oxidative stress and ovarian growth and development in fish for the betterment of aquaculture.
- Therapeutic intervention for ulcerative colitis by application of mitochondria - targeted antioxidants
- Therapeutics for treating pesticide toxicity by application of mitochondria - targeted antioxidants

#### **Research Laboratory:**

- Genetics and Molecular Biology Laboratory
- Cell and Molecular Biology Laboratory
- Insect Biochemistry and Molecular Biology Laboratory
- Immunology and Microbiology Laboratory
- Fish Biology and Endocrinology Laboratory
- Ecology, Mitochondrial Biology and Experimental Therapeutics (MBET)

#### **Sophisticated Instrument/Equipment:**

- Thermo Fisher Trace 1300 GC-MS
- Shimadzu HPLC
- Nikon Eclipse E200 Fluorescence Microscope
- Shimadzu UV-1900i Spectrophotometer
- Light Cycler 96 (Real time PCR)
- Thermal cycler (Eppendorf Mastercycler nexus GX2)
- Microplate reader (BMG LABTECH SPECTROstar <sup>Nano</sup>)
- Microplate Absorbance Reader with Software (Make: Bio Rad) (Model No. 1681135)

#### **Faculty Details:**

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Email</b>
Dr. Min Bahadur	M.Sc., Ph.D.	Professor	mbahadur59@nbu.ac.in
Dr. Soumen Bhattacharjee	M.Sc., Ph.D.	Professor	soumenb@nbu.ac.in
Dr. Dhiraj Saha	M.Sc., Ph.D.	Assc. Professor	dhirajsaha@nbu.ac.in

Name	Qualification	Designation	Email
Dr. Tilak Saha	M.Sc., Ph.D.	Asst. Professor	tilaksaha@nbu.ac.in
Dr. Sourav Mukherjee	M.Sc., Ph.D.	Asst. Professor	sourav16@nbu.ac.in
Dr. Arpan Kr. Maiti	M.Sc., Ph.D.	Asst. Professor	arpankrmaiti@nbu.ac.in

#### Details of Non-Teaching Staff:

Name	Qualification	Designation
Mr. Subrata Ghosh	B. Com	Jr. Supdt.
Mr. Samiran Ch. Debnath	Madhyamik Appeared	Lab. Attendant G-II
Mr. Sudam Das	8 <sup>th</sup> Pass	Casual Gr. D
Mr. Tapan Das	8 <sup>th</sup> Pass	Casual Gr. D

#### Details of Research Scholars:

Name	Fellowship Name	Supervisor's Name	Gender	Date of Registration
Debojit Dutta	UGC-SRF	Prof. M Bahadur	Male	02.01.2020
Arpita Ray	CSIP-SRF	Prof. M Bahadur	Female	02.01.2020
Debabrata Modak	University Fellowship	Prof. S Bhattacharjee	Male	26-11-2020
Sudipta Kumar Roy	CSIR SRF	Prof. S Bhattacharjee	Male	16-07-2019
Sourav Sarkar	CSIR SRF	Prof. S Bhattacharjee	Male	02-01-2020
Abhisekh Subba	UGC-JRF	Prof. D Saha	Male	31.07.2019
Prerana Bhujel	UGC-JRF	Prof. D Saha	Female	02.01.2020
Nilu Limboo	UGC-JRF	Prof. D Saha	Female	02.01.2020
Prapti Das	UGC-JRF	Prof. D Saha	Female	01.01.2020
Abhirup Saha	NFSC-JRF	Prof. D Saha	Male	Unregistered
Rejuan Islam	UGC-JRF	Dr. T Saha	Male	17.12.2021
Amlan Jyoti Ghosh	CSIR - JRF	Dr. T Saha	Male	17.12.2021
Supriyo Ghosh	UGC-JRF	Dr. T Saha	Male	Unregistered
Farha Yasmin	UGC-JRF	Dr. S Mukherjee	Female	03.01.2019
Sona Sutradhar	UGC-JRF	Dr. S Mukherjee	Male	02.01.2020
Shashwati Ghosh	UGC -SRF	Dr. A K Maiti	Female	03.01.2019

#### Details of Project Scholars:

Name	ProjectName	Supervisor's Name	Gender	Date of Joining
Manas Pratim Modak	Study of target site resistance through kdr mutation screening in <i>Aedes</i> and <i>Culex</i> mosquitoes from West Bengal, India	Prof. D Saha	Male	21.01.2020

Name	ProjectName	Supervisor's Name	Gender	Date of Joining
Arun Roy	Functional implications of endogenous gut melatonin on the rate of ovarian growth and development in carp <i>Catla catla</i>	Dr. S Mukherjee	Male	09.08.2021

**Details of PhD Students (Without Fellowship):**

Names	Supervisor Names	Gender
Ms. Swati singh	Prof. M Bahadur	Female
Ms. Trishita Majumdar	Prof. M Bahadur	Female
Mr. Subhashis Paul	Prof. S Bhattacharjee	Male
Ms. Sutanuka Chattaraj	Prof. S Bhattacharjee	Female
Ms. Uttara Dey Bhowmik	Prof. S Bhattacharjee	Female
Mr. Tanmoy Dutta	Prof. S Bhattacharjee	Male
Mr. Sagar Sarkar	Dr. T Saha	Male

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars/Conferences / Webinar	Title of the Paper Presented
Prof. D Saha	National Webinar entitled 'Control of Malaria and Dengue vectors by targeting insecticide resistance development mechanisms in mosquitoes', organized by Department of Zoology, NBU, 20.02.21	Organized
	National Workshop entitled 'Insecticide resistance Control and of Dengue Mosquito', organized by Department of Zoology, NBU, 20.02.21	Organized
	State- level Conference entitled 'Cyber Shikshak- a Cyber Security Awareness Training Programme', organised by Cyber Security Centre of Excellence, Department of Information Technology & Electronics, Government of West Bengal in collaboration with Indian School of Ethical Hacking (ISOEH), 17.03.2021	Attended
Dr. A K Maiti	International level webinar entitled '3 <sup>rd</sup> International Conference on Medical and Health Sciences, Bingol, Turkey'organised	Exogenous Vasoactive Intestinal Peptide Maintains Colon Mucosal Lining in Experimental

Name	Details of Seminars/Conferences / Webinar	Title of the Paper Presented
	by ISPEC, Turkey, 24 – 25.12.2021	Murine Model and Reverses Colon Mitochondrial Dysfunction by Scavenging Superoxide and Hydroxyl Radicals: Implications in Ulcerative Colitis
	International webinar entitled ‘The Future of Redox Biology’ Meeting, Siena, Italy, organised by Committee for Future of Redox Biology, 17 -19.06.2022	MTAs : Past, Present and Future

**Details of Seminar/Conferences /Webinar Attended by Student:**

Name	Details of Seminars/Conferences / Webinar	Title of the Paper Presented
Debabrata Modak	Advancement of plant sciences for food diversity and nutritional security, organized by Department of Botany, University of North Bengal, 30.09.2021	<i>Drynaria quercifolia</i> rhizome methanolic extract ameliorates rheumatoid paw edema in Freund's complete adjuvant-induced arthritis in rats.
Sudipta Kumar Roy	Virtual International Conference of Infections and Immunity, Organized by Department of Zoology, Daulat Ram College, University of Delhi, 08.10.2021	Multiple serotypic infections of DENV: a trend in the Northern West Bengal, India.

**Publications:**

Name of the Author(s)	Publication Details
Paul S., Modak D., Chattaraj S., Nandi D., Sarkar A., Roy J., Chaudhuri T.K. and <b>Bhattacharjee S.</b>	<i>Aloe vera</i> gel homogenate shows anti-inflammatory activity through lysosomal membrane stabilization and downregulation of TNF- $\alpha$ and Cox-2 gene expressions in inflammatory arthritic animals. <i>Future Journal of Pharmaceutical Sciences</i> , Vol. 7, Issue 1, pp.1-8, 2021.
Modak D., Paul S., Sarkar S., Thakur S. and <b>Bhattacharjee S.</b>	Validating potent anti-inflammatory and anti-rheumatoid properties of <i>Drynaria quercifolia</i> rhizome methanolic extract through in vitro, in vivo, in silico and GC-MS-based profiling. <i>BMC Complementary Medicine and Therapies</i> , Vol. 21, Issue 1, pp.1-20, 2021.
Dutta T. and <b>Bhattacharjee S.</b>	Frequency of glutathione S-Transferase M1, T1 and P1 genotypes and their combinations in northern West Bengal, India: Implications for disease association. <i>Gene Reports</i> , Dutta,



Name of the Author(s)	Publication Details
	T. and Bhattacharjee, S., Vol. 25, p.101313, 2021.
Roy S.K. and <b>Bhattacharjee S.</b>	Dengue virus: epidemiology, biology, and disease aetiology. <i>Canadian Journal of Microbiology</i> , Vol. 67, Issue 10, pp.687-702, 2021.
Ghosh J., Chakraborty S., Dey S., Mukherjee D., Sarkar B., Mallick S., Dutta A., Dutta T., <b>Bhattacharjee S.</b> , Ghorai N. and Pal C.	Potential anti-leishmanial activity of a semi-purified fraction isolated from the leaves of <i>Parthenium hysterophorus</i> . <i>Acta Parasitologica</i> , Vol. 66, Issue 4, pp.1480-1489, 2021.
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Saha, A. and <b>Saha, D.</b>	Mosquito diversity and their larval habitats from the northern part of West Bengal, <i>International Journal of Mosquito Research</i> , Vol. 8, Issue 6, pp. 48-52. 2021
Bharati, M., and <b>Saha, D.</b>	Insecticide resistance status and biochemical mechanisms involved in Aedes mosquitoes, <i>Asian Pacific Journal of Tropical Medicine</i> , Vol. 14, Issue 2, pp. 52-63, 2021
Sarkar B., Das K., <b>Saha T.</b> , Prasad E. and Gardas R.L.	Insights into the formations of host-guest complexes based on the Benzimidazolium based ionic liquids- $\beta$ -Cyclodextrin systems, <i>ACS Physical Chemistry Au</i> , Vol. 2, Issue 1, pp. 3-15, 2021
<b>Saha T.</b> , Paul D. and Chakraborty R.	Abundance of Multiple-Antibiotic-Resistant Salmonella Strains in Fecal Samples of Rhinoceros unicornis of the Kaziranga National Park, India, <i>Journal of Pharmaceutical Research International</i> , Vol. 33, Issue 44B, pp. 298-313, 2021
Ghosh A.J., Islam R. and <b>Saha T.</b>	Dietary Supplementation of Lactobacillus brevis Normalizes Metabolic Parameters in Mouse with Obesity and Hyperglycemia, <i>Journal of Pharmaceutical Research International</i> , Vol. 33, Issue 45A, pp. 60-70, 2021
<b>Saha T.</b> , Biswas A. and Chakraborty R.	Sub-inhibitory Levels of Oxytetracycline in Earthworm Meal Significantly Boost Resistance-Mutation Rates in Bacillus spp. within the Gut of Eisenia fetida, India, <i>Journal of Pharmaceutical Research International</i> , Vol. 33, Issue 45A, pp. 80-87, 2021
Farha Yasmin, Sona Sutradhar, Poulami Das, <b>Sourav Mukherjee</b>	Gut melatonin: A potent candidate in the diversified journey of melatonin research. <i>General and Comparative Endocrinology</i> , Vol. 303, Special issue, Article No. 113693, pp. 1-10, 2021, DOI: 10.1016/j.ygcen. 2020.113693

Name of the Author(s)	Publication Details
Banerjee P, Saha I, Sarkar D, <b>Maiti A K.</b>	Contributions and Limitations of Mitochondria-Targeted and Non-Targeted Antioxidants in the Treatment of Parkinsonism: an Updated Review. <i>Neurotoxicity Research</i> , Vol 40, Issue 3, pp.847-873, 2022.
Sarkar D, <b>Maiti A K.</b> , Alenazy R, Joseph B.	<i>In silico</i> Approach to Identify Potent Bioactive Compounds as Inhibitors against the Enoyl-acyl Carrier Protein (acp) Reductase Enzyme of Mycobacterium tuberculosis. <i>Biointerface Research in Applied Chemistry</i> , Vol 12, Issue 5, pp.7023-7039, 2022.

#### Research Projects Details:

Title of the Project	Funding Body	Year of Sanction	Duration	Budget (Rs.)	Name of PI
Assessment of anti-inflammatory and anti arthritic properties of <i>Equisetum diffusum</i> D. Don whole plant extract as a complementary medication.	NBU	2021	1 year	1,50,000/-	Prof. S Bhattacharjee
Study of target site resistance through kdr mutation screening in <i>Aedes</i> and <i>Culex</i> mosquitoes from West Bengal, India	DST-SERB	2019	3 years	39.95 Lac	Prof. Dhiraj Saha
Phytochemical profiling of <i>Xanthoxylum oxyphyllum</i> leaf extracts evaluation of their oviposition deterrent, ovicidal, larvicidal and pupicidal activity against <i>Culex sp.</i> and <i>Aedes sp.</i>	NBU	2020	1 years	1.50 Lac	Prof. Dhiraj Saha
Functional implications of endogenous gut melatonin on the rate of ovarian growth and development in carp <i>Catla catla</i>	CSIR	2019	03.12.2019 to 31.03.2023	34 Lakhs (Approx.)	Dr. Sourav Mukherjee

#### Placement Details:

Name of the Student	Name of the Employer
Bappaditya Ghosh	As Guest Faculty in the Department of Anthropology, UG, NBU; employed by NBU

**Awards and Recognitions:**

- **Prof. Dhiraj Saha** from the Department has received prestigious “Prof. T. N. Ananthakrishnan Award for Insect Research” award from Society of Medical Arthropodologist (SOMA)

## B. Faculty of Arts, Commerce and Law

### DEPARTMENT OF BENGALI

#### About the Department:

The Department of Bengali commenced its journey from 8<sup>th</sup> February 1965, three years after the establishment of the University of North Bengal. The basic objectives of setting up of the Department were the promotion of Vernacular education, systematic and scholarly study of Bengali literature and language and regional languages & literature as well.

In its long journey of last 48 years, it has most commendably performed its duties and successfully fulfilled its purpose. Initially the Department was started with only thirteen students in its present location. Over the years, the number of Students, Research Scholars and Teachers have increased. It has firmly established its worth in teaching and Research in the field of Bengali language and literature.

To cater the need, the Department of Bengali started its journey at the Jalpaiguri Campus, with Master of Arts programme from 16<sup>th</sup> August 2013. The Department offers two optional specializations in the groups of Kathasahitya and Madhya Youg in the Post Graduate level.

#### Courses Offered:

- M. A.
- Ph. D.

#### Research Focus:

- Ancient & Mediaeval Bengali Literature
- Baishnav Literature
- Modern Bengali Literature
- Literary Criticism
- Socio – Linguistic Study
- Folklore and folk culture

#### Faculty Details:

Name	Qualification	Designation	Email
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Dr. Utpal Mandal	Ph.D.	Professor	utpalmandal@nbu.ac.in,
Dr. Surya Lama	Ph.D.	Asst. Professor	suryalama@nbu.ac.in
Dr. Urbi Mukherjee	Ph.D.	Asst. Professor	urbi.2017@nbu.ac.in
Dr. Ashis Roy	Ph.D.	Asst. Professor	ashisroy@nbu.ac.in
Dr. Plaban Singha	Ph.D.	Asst. Professor	plabansingha@nbu.ac.in
Dr. Hasnara Khatun	M.Phil., Ph.D.	Asst. Professor	hasnarakhatun@nbu.ac.in
Dr. Sharmishtha Paul	MA, M.Phil.	Asst. Professor	sharmisthapaul@nbu.ac.in

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Rajib Goswami	B. Com	Jr. Superintend
Ramesh Chandra Singha	Madhyamic	Sr. Peon

**Details of Research Scholars:**

Name	Fellowship Name	Supervisor's Name	Gender
Moumita Sarkar	SVMCM	Prof. Manjula Bera	Female
Repa Paul	NET-JRF	Prof. Manjula Bera	Female
Shatabdi Bhoumik	SVMCM	Prof. Manjula Bera	Female
Ratan Das	NFSC	Prof. Nikhil Chandra Ray	Male
Ashis Debnath	SVMCM	Prof. Nikhil Chandra Ray	Male
Biki Das	SVMCM	Prof. Nikhil Chandra Ray	Male
Prolay Mandol	NET-JRF	Prof. Nikhil Chandra Ray	Male
Manomita Prodhan	NET-JRF	Prof. Nikhil Chandra Ray	Female
Gita Ray	NET-JRF	Prof. Nikhil Chandra Ray	Female
Janak Barman	SVMCM	Prof. Nikhil Chandra Ray	Male
Saijya Deb Das	SVMCM	Prof. Nikhil Chandra Ray	Male
Ruma Roy	SVMCM	Prof. Nikhil Chandra Ray	Female
Abhishek Mandal	SVMCM	Prof. Nikhil Chandra Ray	Male
Madhurima Kar	SVMCM	Prof. Utpal Mandal	Female
Ram Konai	NFSC	Prof. Utpal Mandal	Male
Keshab Ghosh	SVMCM	Prof. Utpal Mandal	Male
Tumpa Khatun	State Fellow	Dr.Urbi Mukherjee	Female
Snigdha Chakravarty	SVMCM	Dr.Urbi Mukherjee	Female
Oli Acharjee	SVMCM	Dr.Urbi Mukherjee	Female
Jyotismita Chakrabarti	SVMCM	Dr.Urbi Mukherjee	Female
Lokeshwar Roy	NET-JRF	Dr. Surya Lama	Male
Bikash Narjinary	NET-JRF	Dr. Surya Lama	Male
Piyali Das	SVMCM	Dr. Surya Lama	Female
Tapas Paul	NET-JRF	Dr. Surya Lama	Male
Rajonita Bhowmick	SVMCM	Dr.Sharmishtha Paul	Female
Niru Barman	NFSC	Dr.Plaban Singha	Male
Mithun Thandar	NET-JRF	Dr.Plaban Singha	Male
Parna Biswas	NFSC	Dr.Plaban Singha	Female
Shrabanti Barman	SVMCM	Dr.Plaban Singha	Female
Sathi Nandi	SVMCM	Dr.Plaban Singha	Female
Panchanan Deyasi	SVMCM	Dr.Ashis Roy	Male
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Souvik Panja	SVMCM	Dr.Ashis Roy	Male
Abdulla Rahaman	SVMCM	Dr.Hasnara Khatun	Male
Surajit Ghorai	SVMCM	Dr.Hasnara Khatun	Male

Name	Fellowship Name	Supervisor's Name	Gender
Beauty Rakshit	SVMCM	Dr.Hasnara Khatun	Female
Dipankar Sarkar	STATE FELLOW	Dr. Bikash Chandra Paul	Male

**Details of PhD Students (Without Fellowship):**

Name	Supervisor Name	Gender
Bratati Singha	Prof. Manjula Bera	Female
Falguni Mondal	Prof. Manjula Bera	Female
Madan Gopal Adhikary	Prof. Manjula Bera	Male
Repa Paul	Prof. Manjula Bera	Female
Pratap Kr. Saha	Prof. Manjula Bera	Male
Jagadish Roy	Prof. Manjula Bera	Male
Gopa Ray	Prof. Nikhil Chandra Ray	Female
Shilpee Ray	Prof. Nikhil Chandra Ray	Female
Bhagirath Das	Prof. Nikhil Chandra Ray	Male
Sudeshna Moitra	Prof. Nikhil Chandra Ray	Female
Debalina Biswas	Prof. Nikhil Chandra Ray	Female
Sahadeb Roy	Prof. Nikhil Chandra Ray	Male
JoynabBinte Hossain	Prof. Utpal Mandal	Female
Prasenjit Das	Prof. Utpal Mandal	Male
Subrata Paul	Dr. Surya Lama	Male
Amit Biswas	Dr. Plaban Singha	Male
Mallika Sinnigrahi	Dr. Ashis Roy	Female
Monab Mondal	Dr. Hasnara Khatun	Male
Rupayan Roy	Dr. Bikash Chandra Paul	Male
Iunus Maih	Dr. Bikash Chandra Paul	Male

**Details of Seminar/Conferences/Webinar Attended by Faculty:**

Name	Details of Seminars /Conferences/Webinar
Prof.Manjula Bera	<p>1. A Lecture delivered on 26<sup>th</sup> Marcha 2021 in the International Webinar organized by Jatiya Kobi Kaji Najrul Islam Biswabidyalay, Trisul, Maymonsingha, Bangladesh on 26<sup>th</sup> Marcha 2021</p> <p>2. A Key Note Address delivered on the 17<sup>th</sup> Marcha, 2021 in the International Webinar jointly organised by Rajganj college, Rajganj, Jalpaiguri and Baneshwar Sarathibala Mahavidyalaya, Baneshwar, Jalpaiguri. on 17<sup>th</sup> Marcha 2021</p> <p>3. Attended a seminar &amp; Exhibtion named “DwiSata –Janma Jayantite Ishwarchandra Vidyasagar’ on 28<sup>th</sup> February, 2021 organised by Bangiya Sahitya Parishad, 243/1, A.P.C.Road, Kolkata -700006 on 28<sup>th</sup></p>

Name	Details of Seminars /Conferences/Webinar
	<p>February, 2021</p> <p>4. Course Co-Ordinator -- UGC sponsored Refresher Course organised by UGC HRDC, NBU on the title heading “Post-Colonial Thought and Indian Literature” from 07.01.2022 to 21.01.2022.</p> <p>5. Adjudicator in the ‘Seminar Presentation’ of the Refresher Course on Women Studies (RC-WS) held in digital platform (GOOGLE MEET) at the UGC-Human Resource Development Centre, University of North Bengal from 12.01.2021 to 25.01.2021[HRDC PROG4]</p> <p>6. Language Expert for preparation of “Comprehensive Glossary of Engineering” (English-Hindi-Bangla) held the 05 days meeting dated 23-27 March 2022 at Siliguri Institute of Technology, Siliguri, West Bengal organised by the Commission for Scientific and Technical Terminology (CSTT), Department of Higher Education, Ministry of Education, Government of India</p> <p>7. Adjudicator in the ‘Seminar Presentation Session’ of the Refresher Course in ‘Gender Discourse : Theory and Practice’ held in digital platform (GOOGLE MEET) at the UGC-Human Resource Development Centre, University of North Bengal from 31.08.2021 to 13.09.2021</p> <p>8. Adjudicator in the ‘Seminar Presentation Session’ of Faculty Induction Programme-03 on the theme “Literary Work &amp; Society” held in digital platform (GOOGLE MEET) at the UGC-Human Resource Development Centre, University of North Bengal from 04.01.2021 to 02.02.2021</p> <p>8. Adjudicator in the ‘Micro-Teaching Session’ of Faculty Induction Programme-03 on the theme “Literary Work &amp; Society” held in digital platform (GOOGLE MEET) at the UGC-Human Resource Development Centre, University of North Bengal from 04.01.2021 to 02.02.2021</p>
Prof.Nikhil Chandra Ray	<p>1. One Day National Level Seminar entitled “বিদ্যাসাগরেরদর্শন ও সাহিত্য”, Organised by BaneswarSarathibala Mahavidyalaya on 20/12/2021</p> <p>2. One Day National Level Seminar entitled “বীরচিলারায়েরজীবনদর্শন”, Organised by BaneswarSarathibala Mahavidyalaya on 16/02/2022</p> <p>3. Two Days International Seminar entitled “The Role of Manishi</p>

Name	Details of Seminars /Conferences/Webinar
	<p>Panchanan Barma and Dr.B.R.Ambedkar in the Formation of New India” Organised by BaneswarSarathibala Mahavidyalaya&amp; TITAS Charitable Trust, Coochbehar on 15/11/2022-16/11/2022</p> <p>4. Five Day International Seminar entitled “নৃ-জাতিগোষ্ঠীয়ভাষা ও সাহিত্যচর্চা, অন্তরায় ও প্রতিকার” Organised by Bangabandhu Institute of Comparative Literature and Culture, Jahangirnagar University, Dhaka, Bangladesh on 20/02/2022-24/02/2022</p>
Prof.Utpal Mandal	<p>1.One Day International Webinar entitled “Celebrating International Mother Tongue Day on 21<sup>st</sup> February 2022” Organised by Zakir Husain Delhi College (Evening), New Delhi on 21/02/2022</p> <p>2.Two Days International Webinar entitled “Development and nature of Bengali Literature and Culture in Post-independence period” Organised by Department of Bengali, Tripura University on 04/05/2022-05/05/2022</p> <p>3.Two Days International Seminar entitled “BangadarshanPatrika: SardhashatabarshePunarbikshan” Organised by Department of Bengali, Cooch Behar Panchanan Barma University on 15/09/2022-16/09/2022</p> <p>4.Two Days International Seminar entitled “Bengali Drama, Dramatic Movements and Modern Bengali Literature” Organised by Department of Bengali, University of Kalyani on 20/12/2022-21/12/2022</p>
Dr. Ashis Roy	<p>1.One Day National Level Seminar cum Webinar entitled “JharkhandiLoksahtiyerPunorbinyas O Punornulyan”, Organised by Kolhan University, Chaibasa, Jharkhand on 25/02/2022</p> <p>2. Two Days International offline/online Coference 2022 entitled “Rabindrottar Bangla NatakergotiProkriti O Chalchitra”, Organised by Kolhan University, Chaibasa, Jharkhand on 29/03/2022 -30/03/2022</p> <p>3. One Day International Seminar entitled “বাংলানাটক: ঐতিহ্য ও উত্তরাধিকার”, Organised by The Gouri Cultural &amp;Educatiounal Association, Banipur, Habra on 29/07/2022</p> <p>4. One Day International Seminar entitled “সার্থশতবর্ষেবঙ্গদর্শন ও জাতীয়রঙ্গালয়”, Organised by Jadavpur University &amp; Society of Bengal Studies 01/11/2022</p> <p>5. One Day National Level Seminar entitled “বাংলাসাময়িকপত্র:ঐতিহ্য, সংকট, সম্ভাবনা”,Organised by</p>



Name	Details of Seminars /Conferences/Webinar
	<p>Ramkrishna MisionVidyamandira, Belur Math, Howrah 26/11/2022</p> <p>6. One Day International Seminar entitled “বাংলাসাহিত্য:দেশ, কাল ও সমাজেরপ্রেক্ষিতে”, Organised by Ramkrishna MisionVidyamandira&amp; The Gouri Cultural &amp;Educatiuonal Association, Kolkata on 16/12/2022</p> <p>7.One Day International Seminar entitled “প্রবহমান বাংলাচর্চা-৭”, Organised by ProbahamanBanglacarcha&amp;Basirhat College on 24/12/2022</p>
Dr.Hasnara Khatun	<p>1.One Day International Seminar entitled “প্রবহমান বাংলাচর্চা-৬”, Organised by ProbahamanBanglacarcha&amp; Ramkrishna Mision Residential College on 05/12/2021</p> <p>2.One Day International Conference entitled“The Seventeenth Intarnational Conference of History &amp; Heritage 2022”, Organised byItihas Academy Dhaka, Dhaka, Bangladesh 20/05/2022</p>

#### Publications:

Author (s)	Publication Details
Prof. Manjula Bera	<p><u>Journal :</u></p> <p>1. Vidyasagar O Sanbad-Samayik Patra, Vidyasagar : Anweshan-Anubhab-Pratiti [Dwishata Janmabarsha Smarak Grantha] edited by Ashok Paul, published by Banlar Mukh Prakashan, 21/1 A, Patuatola Lane, Kolkata-9, ISBN : 978-93-84108-05-2, 30 July, 2021.</p> <p>2. Vidyasagarer Samajbhabna, Bohumatrik Vidyasagar edited by Jyotsna Chattopadhyay published by Dey’s Publishing (Kamalini Prakashan Bibhag), 13 Bankim Chatterjee Street, Kolkata-700073; ISBN : 978-93-91483-26-5, 26 September, 2021.</p> <p>3. Narendranath Mitre ‘Ras’ : Rupasaktir Sange Jibikar Dwandwe Hridaydharmer Unmochan Shruti (Sahitya-Sanskriti Bishayak Gabeshanamulak Patrika) edited by Tapas Adhikari published from Dakshin Dinajpur, West Bengal, ISSN : 2394-7225, December, 2021.</p> <p>4. Narayan Dever ‘Padmapuran’-e Bishay O Silpa-Kathamor Baichitrya (Book) Edited by Manik Maitra &amp; Tapas Mandal and published from Bangiya Sahitya Sansad, 6/2 Ramanath Majumder Street, Kolkata – 700009 in March, 2021.</p> <p>5. Iwarchandra Vidyasagarer Paribarik Jiban, Vidyasagar : Monon O Srejon edited by Bela Das &amp; Biswatosh Chowdhuri Published by Bangiya Sahitya Samsad, 6/2 Ramanath Majumder Street, Kolkata-700009, ISBN : 978-93-90993-00-0,</p>

Author (s)	Publication Details
	January, 2022.
Prof. Utpal Mandal	<p><u>Journal :</u></p> <p>১. “প্রবন্ধনিষে”, ‘অংশুমালী’, জুলাই, ২০২১, <a href="https://shorturl.at/vyTY8">https://shorturl.at/vyTY8</a></p> <p>২. “সমাজচিন্তক বিদ্যাসাগর:একুশ শতকের চোখে”, পেজ ফোর, ২৯ জুলাই, ২০২১, <a href="https://pagefournews.com/vidyasagar_utpal-mandal/">https://pagefournews.com/vidyasagar_utpal-mandal/</a></p> <p>৩. “কলকাতা আর উলাপুর: ‘পোস্টমাস্টার’ এর সমাজ মনস্তাত্ত্বিক প্রেক্ষিত”, সংবাদ একলব্য নিউজ ওয়েব পোর্টাল, ৯মে, ২০২২, <a href="https://shorturl.at/DIM34">https://shorturl.at/DIM34</a></p>
Dr.Urbi Mukherjee	<p><u>Book:</u></p> <p>১. “হরিশংকর জলদাসের ‘জলপুত্র’: কাহিনি ও ঘটনার বিন্যাস কৌশল”, প্রাপ্তি চক্রবর্তী সম্পাদিত, ‘একুশ শতকের বাংলা উপন্যাস’, দিয়া পাবলিকেশন, কলকাতা, ২০২১</p> <p>২. “ছওমাহিনায় দুই মাইল বন খায়া ফেলছে”, সুশান্ত মণ্ডল সম্পাদিত, ‘ইকোক্রিটিসিজম ও বাংলা সাহিত্য’, দিয়া পাবলিকেশন, কলকাতা, ২০২১</p> <p>৩. “বাখতিনের দ্বিবাচনিকতা ও ‘চিলেকোঠারসেপাই’ উপন্যাস”, প্রবহমান বাংলা চর্চা ৬, প্রথম পর্যায়, ২০২২</p> <p>৪. “অমিয়ভূষণ মজুমদারের উপন্যাস: আন্বয়িক সংস্কৃতির আলোকে”, মহম্মত নাজমুল ইসলাম ও শুভজিত দাস সম্পাদিত ‘বসুন্ধরা’, রবি প্রকাশ, রানিধন্য কুমারি মহাবিদ্যালয়, জিয়াগঞ্জ, মুর্শিদাবাদ, ২০২২</p> <p>৫. ‘উপনিবেশ’ উপন্যাসে নদী: সংস্থানের গুরুত্ব’, তপন মণ্ডল, দীপঙ্কর মল্লিক ও তাপস পাল সম্পাদিত, ‘বাংলাসাহিত্য দেশ, কাল ও সমাজের প্রেক্ষিতে’, রামকৃষ্ণ বিদ্যামন্দির ও দিয়া পাবলিকেশন, ২০২২</p> <p><u>Journal:</u></p> <p>১. ‘অমিয়ভূষণ মজুমদারের ‘নির্বাস’: উদ্বাস্তু ভাবনার ভিন্নমাত্রা’, দীপঙ্কর মল্লিক সম্পাদিত, ‘তবু একলব্য’, বিশেষসংখ্যা- ‘বাংলা সাহিত্যে সামাজিক-সাংস্কৃতিক-রাজনৈতিক ও ধর্মীয় আন্দোলন’, ২৬ বর্ষ, ৪২ সংখ্যা, ২০২১</p> <p>২. ‘পুতুলনাচের ইতিকথা উপন্যাসের কখনরীতি’, ড. মদনমোহন বেরা সম্পাদিত, ‘এবং মল্লয়া’, ২৩ তম বর্ষ, ১৩৪ সংখ্যা, ২০২১</p> <p>৩. ‘শিবরামের উপন্যাসের গঠন কৌশল’, ড. মদনমোহন বেরা সম্পাদিত, ‘এবং মল্লয়া’, ২৩ তম বর্ষ, ১৩৮ সংখ্যা, ২০২১</p>

Author (s)	Publication Details
	<p>৪. “অমিয়ভূষণের ‘দুখিয়ারকুঠি’: সম্পর্কের বহুমাত্রিকতা”, আশিস রায় সম্পাদিত ‘এবং প্রান্তিক’, ৯ম বর্ষ, ১৯ তম সংখ্যা, ২০২২</p>
Dr.Surya Lama	<p><u>Journal:</u>            ১. “আদিকবি’ ভানুভক্ত: নেপালি রামায়ণ প্রসঙ্গ”, ড. মদনমোহন বেরা সম্পাদিত, ‘এবং মল্লয়া’, ২৩ তম বর্ষ, ১৪০ সংখ্যা, ২০২১            ২. “তামাঙ সমাজ ও সংস্কৃতি”, পতিত পাবন পাল সম্পাদিত, “Proceedings: IBWTL-2”, Part-1, 2022</p>
Dr.Ashis Roy	<p><u>Journal:</u>            ১. “ঘনশ্যাম চৌধুরির গল্প: চেনার মধ্যে অচেনা জগত”, ড. মদনমোহন বেরা সম্পাদিত, ‘এবং মল্লয়া’, ২৩ তম বর্ষ, ১৩০ সংখ্যা, ২০২১            ২. “প্রেমে প্রতিবাদে”, ড. সুকান্ত মুখোপাধ্যায় সম্পাদিত, ‘লোকস্বর’, নবম বর্ষ, ১৭তম সংখ্যা, ২০২১            ৩. “দ্বন্দ্বমূলক বস্তুবাদ ও রবীন্দ্রনাটক”, অভীক ভট্টাচার্য সম্পাদিত, ‘ভাবনা থিয়েটার’, বর্ষ ১১, বিশেষ সংখ্যা, ২০২১            ৪. “মুনির চৌধুরীর ‘কবর’ নাটক: প্রতিবাদী চেতনা”, সুবল সামন্ত সম্পাদিত, ‘এবং মুশায়েরা’, ২৮ তম বর্ষ, শারদীয়া ১৪২৮            ৫. “নাগরিক? — প্রমাণ করার উপায়!”, সাইদুর রহমান সম্পাদিত, ‘অতঃপর’, অষ্টম বর্ষ, প্রথম সংখ্যা, ২০২১</p>
Dr.Hasnara Khatun	<p><u>Book:</u>            ১. “দুটি কাহিনি (একটি গল্প অন্যটি কিস্সা): চেতন-অবচেতন মনের দ্বন্দ্ব”, সনৎকুমার নস্কর সম্পাদিত, প্রবহমান বাংলা চর্চা ৫, ২০২১</p> <p><u>Journal:</u>            ১. “দাম্পত্য সম্পর্কের রসায়ন এবং অনিতা অগ্নিহোত্রীর চারটি ছোটগল্প”, আশিস রায় সম্পাদিত ‘এবং প্রান্তিক’, ৮ম বর্ষ, ১৭ তম সংখ্যা, ২০২১            ২. “জনর্দনের জর্দার কৌটো এবং পারিবারিক ‘টক্লিক এফেক্ট’, আসরফী খাতুন সম্পাদিত ‘লালপরি নীলপরি’, বিশেষ সংখ্যা- সঞ্জীব চট্টোপাধ্যায়ের শিশুসাহিত্য, বর্ষ ২০, সংখ্যা ২২, ২০২১            ৩. “অনিতা অগ্নিহোত্রীর ‘কেউ ভোলেনা’ গল্প এবং আধুনিক মানুষের পোষ্য”, সাইদুর রহমান সম্পাদিত, ‘অতঃপর’, অষ্টম বর্ষ, প্রথম সংখ্যা, ২০২১</p>

<b>Author (s)</b>	<b>Publication Details</b>
	৪. “ভাস্কর চক্রবর্তীর কবিতা: নৈরাশ্যের বিষাদ উত্তরণের আভাস”, সৈয়দ তৌফিক জুহুরি সম্পাদিত, ‘তপোবন’, বর্ষ ১, সংখ্যা ১, ২০২২

**Research Projects Details:**

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>
“Multidimensional Analysis of Amiya Bhushan Majumdar’s Novel”	NBU	2021	1 year	1,00,00

## DEPARTMENT OF COMMERCE

### About the Department

The Post Graduate Department of Commerce was established in 1965 with the purpose to promote state of the art teaching and research and in Business Operations and Management. The primary programme offered by the department is Master of Commerce, with specializations offered Accounting Finance, Personnel Management and Human Resource Management, Marketing. The course curriculum has been designed according to the guidelines prescribed by the UGC and aims at equipping the students with technical and analytical skill in management of funds, people, markets and legal and economic environment of business so that they are capacitated to handle strategic and operational issue in corporate and non-corporate business house.

The Department also runs a full time six month Research Methodology course for Ph. D. scholars. For administration of the courses, modern pedagogic techniques link case studies, business games, role playing etc. are used with appropriate audio-visual media. The examination and assessment processes consist of structured class tests, assignments, Viva-voce and seminar presentations. The alumni of this departments are placed as professional managers in banking insurance and other companies and as faculty in several universities, colleges and reputed management and professional institutes. The faculty of this department has diverse specializations to cater to the needs of teaching and research and has also been associated with a large number of universities, institutions and government departments. The department has organized national level seminars and woekshops and contributed in development of teachers in the field of Management by organizing Refresher Courses.

### Courses Offered:

- M. Com.
- Ph. D.

### Research Focus:

- Organizational Development
- Microfinance and Financial Inclusion
- Transport Economics
- Industrial Relations
- Corporate Finance
- Organizational Behaviour

### Faculty Details:

Name	Designation	Qualification	E-mail
Palas Ranjan Sengupta	Professor	LLB, Ph.D., D.Litt	senguptapalas@gmail.com
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Dipen Roy	Professor	M.B.A, Ph.D.	roydipennbu@rediffmail.com
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#### Details of Non-Teaching Staff:

Name	Qualification	Designation
Rashik Lal Roy	Madhyamik (appeared)	Sr. Peon
Manik Das	H.S., Diploma in Computer	Office Assistant (Casual)

#### Details of Research Scholars:

Name	Fellowship Name	Supervisor's Name	Gender
Narayan Prasad	UGC NET JRF	Dr. Debasis Bhattacharya	Male
Alivia Ghosh	UGC NET JRF	Prof. Palas R. Sengupta	Female
Suchismita Paul	UGC NET JRF	Dr. Soumitra Sarkar	Female
Pema Kisheb Yolmo	UGC NET JRF	Dr. Debasis Bhattacharya	Male
Mintu Adhikary	UGC NET JRF	Dr. Soumitra Sarkar	Male
Md. Nasim Ansari	UGC NET JRF	Dr. Jamaluddeen	Male
Sherab Wangdi	UGC NET JRF	Prof. Dipen Roy	Male
Dev Anand	UGC NET JRF	Prof. Palas R. Sengupta	Male
Bishal Routh	UGC NET JRF	Dr. Joy Sarkar	Male
Raju Paul	UGC NET JRF	Prof. Dipen Roy	Male
Kriti Shakya	MANF	Dr. Gangotree Ghosh	Female
Md. Afnan	UGC NET	Dr. Soumitra Sarkar	Male
Debapriya Banerjee	State JRF	Dr. Soumitra Sarkar	Male
Prasid Gurung	State JRF	Dr. Soumitra Sarkar	Male

#### Details of Ph.D. Students (Without Fellowship):

Name	Supervisor's Name	Gender
Sabyasachi Bose	Prof. Debabrata Mitra	Male
Ruma Dey	Prof. Dipen Roy	Female
Sanmoy Mallick	Prof. Debabrata Mitra & Co-guide Amlan Ghosh	Male
Pintu Prasad Jaiswal	Prof. Samirendra Nath Dhar	Male
Saraswati Lama	Prof. Samirendra Nath Dhar	Female

<b>Name</b>	<b>Supervisor's Name</b>	<b>Gender</b>
Joy Sarkar	Prof. Hirak Ray Co-Guide Prof. S.N. Dhar	Male
Dipankar Karmakar	Dr. Debasis Bhattacharya	Male
Prabir Tarafder	Prof. S. N. Dhar	Male
Agnishwar Basu	Prof. Debabrata Mitra	Male
Abhrangshu Kumar Sarkar	Prof. Debabrata Mitra	Male
Sandip Kr. Santra	Prof. Dipen Roy	Male
Dipankar Bhaumik	Prof. Dipen Roy	Female
Mukesh Saha	Dr. Debasis Bhattacharya	Male
Smt. Dipika Bhowmik	Prof. S.N. Dhar	Female
Smt. Madhu Sarda	Prof. Indrajit Ray	Female
Pawan Prasad	Prof. Dipen Roy	Male
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Reema Doma Sherpa	Prof. Samirendra Nath Dhar	Female
Avijit Roy	Prof. Debabrata Mitra	Male
Shital Thatal	Dr. Gangotree Ghosh	Female
Badika Agarwal		Female
Suman Sarkar	Prof. Dipen Roy	Male
Pinky Gupta	Prof. Palas R. Sengupta	Female
Santosh Biswas	Prof. Palas R. Sengupta	Male
Subrata Mallik	Prof. Dipen Roy	Male
Serene Alam	Dr. Jamaluddeen	Female
Suraj Agarwal	Prof. Palas R. Sengupta	Male
Risha Chettri	Dr. Debasis Bhattacharya	Female
Prasenjit Bhowmick	Prof, Palas R. Sengupta	Male
Tanisha Kansal	Prof, Palas R. Sengupta	Female
Rumi Paul Choudhury	Prof. Palas R. Sengupta	Female
Prajjawal Pradhan	Dr. Jamaluddeen	Male
Sanjukta Mahanta Mitra	Dr. Soumitra Sarkar	Female
Lakpa Tashi Sherpa	Prof. Palas.R sengupta	Male
Kriti Shakya	Dr. Gangotree Ghosh	Female
Rajeev Dutraj	Prof. Palas R. Sengupta	Male
Payel Mitra	Prof. Palas R. Sengupta	Female

**Details of Seminar/Conference Attended by the Teachers:**

<b>Name</b>	<b>Details of Seminars/Conferences/ Webinar</b>	<b>Title of the Paper Presented</b>
Prof. Palas Ranjan Sengupta	National Conference entitled "Management in the VUCA World", organised by Graphic Era Deemed to be University, Dehradun, 11-12-21	An empirical study of the quality of work life balance of Anganwadi

Name	Details of Seminars/Conferences/ Webinar	Title of the Paper Presented
	to 12-12-2021	workers in the Darjeeling district of North Bengal
	57 <sup>th</sup> National & 26 <sup>th</sup> International Conference entitled “Relevance of Psychology in Pandemic Conditions & it’s impact on Well-Being in the Digital World”, organised by International Conference of Indian Academy of Applied Psychology, held at Mizoram University, Mizoram, 27-01-22 to 29-01-2022	An Investigation into the Psychological Health of Anganwadi Workers Amidst the Pandemic
	57 <sup>th</sup> National & 26 <sup>th</sup> International Conference entitled “Relevance of Psychology in Pandemic Conditions & it’s impact on Well-Being in the Digital World”, organised by International Conference of Indian Academy of Applied Psychology, held at Mizoram University, Mizoram, 27-01-22 to 29-01-2022	Online Education During Pandemic and its Impact
Dr. Soumitra Sarkar	International Web-Based Conference on “COVID-19: consequences and challenges”, organised by Alipurduar University, 05-08-21 to 06-08-21	Attended as <b>Resource Person/ Key note speaker</b>
Dr. Gangotree Ghosh	International Web-Based Conference on “COVID-19: consequences and challenges”, organised by Alipurduar University, 05-08-21 to 06-08-21	Attended as <b>Session-Chair</b>
	Two days online special lecture program organised by Cooch-Bihar College, 05-07-21 to 06-07-21	<b>Special Lecture</b> on “Tax Planning under Personal Income Tax”
Prof. Debabrata Mitra	AICTE Training and Learning (ATAL) Academy online Elementary FDP on “Faculty Development Programme in Management” held at Department of Management, University of North Bengal, 06.12.2021 to 10.12.2021	Delivered lectures as a Resource Person
	Delivered lectures as a Resource Person in the National Webinar organized by the Department of Commerce & Management in association with IQAC, SCMIRT on the topic “Forensic Accounting”, 05.10.2021	“Technological Reforms in Commerce and Management”
	Delivered lectures as a Resource Person at the Online Refresher Course organized by the UGC-Human Resource Development Centre, Devi Ahilya Vishwavidyalaya, Indore,	“Research with Special Emphasis on ROL”



Name	Details of Seminars/Conferences/ Webinar	Title of the Paper Presented
	28.09.2021	
	Delivered lectures as a Resource Person in the National Webinar organized by Netaji Subhas Mahavidyalaya, 16.09.2021	“Intellectual Property Rights and its Implications”
	Acted as a Judge for 15 th Intercollegiate / Institute / Department Avishkar Research Convention: 2020-21 (Final Round), organized by Department of Students’ Development and Universities Information Bureau, University of Mumbai.	

**Details of Seminar/Conferences/Webinar Attended by Student:**

Name	Details of Seminars/ Conferences/ Webinar	Title of the Paper Presented
Aliviya Ghosh	National Conference entitled “Management in the VUCA World”, organised by Graphic Era Deemed to be University, Dehradun, 11-12-21 to 12-12-2021	An empirical study of the quality of work life balance of Anganwadi workers in the Darjeeling district of North Bengal
Aliviya Ghosh	57 <sup>th</sup> National & 26 <sup>th</sup> International Conference entitled “Relevance of Psychology in Pandemic Conditions & it’s impact on Well-Being in the Digital World”, organised by International Conference of Indian Academy of Applied Psychology, held at Mizoram University, Mizoram, 27-01-22 to 29-01-2022	An Investigation into the Psychological Health of Anganwadi Workers Amidst the Pandemic
Payel Mitra	57 <sup>th</sup> National & 26 <sup>th</sup> International Conference entitled “Relevance of Psychology in Pandemic Conditions & it’s impact on Well-Being in the Digital World”, organised by International Conference of Indian Academy of Applied Psychology, held at Mizoram University, Mizoram, 27-01-22 to 29-01-2022	Online Education During Pandemic and its Impact

**Publications:**

<b>Author(s)</b>	<b>Publication Details</b>
Mitra D.	Published an article titled “Evaluation of Microfinance Institutions (MFIS) in Inculcating CSR Values in the Society” at the Purana (UGC Care Listed Group 1, Peer Reviewed and Referred Journal), volume LXIV, No. 1, 2022 (ISSN: 0555-7860) (Co-authored with Mr. Narayan Prasad).
Mitra D.	Published an article titled “Overview of Corporate Social Responsibility in the Indian Scenerio” in the edited volume “Environment Management” edited by Dr. Nita Mitra and Dr. Sujit Pal, N. B. Publications, Ghaziabad, 2022 (co-authored with Mr. Narayan Prasad) pp. 1-27 (ISBN: 978-93-91550-73-8)
Mitra D.	Published an article titled “Implications of COVID-19 on Ind AS compliant Corporate Financial Reporting in India” in the edited book titled “Issues in Accounting & Finance in the Post COVID Scenario” (edited by Prof. Sunil Kumar Gandhi, Prof. Ananda Mohan Pal, Prof. Satyajit Dhar, Prof. Amalendu Bhunia, Prof. Ashish Kumar Sana), Rohini Nandan, Calcutta, pp 54 – 57 (Co-authored with CA Agnishwar Basu)
Mitra D.	Efficiency of Life Insurance Companies in the Liberalized Regime”, <i>Abhijeet Publications</i> , Delhi, 2021 (ISBN 978-81-953707-2-6) (Co-authored with Dr. Piyali Chandra Khan)
Ghosh G.	Indo-Bhutan Trade in Post GST Period: An Overview, in Paul, R. (ed.) <i>Indo-Bhutan Relations</i> , ISBN -978-93-92816-09-3, <i>Abhijeet Publications</i> , New Delhi, Pp. 179-194, 2022

## DEPARTMENT OF ECONOMICS

### About the Department:

The Department of Economics, University of North Bengal was established on 2<sup>nd</sup> November, 1962. In keeping with curricular reform and development, the Department has instituted continuing evaluation of its students through Group-Discussions and a comprehensive Viva-voce examination, and a Term Paper in addition to written examinations held at the conclusion of each postgraduate semester.

Since the 8<sup>th</sup> Plan period, the Department has also imparted a field-orientation to its regular Postgraduate course through its Student Survey Programme (SSP), which offer rural sensitization to students of Economics, besides providing rigorous exposure to the entire investigative procedure involved in sample-surveys, ranging from sample drawal and execution of the SSP questionnaire, through tabulation and computation to the economic analysis of data and report presentation. Remedial teaching and student counselling using tutorial and preceptorial methods are also undertaken to help weaker students to frame answers to assignments and develop writing skills in the regular course work.

The Department has an active research programme under which many students have successfully worked for Ph.D. in Economics. As per new UGC regulations, 2009, entrance examination, compulsory course work, etc. have been duly introduced to ensure rigour in research. The Department has an impressive performance record in the NET and SLET Examinations, where several students of the Department have qualified till date for lectureship/JRF.

### Courses Offered:

- M. A.
- Ph. D.

### Research Focus:

- Inequality and Human Development
- Micro Economics
- Feminist and Gender Economics
- Infrastructure Economics
- Plantation Economics
- Gender and Tribal Economics

### Faculty Details:

Name	Qualification	Designation	Email
Prof. K K Bagchi	Ph.D.	Professor	econkkbagchi@nbu.ac.in
Prof. Sanchari Roy Mukherjee (on lien)	Ph.D.	Professor	sancharimeco@nbu.ac.in
Prof. Anil Bhumali	Ph. D.	Professor	anilbhumali@nbu.ac.in
Ms. Sudakshina Ray	M.A	Assoc. Professor	sudakshina.ray@nbu.ac.in

Name	Qualification	Designation	Email
Dr. Kanchan Datta	M.Phil., Ph.D.	Assoc. Professor	kanchandatta_72@nbu.ac.in
Dr. Tamash Ranjan Majumdar	Ph.D.	Asst. Professor	trmeco@nbu.ac.in
Dr. Govinda Choudhury	Ph.D.	Asst. Professor	govinda.c2006@nbu.ac.in
Dr. Amlan Majumder	MPS., Ph.D.	Assoc. Professor	amlan@nbu.ac.in
Mr. Karan Tamang	M.A.	Asst. Professor	karantamang_eco@yahoo.in
Dr. Zafar Iqubal	Ph.D.	Asst. Professor	zafareco@nbu.ac.in

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Mr. Nayan	Graduate	Office Assistant

**Details of Research Scholars:**

Name	Fellowship Name	Supervisor's Name	Gender
Barnali Das	SVMCM	Dr. Amlan Majumder	Female
Fahad Alam	MANF	Dr. Zafar Iqubal	Male
Amrita Chakraborty	State Fellowship	Dr. Govinda Choudhury	Female
Dhanjit Sarkar	UGC NET-JRF	Dr. Amlan Majumder	Male
Gaurav Baraily	SVMCM	Prof Anil Bhuijali	Male
Pawan Kumar Prasad	NFOBC	Dr. Kanchan Datta	Male
Kishan Agarwalla	State Fellowship	Dr. T R Majumdar	Male
Jeet Saha	UGC NET JRF	Dr. Zafar Iqubal	Male
Jeherul Islam	MANF	Dr. Amlan Majumder	Male
Niranjana Deori	UGC NET-JRF	Prof. A Bhuijali	Male
Priyaa Tamang	SVMCM	Prof. Anil Bhuijali	Female
Trishala rai	SVMCM	Prof. S R Mukherjee	Female
Yogendra Mani Pradhan	SVMCM	Dr T R Majumdar	Male

**Details of PhD Students (Without Fellowship):**

Name	Supervisor Name	Gender
Alen Lama	Dr. Kanchan Dutta	Female
Adit Pariyar	Dr. Panchali Sengupta	Male
Bishal Rai	Dr. Panchali Sengupta	Male
Sulagna Chandra	Dr. Tamash Ranjan Majumder	Female
Phu Tshering Sherpa	Dr Panchali Sen Gupta	Male
Gopal Halder	Dr. Kanchan Datta	Male
Md. Shah Alom	Dr. Zafar Iqubal	Male

<b>Name</b>	<b>Supervisor Name</b>	<b>Gender</b>
Sushovan Mondal	Dr. Amlan Majumder	Male
Swastika Lama	Prof. Anil Bhumali	Female

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

<b>Name</b>	<b>Details of Seminars / Conferences / Webinar</b>	<b>Date</b>
Prof. K K Bagchi	35 <sup>th</sup> National Conference on Agricultural Marketing	14 - 16.12.2021
Prof. S R Mukherjee	Special Lecture and Webinar Series	07.03.2022
Prof. A Bhumali	35 <sup>th</sup> National Conference on Agricultural Marketing	14 - 16.12.2021
Prof. A Bhumali	Special Lecture and Webinar Series	07.03.2022
S Ray	35 <sup>th</sup> National Conference on Agricultural Marketing	14 - 16.12.2021
S Ray	Special Lecture and Webinar Series	07.03.2022
Dr. Kanchan Datta	35 <sup>th</sup> National Conference on Agricultural Marketing	14 - 16.12.2021
Dr. Kanchan Datta	Special Lecture and Webinar Series	07.03.2022
Dr. A Majumder	35 <sup>th</sup> National Conference on Agricultural Marketing	14 - 16.12.2021
Dr. Kanchan Datta	Special Lecture and Webinar Series	07.03.2022
Dr. T R Majumdar	35 <sup>th</sup> National Conference on Agricultural Marketing	14 - 16.12.2021
Dr. T R Majumdar	Special Lecture and Webinar Series	07.03.2022
Dr. G Choudhury	35 <sup>th</sup> National Conference on Agricultural Marketing	14 - 16.12.2021
Dr. G Choudhury	Special Lecture and Webinar Series	07.03.2022
Dr. G Choudhury	UGC-SAP International Seminar on Development Cooperation between India & Neighbouring Countries: Possibilities and Challenges	22 - 24.3.2022
Karan Tamang	35 <sup>th</sup> National Conference on Agricultural Marketing	14 - 16.12.2021
Karan Tamang	Special Lecture and Webinar Series	7.3.2022
Dr. Zafar Iqbal	35 <sup>th</sup> National Conference on Agricultural Marketing	14 - 16.12.2021
Dr. Zafar Iqbal	Special Lecture and Webinar Series	07.03.2022

**Details of Seminar/Conferences /Webinar Attended by Student:**

<b>Name</b>	<b>Details of Seminars / Conferences / Webinar</b>	<b>Date</b>
Alen Lama	26 <sup>th</sup> Research Methodology Workshop and Training in Economics on use of STATA in Data Analysis. (Department of Economics NBU)	15-16.03.2022
Adit Pariyar	5 <sup>th</sup> International Conference on Digital Culture & Politics (Dept of Visual Communication , SRM inst of Social Sciences, Kattankulathur, Tamil Nadu)	23.03.2022
Barnali Das	26 <sup>th</sup> Research Methodology Workshop & Training in Economics on use of stata on data analysis. (Department of Economics NBU)	15-16.03.2022
Fahad Alma	One-Day Webinar On Contemporary India's Demographic Dividend: Can India Reap this Benefit? (Organized by Department of Economics, Acharya Brojendra Nath Seal College, Cooch Behar, West Bengal)	18.06. 2021
Fahad Alam	Online Workshop on Quality Research and Publication Ethics (organized by Faculty of Social Sciences, AMU, Aligarh)	110.4.2021
Fahad Alam	Webinar on 'Socio-Economic Implications of Covid-19 for Marginalized Communities' , (Organised by Foundation for Economic Growth and Welfare)	27.10.2021
Fahad Alam	Webinar on "How to achieve Inclusive Growth", (organised by Foundation for Economic Growth and Welfare, Noida, U.P)	16.12.2021
Fahad Alam	Conference Expectations from the Union Budget 2022-23, (organized by Indian Economic Association and Radiant Group Of Institutions, Jabalpur(M.P))	26.01.2022
Fahad Alam	5-Days Online Workshop on Basic Econometrics :Tools and Techniques, (organized by Department of Economics, University Of Allahabad)	27-31.01.2022
Fahad Alam	Webinar on "Russia, Ukraine and Indian Economy" (organised by Foundation for Economic Growth and Welfare, Noida, U.P Noida, U.P )	16.03.2022
Amrita Chakraborty	41 <sup>st</sup> Annual Conference on Migration and Challenges Facing Urban Centres in the Globe due to COVID 19 (organised by Centre for Urban Economic Studies (CUES), Kolkata)	02.03.2022
Dhanjit Sarkar	35th National Conference on Agricultural Marketing, (Indian Society of Agriculture Marketing and Department of Economics, University of North Bengal)	14-16.12.2021
Dhanjit Sarkar	26 <sup>th</sup> Research Methodology Workshop & Training in Economics on use of STATA in Data Analysis.	15-16.03.2022

<b>Name</b>	<b>Details of Seminars / Conferences / Webinar</b>	<b>Date</b>
	(Department of Economics NBU)	
Phu Tshering Sherpa	35 <sup>th</sup> National Conference on Agricultural Marketing (Indian Society of Agriculture Marketing and Department of Economics, NBU)	14-16.12.2021
Gaurav Baraily	26 <sup>th</sup> Research Methodology Workshop and Training in Economics on use of STATA in Data Analysis (Department of Economics NBU)	15-16.03.2022
Pawan Kumar Prasad	35 <sup>th</sup> National Conference on Agricultural Marketing, (Indian Society of Agriculture Marketing and Department of Economics NBU)	14-16.12.2021
Pawan Kumar Prasad	26 <sup>th</sup> Research Methodology Workshop & training in Economics on use of Strata in Data Analysis(Department of Economics NBU)	15-16.03.2022
Kishan Agarwalla	26 <sup>th</sup> Research Methodology Workshop & Training in Economics on Use of Stata in Data Analysis (organized by Department of Economics, University of North Bengal)	15-16.03.2022
Jeet Saha	26 <sup>TH</sup> Research Methodology Workshop and Training in Economics on Use of STATA in Data Analysis. (Department of Economics NBU)	15-16.03.2022
Jeherul Islam	26 <sup>th</sup> Research Methodology Workshop & Training in Economics on use of stata on data analysis(Department of Economics NBU)	15-16.03.2022
Priyata Tamang	26 <sup>TH</sup> Research Methodology Workshop and Training in Economics on Use of STATA in Data Analysis (Department of Economics NBU)	15-16.03.2022
Swastika Lama	26 <sup>th</sup> Research Methodology Workshop and Training in Economics on use of STATA in Data Analysis (Department of Economics NBU)	15-16.03.2022
Trishala Rai	26 <sup>th</sup> Research methodology workshop and Training in Economics on use of STATA in Data Analysis	15-16.03.2022
Yogendra Mani Pradhan	26 <sup>th</sup> Research Methodology Workshop and Training in Economics on use of STATA in Data Analysis (Department of Economics NBU)	15-16.03.2022
Adarsh Rai	35 <sup>th</sup> National Conference on Agricultural Marketing, (Indian Society of Agriculture Marketing and Department of Economics NBU)	14-16.12.2021
Adarsh Rai	26 <sup>th</sup> Research Methodology Workshop & Training in Economics on use of STATA in Data Analysis. (Department of Economics NBU)	15-16.03.2022

**Publications:**

<b>Name of the Author(s)</b>	<b>Publication Details</b>
<b>Dutta K.</b>	Relationship between Commercial Banks Credit and Per capita net state domestic product of India: A Regional Panel data analysis, International Journal of Finance Research, e-ISSN: 2746-136X. Vol. 2, No. 2, June 2021, DOI. <a href="https://doi.org/10.47747/ijfr.v2i2.324">https://doi.org/10.47747/ijfr.v2i2.324</a>
<b>Dutta K</b>	Does Budget Deficit Cause Current Account Deficit in SAARC Countries? A Time-Series Econometric Investigation, Routledge India, 2021, <a href="https://doi.org/10.4324/9781003026495">https://doi.org/10.4324/9781003026495</a>
<b>Dutta K</b>	Optimum Size of Government Intervention, Emerging Economies and Their Challenges <i>Edited By Ramesh Chandra Das</i> , Chapter 10
<b>Dutta K and Firdous J.</b>	Measuring Student Satisfaction of Master Level Students; Evidence from University of North Bengal; <i>published in edited volume of Comparative Advantage in the Knowledge Economy: A National and Organizational Resource</i> , (Chapter 17). by <u>Rajib Bhattacharyya</u> , <i>Goenka College of Commerce and Business Administration, India</i> , Publisher: Emerald Publishing Limited, 2021, <i>Emerald Publishing Limited, UK</i>
<b>Dutta K</b>	Impact of Tariff war on World Economy Especially after WTO: A Time Series Econometric Enquiry, Chapter 6, edited volume of <i>Global Tariff War: Economic, Political and Social Implications</i> edited by Ramesh Chandra Das, 2021, <i>Emerald Publishing Limited, UK</i>
<b>Choudhury G. and Roy B.</b>	Crop Diversification and Changing Agriculture Marketing in Cooch Behar District of West Bengal, <i>Indian Journal of Agricultural Marketing</i> , 2022

**Research Projects Details:**

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Problems of Agricultural Marketing in Jalpaiguri District with Special Reference to Potato Crops	University of North Bengal	2021	One year	50000	Dr. Kanchan Datta
Examination of the Effectiveness of MGNREGA on	University of North Bengal	2021	One year	50000	Dr. Zafar Iqbal



<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Employment Generation before and after Covid-19 in Uttar Dinajpur District, West Bengal					

## DEPARTMENT OF EDUCATION

### About the Department:

The Department of Education is one of the newest Departments of University of North Bengal which was established in 2017. The purpose of the Department is to produce students having ability to develop leadership roles in developing effective educational environment. The students will also be able to apply current, credible learning theory and approaches to the assessment that indicates curriculum and programme. They will be able to process educational data and shape data driven process for educational improvement.

MA in Education (CBCS) course was introduced for the first time in the University of North Bengal from 2019-20 Session with 20 seat capacity. Ph.D. Course Work in Education has also been started from the year 2020.

The vision of the Department is to become one of the most important Education Departments of North-East India by producing good quality students and researchers who can contribute by their work to bring desirable changes in the society.

### Courses Offered:

- M. A.
- Ph. D.

### Research Focus:

- Philosophy of Education
- Psychology of Education
- Sociology of Education
- Inclusive Education
- Teacher Education

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Rupnar Dutta	M.Ed., Ph.D.	Asst. Professor	rupnardutta@nbu.ac.in
Paromita Das	M.Ed.	Asst. Professor	paromitadas@nbu.ac.in

### Details of Non-Teaching Staff:

Name	Qualification	Designation
Bishnupada Roy	Madhyamik Pass	Junior Assistant cum Typist
AnjanChaudhury	Class VIII Pass	Senior Peon

### Details of Research Scholars:

Name	Fellowship Name	Supervisor's Name	Gender
Md. Aminul Islam	SVMCM	Dr. Anisha Tamang	Male

Name	Fellowship Name	Supervisor's Name	Gender
Trina Mukhopadhyay	SVMCM	Dr. Rupnar Dutta	Female
Sumita Tudu	SVMCM	Dr. Ritwika Laskar	Female
Arjita Roy	SVMCM	Dr. Ritwika Laskar	Female
Chhabi Rabi Das	UGC-JRF	Dr. Ritwika Laskar	Female
Nafisa Sanam	MANF	Dr. Ritwika Laskar	Female
Sujata Barman	UGC-JRF	Dr. Gour sundar Ghosh	Female
Bholanath Majumder	SVMCM	Dr. Gour sundar Ghosh	Male

**Details of PhD Students (Without Fellowship):**

Name	Supervisor Name	Gender	Date of Registration
Sudeep Sarkar	Dr. Rupnar Dutta	Male	28-06-2021
Priscella Ghimiray	Dr. Rupnar Dutta	Female	01-01-2020
Kanad Dutta	Dr. Rupnar Dutta	Male	28-06-2021
Tenzin Doensal Bhutia	Dr. Anisha Tamang	Female	Yet to be Registered
Subhashis Kundu	Dr. Gour Sundar Ghosh	Male	Yet to be Registered

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar	Title of the Paper Presented
Rupnar Dutta	International Conference entitled "Education Outside the Classroom", organised by Department of Humanities & social Sciences in Collaboration with Teaching Learning Centre, Birla Institute of Technology, Goa held on 29.07.2022	Teacher and Teacher Effectiveness: A Comparative Analysis between Traditional and New Normal Educational Scenario.
	University Level Lecture entitled "Shikshak Parv" by Department of Microbiology, NBU held on 09.09.2022	Various themes related to role of teachers as envisaged in NEP 2020
	National Level Seminar entitle " Inclusive Growth Through Open and Distance Learning Strategy and Policy Perspectives for Higher Education held on 08-09.12.2022	Women Education and Empowerment through Open and Distance Learning
	One-Day Webinar entitled "Changing Trajectories of Indian Education Policies: National and Regional Perspectives held on 15.12.2022	Convenor
Paromita Das	National Level Seminar entitle " Inclusive Growth Through Open and Distance Learning Strategy and Policy Perspectives for Higher Education held on 08-09.12.2022	Attended
	One-Day Webinar entitled "Changing Trajectories of Indian Education Policies: National and	Co-Convenor

Name	Details of Seminars / Conferences / Webinar	Title of the Paper Presented
	Regional Perspectives held on 15.12.2022	

**Publications:**

Name of the Author(s)	Publication Details
Sen M. and <b>Dutta R.</b>	Mental Stress Coping in Pandemic Situation: Perspectives of Samkhya-Yoga Philosophy of Education, <i>COVID Narratives and Politics of the New Normal Issues, Challenges and Perspectives</i> , Authorspress, ISBN: 978-93-90891-55-9, 2021

**Placement Details:**

Name of the Student	Name of the Employer
Divya Tamang	Pratap International School

## DEPARTMENT OF ENGLISH

### About the Department:

The Department of English was one of the few Departments with which the University of North Bengal started functioning sixty years ago in 1962. Since then the Department of English has always been vibrated with teaching, research and extramural activities. In addition to the courses run in the Main Campus, the Department of English at the Jalpaiguri Campus has started journey since 2013 and presently offering MA in English.

Most of the teachers of the Department have international publications and visits to their credit. Some of them are engaged in collaborative work with universities abroad. Always innovative but earnestly student friendly, the staff of the Department have always been trying to keep the matter of teaching and research on a par with the current international standards.

A language lab, a well-stocked seminar library, a computer lab, and the audio-visual aids supplement the elan of the teachers to break new grounds. And the results of all these have always been satisfactory. The Department takes pride in regular output of brilliant students and researchers many of whom are well established academics home and abroad.

### Courses Offered:

- M. A.
- Ph. D.

### Research Focus:

- Literary and cultural theory
- Feminism and Gender Studies
- Comparative Aesthetics
- Indian Writing in English
- Postcolonial Theory
- American Literature

### Faculty Details:

Name	Qualification	Designation	Email
Ashis Sengupta	Ph. D.	Professor	ashmit2018@nbu.ac.in
Ranjan Ghosh	Ph. D.	Assoc. Professor	ranjanguosh@nbu.ac.in
Zinia Mitra	Ph. D.	Assoc. Professor	ziniamitra@nbu.ac.in
Bishnupada Ray	M. A.	Assoc. Professor	bishnuray@nbu.ac.in
Binayak Roy	Ph. D.	Asst. Professor	binayakroyeng@nbu.ac.in
Sumit Ray	M. A.	Asst. Professor	Sumitray77@nbu.ac.in
Kaushani Mondal	M.A.	Asst. Professor	kaushanimondal@nbu.ac.in
Nirmalya Biswas	M. Phil.	Asst. Professor	Nirmalya.biswas@nbu.ac.in
Kritika Chettri	M. Phil.	Asst. Professor	kritikachettri@nbu.ac.in
Pradipta Shyam Chowdhury	Ph. D.	Asst. Professor	pradiptashyamchowdhury@nbu.ac.in

**Non-Teaching Staff Details:**

Name	Designation
Ashim Kumar Roy	Group- C
Basudeb Sutradhar	Group-D

**Details of Research Scholars:**

Name	Fellowship Name	Supervisor's Name	Gender	Date of Regn.
Agnibha Maity	UGC-JRF	Dr Ranjan Ghosh	Male	01.01.2020
Abhirupa Roy	State Fellowship	Dr Ashis Sengupta	Female	09.12.2020
Firoja Parvin	SVMCM	Dr Zinia Mitra	Female	30.12.2021
Gargi Dutta	SVMCM	Dr P S Chowdhury	Female	06.01.2020
Jyotismita Sarkar	SVMCM	Dr R Ghosh	Female	26.04.2021
Nabanita Roy	UGC-JRF	Dr R Ghosh	Female	02.01.2020
Wasim Akram	UGC-JRF	Dr Zinia Mitra	Male	01.01.2020

**Details of PhD Students (Without Fellowship):**

Name	Supervisor Name	Gender	Date of Regn.
Anik Sarkar	Dr Ranjan Ghosh	Male	02.01.2019
Kaushani Mondal	Dr Ranjan Ghosh	Female	16.08.2022
Soumyadip Ghosh	Dr Zinia Mitra	Male	15.03.2019
Somasree Sarkar	Dr P S Chowdhury	Female	28.12.2015

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Seminar/Conference	Date	Organiser
Dr. Ashis Sengupta	Refresher Course "The Postcolonial and the Postdramatic: Contemporary Indian Theatre"	02-15.09.2021	Department of Bengali NBU
Dr. Ashis Sengupta	Refresher Course Postcolonial Thought and Indian Literature	07-21.01.2022	Department of Bengali NBU
Dr. Ashis Sengupta	Refresher Course "The Genealogy of Gender and the Performative Turn in Indian Theatre"	31.08.2021 to 13.09.2021	Department of Womens Studies NBU
Dr. P S Chowdhury	Comparative Literature: Frames, Methods, and Practice	04-06.03.2022	Shreemati Nathibai Damodar Thackersey Womens University and Calcutta Comparatist 1919
Dr. P S Chowdhury	Conceptualising Culture in India: Nation, Province, and	23-24.03.2022	Centre for Studies in Local Languages and Culture,

	Locality		NBU
Sri Sumit Ray	1921: A Three-Day National e-Conference. A Centenary Commemoration of a Fabulous Fourteen	28-30.09.2021	Devamatha College, Kerala

**Publications:**

<b>Name of the Author(s)</b>	<b>Publication Details</b>
<b>Ghosh R.</b>	The Plastic Turn, <i>Diacritics</i> , Vol. 49, Issue 1, 2021
<b>Ghosh R.</b>	Plastic Controversy, <i>Critical Enquiry</i> , In the Moment, 2021
<b>Ghosh R.</b>	Desiring Material: Plastic-Art and Affect-tability, <i>The Minnesota Review</i> , Issue 97, 2021
<b>Mitra Z.</b>	Scribbles on Theorizing the Personal in Feminism and Women's Research, <i>Research Journal of Women's Studies</i> , Vol. 10, 2021
<b>Roy B.</b>	The "Alien" Experience: Satyajit Ra's Posthumanism, <i>Journal of Asia-Pacific and Pop Culture</i> , Vol. 6, No.1, 2021
<b>Roy B.</b>	"An Era of Darkness": Ray's Anticolonial Project, <i>Revista Canaria de Estudio Ingleses</i> , Vol. 83, 2021
<b>Roy B.</b>	Subverting Reason, Thinking Futurity: Climate Change, Posthumanism and Bengali Science Fiction, <i>Contact Zone: Rivista dell'Associazione Italiana per lo Studio della fantascienza e del Fantastico</i> Vol 1, 2021
<b>Roy B.</b>	The Shadow Lines and the Dialogism of Adda, University of Turin, 2021
<b>Chowdhury P.S.</b>	A SYSTEMATIC REVIEW OF THE 'BROMANTIC' JOURNEY OF BOLLYWOOD, <i>Ensemble: A bi-lingual Peer-Reviewed Academic Journal</i> , 2021
<b>Chettri, K.</b>	Reformulating the Notion of 'Life' Within Life Narratives through a Reading of Tek Nath Riza's <i>Nirbasan</i> , <i>Journal of Comparative Literature and Aesthetics</i> , 2021
<b>Mondal K.</b>	A Historian under Siege: Rethinking Secular Historiography, <i>Religion in South Asian Anglophone Literature: Traversing Resistance, Margins and Extremism</i> , Routledge, 2021
<b>Mondal K.</b>	From Geography to Corpography: The Vegetarian and the Violence, <i>Postscriptum: An Interdisciplinary Journal of Literary Studies</i> , Vol. 7, No. 2, 2021

## DEPARTMENT OF HINDI

### About the Department:

The Department of Hindi, NBU was opened under the X<sup>th</sup> plan of U.G.C. in the year 2004. Since the University of North Bengal is geographically located in a multilingual zone, the Department therefore plays an important socio-cultural role as Hindi being bridge between various languages and cultures.

The Department of Hindi, NBU has a Seminar Library for the academic betterment of staff, research scholars and students. It has a wall magazine namely 'Chetna' which is a platform of literary expression of students. This wall magazine reflects the thought making efforts of students of the Department.

The Department of Hindi, NBU organizes monthly Departmental Seminars in which students of the Department are trained to orate in the guidance of teachers. Apart from these activities, the Department keeps watchful eyes on the all-round development of its students.

### Courses Offered:

- M. A.
- Ph. D.

### Research Focus:

- Criticism of Contemporary Poetry
- Criticism of Contemporary Fiction
- Translation

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Manisha Jha	Ph. D.	Professor	manishajha@nbu.ac.in
Dr. Sunil Kr. Dwivedi	Ph. D.	Professor	sunilkumardwivedi@nbu.ac.in
Dr. Manoj Biswakarma	Ph.D.	Asst. Professor	manojbiswakarma@nbu.ac.in
Dr. Bijay Kumar Prasad	M. Phil., Ph. D.	Asst. Professor (Contractual)	bijayhcu2010@gmail.com
Dr. Sachhidanand Kaushal	Ph. D.	Asst. Professor (Contractual)	kaushal.sachhida@gmail.com

### Details of Non-Teaching Staff:

Name	Qualification	Designation
Sri Samiran Chakraborty	B. Sc.	Office Assistant (Contractual)
Smt. Jasinta Oraon	VIII	Sr. Peon



**Details of Research Scholars:**

Name	Fellowship Name	Supervisor's Name	Gender	Date of Registration
Durgawati Prasad	University Fellowship	Dr. Manisha Jha	Female	08.08.2018
Manohar Kumar Kamti	UGC-JRF		Male	11.03.2021
Dhananjay Mallick	UGC-JRF(NFSC)	Dr. Manoj Biswakarma	Male	03.11.2021
Jereldina Muchwar	UGC-JRF		Female	01.02.2020
Nima Lama	UGC-JRF		Female	03.11.2021

**Details of Ph.D. Students (Without fellowship):**

Name	Supervisor Name	Gender	Date of Registration
Udhab Sharma	Dr. Sunil Kumar Dwivedi	Male	03.11.2021
Gobind Kumar Yadav		Male	01.01.2020
Ankush Kumar Mishra	Dr. Manoj Biswakarma	Male	11.03.2021
Arbind Kumar Sah	Dr. Manisha Jha	Male	01.01.2020
Brajesh Kumar Choudhary		Male	01.01.2020

**Details of Seminars/Conferences/Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar	Title of the Paper Presented
Prof. Manisha Jha	National Seminar, "Hindi Sahitya: Vivioh Sandhrbh" Organized by Bhupendra Narayan Mandal University, Bihar, held on 17-18.05.2022	Samkaleen Hindi Kavita
	National Workshop, "Non Hindi Speaking Neo Hindi Writer's" Organized by Central Hindi Directorate, New Delhi, held on 02-03.2022	Hindi Peotry
	National Webinar, Samkaleen Stree Kavita Ki Dishayen, Organized by Kaliyaganj College, held on 05.07.2021	Samkaleen Stree Kavita Ki Dishayen
Prof. Sunil Kumar Dwivedi	International Webinar, Organized by Hindi Dept. Mohanlal Sukhadia University, Udaipur, held on 02-03.07.2021	Ram Vishyak Aadhunik Kavya, (Vaishvik Paridnshya Mein Ram Sahitya)
	National Workshop(Online), Organized by Hindi Dept. Kavayitri Bahinabai Chaudhary Uttar Maharashtra University, Jalgaon and Moolji Jaitha College, Jalgaon, held on 06.11.2020	Hindi Ki Rashtriya Kavyadhara
	National Webinar, Organized by Ramniranjan Jhunjhunwala Mahavidyalaya, Mumbai, held on 31.07 2021	Vartman Samay Mein Premchand Ki Prasangikata
	International Webinar, Organized by Hindi Dept. Birsa Munda College, Darjeeling, held on 14.08. 2021	Vartman Pariprekshya Mein Tulsi Sahitya Ki Prasangikata

Name	Details of Seminars / Conferences / Webinar	Title of the Paper Presented
	International Webinar, Organized by Hindi Dept. Amdar Shashikant Shinde Mahavidyalaya, Satara & Shivaji Vishwavidyalaya, Kolhapur, held on 28.08 2021	Madhyayugin Sant Sahitya Ke Pariprekshya Mein Maharshttra Ka Varkari Sampradaya
	National Webinar Cum Cultural Programme, Organized by Hindi Dept. Shree Sant Savata Mali Gramin Mahavidyalaya, Aurangabad, Maharashtra, held on 18.09. 2021	Swadhinata Aandolan Aur Hindi Sahitya
	National Seminar, Organized by Hindi Dept. Lucknow University & U.P. Hindi Sansthan, Lucknow, held on 30-31.10. 2021	Swadhinata Sangram Aur Hindi Katha-Sahitya
	Special Lecture(Online), Organized by Hindi Dept. Smt. P.N.Doshi Mahila Mahavidyalaya, Mumbai, held on 17.12.2021	Kahani Ko Kaise Padhen
	Special Lecture(Online), Organized by Hindi Dept. Mohanlal Sukhadia University, Udaipur, held on 11.01.2022	Vartman Vaishvik Paridrishya Mein Hindi: Swaroop Aur Sambhavanayen
	National Webinar, Organized by Hindi Dept. Shree Sant Savata Mali Gramin Mahavidyalaya, Aurangabad, Maharashtra, held on 21.02. 2022	Katha Evam Kathetar Sahitya Mein Vyakta Rashtriya Chetana, (Swadhinata Aandolan Aur Hindi Sahitya)
	Participated in IP Awareness/Training Programme Under National Intellectual Property Awareness Mission by Intellectual Property office, Ministry of Comm. & Industry, Govt. of India, held at North Bengal University, Darjeeling, held on 20.04.2022	Attended
Dr. Manoj Biswakarma	National Workshop on the Revision of Nepali Style Manual, Organized by North-Eastern Regional Language Centre, Guwahati, held on 06-08.12.2021	Attended
	Participated in IP Awareness/Training Programme Under National Intellectual Property Awareness Mission by Intellectual Property office, Ministry of Comm. & Industry, Govt. of India, held at North Bengal University, Darjeeling, held on 20.04.2022	Attended

**Publications:**

<b>Author(s)</b>	<b>Publication Details</b>
Prof. Manisha Jha	Hindi Kavita Mein Streeyon Ki Nayee Aavaajen, <i>Parinde</i> , pp. 145-147
Prof. Sunil Kumar Dwivedi	Katha-Prayukti Ka Vaikalpik Sansar: Renu Ki Kahaniyan, <i>Samvet</i> , Issue 17, pp.110-132, 2021
	Samkaleen Hindi Kavita Mein Bachche, <i>Visva-Bharati Patrika</i> , Vol.80, Issue 2, pp.83-92, 2021
	Bolti-Batiyati Kavitaon Ka Jantantra, <i>Banas-Jan</i> , Issue 51, pp. 375-382, 2022
Dr. Manoj Biswakarma	Kavi Ko Hamesha Hi Lagta Hai Ki Kavita Mein Kahin Kuchh Chhoot Gaya Hai, <i>Banas-Jan</i> , Issue 51, pp. 408-415, 2022

## DEPARTMENT OF HISTORY

### About the Department:

The Department of History was established in the year 1964, just two years after the foundation of this University. The history of this Department is indeed decked with the contribution of many academicians, teachers, research scholars, students, non-teaching members, and others.

In 1965, with the initiative of Professor Pranab Kumar Bhattacharya, the then Head of the Department, a University level museum, primarily intended for collecting, preserving, and exhibiting objects of Indian art and antiquity, was founded and named after Akshaya Kumar Maitreya, the famous historian of the colonial period. It is one of the very few History Departments of our state which in its syllabus has well-delineated specializations pertaining to the ancient, medieval, modern and contemporary periods.

For more than five decades, this Department has produced able students, researchers, teachers, and a number of academicians who have received acclamation from every nook and corner of the country. Now the Department offers Post Graduate and Ph.D. courses, besides, giving NET/SET coaching, remedial classes. The Department also conducts Study Tour every year for the fourth semester Post Graduate students. It has also received various seminar and research grants from UGC, ICSSR, etc. time to time. Significantly, it publishes a peer-reviewed and UGC approved journal, known as Karatoya. The Department has organized a number of special lecture programmes by eminent historians and academicians. From the year 2019, the Department has also initiated a monthly Faculty Lecture Programme with a view of sharing the research orientations of the in-house faculty members.

### Courses Offered:

- M. A.
- Ph. D.

### Research Focus:

- Early Medieval Indian History
- Diaspora Studies
- Social and Cultural History of Bengal
- Ancient Indian History
- Regional history
- Tribal History

### Faculty Details:

Name	Qualification	Designation	Email
Prof. B K Sarkar	M.Phil, Ph.D.	Professor	bksarkar58@nbu.ac.in
Dr. Dahlia Bhattacharya	M.Phil, Ph.D.	Assoc. Professor	dahliahistory@nbu.ac.in
Dr. Sudash Lama	Ph.D.	Assoc. Professor	lamasudash@nbu.ac.in
Dr. Varun Kr. Roy	M.Phil, Ph.D.	Asst. Professor	varunkroy@nbu.ac.in
Dr. Amrita Mondal	M.Phil, Ph.D.	Asst. Professor	amrita1mondal@nbu.ac.in
Dr. Tahiti Sarkar	M.Phil, Ph.D.	Asst. Professor	tahitisarkar@nbu.ac.in
Dr. Dipsikha Acharya	Ph.D, PDF	Asst. Professor	dipsikhaacharya@nbu.ac.in

Name	Qualification	Designation	Email
Dr. Verma Priyadarshini	M.Phil, Ph.D.	Asst. Professor	vermapriyadarshini@nbu.ac.in

#### Details of Non-Teaching Staff:

Name	Qualification	Designation
Sharmistha Das	B. Com, Diploma in Museum Studies	Senior Assistant
Somnath De	M.P	Casual Gr. D

#### Details of Research Scholars

Name	Fellowship	Supervisor's Name	Gender
Santosh Kumar Sahani,	UGC, JRF	Dr Amrita Mondal	Male
Anamika Subba,	SVMCM	Dr Amrita Mondal	Female
Mandira Banarjee,	SVMCM	Dr Amrita Mondal	Female
MD Alam	SVMCM	Dr Amrita Mondal	Male
John Biswas	UGC-NFSC	Dr. Dahlia Bhattacharya	Male
Madhusudan Paul	State Fellowship	Dr. Dahlia Bhattacharya	Male
Tushar kanti Barman	SVMCM	Dr. Dahlia Bhattacharya	Male
Sweety Paul	UGC NET-JRF	Dr. Dahlia Bhattacharya	Female
Nimai Mandal	SVMC	Dr. Dahlia Bhattacharya	Male
Kaushik Das	SVMC	Dr. Dahlia Bhattacharya	Male
Mampi Barman	SVMC	Dr. Dahlia Bhattacharya	Female
Srija Rakshit	SVMC	Dr. Dahlia Bhattacharya	Female
Farida Khatun	SVMC	Dr. Dahlia Bhattacharya	Female
Gour Kishore Dey	SVMC	Dr. Dahlia Bhattacharya	Female
Rejina Parvin	SVMC	Dr. Dahlia Bhattacharya	Female
Pubali Ghosh	SVMCM	Dr. Dipsikha Acharya	Female
Sriya Sarkar	SVMCM	Dr. Dipsikha Acharya	Female
Abhijit Mahanta	SVMCM	Dr. Dipsikha Acharya	Male
Antarleena Bhattacharjee	State Fellowship	Dr. Sudash Lama	Female
Sulakshana Lama	SVMCM	Dr. Tahiti Sarkar	Female
Chandan Singha	UGC-JRF	Dr. Varun Kr Roy	Male
Vivekananda Roy	SVMCM	Dr. Varun Kr Roy	Male
Mithu Roy	SVMCM	Dr. Varun Kr Roy	Male
Prakash Sarkar	SCVMCM	Dr. Varun Kr Roy	Male
Salini Agarwal	SCVMCM	Dr. Varun Kr Roy	Female
Samarpita Ganguly	SCVMCM	Dr. Verma Priyadarshini	Female
Abhijit Das	SCVMCM	Dr. Verma Priyadarshini	Male
Rakesh Das	SCVMCM	Dr. Verma Priyadarshini	Male
Sanchayeeta Goldar	SCVMCM	Dr. Verma Priyadarshini	Female

### Details of Research Scholars (without fellowship)

Name	Supervisor's name	Gender
Topgyal Zimba	Dr Amrita Mondal	Male
Manoranjan Sarkar	Dr. Dahlia Bhattacharya	Male
Arun Krishna Ghosh	Dr. Dahlia Bhattacharya	Male
Rajat Tamang	Dr. Dahlia Bhattacharya	Male
Arka Acharjee	Dr. Sudash Lama	Male
Anand Sherpa	Dr. Sudash Lama	Male
Anant Sinha	Dr. Sudash Lama	Male
Tapash Biswas	Dr. Sudash Lama	Male
Mamun Sarkar	Dr. Dipsikha Acharya	Male
Tapas Debnath	Dr. Tahiti Sarkar	Male
Sumita Roy Choudhury	Dr. Tahiti Sarkar	Female

### Seminar/Conferences/Webinar Attended:

Name	Details of Seminars / Conferences
Dr Amrita Mondal	Food, Memory, Machines Workshop organized by the Indian Network for Memory Studies (INMS) in association with Centre for Memory Studies and Office of Global Engagement, IIT Madras, Online, 17-20 August 2021
Dr Amrita Mondal	Two Day International Webinar on Conceptualizing Culture in India: Nation, Province and Locality, organized by Centre for Studies in Local Languages and Cultures, University of North Bengal, March 23-24, 2022, online
Dr. Dipsikha Acharya	Participated in UGC-sponsored Refresher Course in History held organized by the UGC-HRDC, University of Calcutta and obtained Grade A+, 10 <sup>th</sup> to 25 <sup>th</sup> March 2022
Dr. Dipsikha Acharya	Participated and successfully completed Short Term Course on <i>Nature and Society of Indian Himalayan Region</i> conducted by the UGC-HRDC of University of North Bengal, 23 <sup>rd</sup> to 29 <sup>th</sup> November 2021
Dr. Tahiti Sarkar	<i>UTKARSHA</i> : State Level Counselling Programme for UG & PG students, 15.12.2021
Dr. Verma Priyadarshini	Participated and Successfully completed Short Term Course on <i>Nature and Society of Indian Himalayan Region</i> , UGC-HRDC of University of North Bengal held on 23 <sup>rd</sup> November 2021-29 <sup>th</sup> , November 2021
Dr. Verma Priyadarshini	Participated and successfully completed in UGC Sponsored Refresher Course in History, 10 <sup>th</sup> -25 <sup>th</sup> March 2022, UGC-HRDC, University of Calcutta

**Publications:**

<b>Author(s)</b>	<b>Details of the Publication</b>
Dr. Sudash Lama & Prasenjit Roy	Akshay Kumar Maitreya and His Scholastic World, <i>Journals of People's History and Culture</i> , Vol 6, Number 2, pp. 54-62, 2020 (UGC-Care)
Sudash Lama	Alternative Education System and Tribal's Responses: Studying the Impact of COVID-19 on Education of Tribal Students of West Bengal, <i>Decoding COVID-19 and the Issues Associated</i> , ed. Gour Chandra Ghosh, Granthamitra, pp. 265-282, 2022, ISBN. 938410490-6.
Sudash Lama & Anand Sherpa	Ethnic and Cultural Identity in Music: Study of the Ethno music of Some of the Ethnic people of Darjeeling, <i>Darjeeling: In Search of People's History of the Hills</i> , ed. By Dinesh Chandra Ray & Srikanta Roy Chowdhury, Manohar, pp. 329-346, 2022, ISBN. 978-93-94262-01-1.
Sudash Lama & et.al (Book)	<i>History and Thought of India: Essays in Memory of Prof. P.K. Bhattacharya</i> , Abhijit Publication, 2022, ISBN. 978-93-92816-13-0.
Sudash Lama & Dr. John B. Tirkey	Academic Performance of the Scheduled Tribe Students in West Bengal, <i>Social Inclusion and Education in India, Scheduled Tribes, Denotified Tribes and Nomadic Tribes</i> , Routledge, Taylor & Francis Group, London and New York, South Asia Edition, 9780367749477, pp 85-99, 2020, ISBN. 9780367749477.
Sudash Lama	History of Some Early Buddhist Monasteries of Darjeeling Hills, <i>History and Thought of India: Essays in Memory of Prof. P.K. Bhattacharya</i> , pp. 352-364, Abhijit Publication, 2022, ISBN. 978-93-92816-13-0.
Dahlia Bhattacharya	European Leisure and Recreation : A Glimpse of Cultural Hegemony in the Hill Town of Darjeeling (1835-1947), Book: <i>History and Thought of India Essays in Memory of Prof. P.K. Bhattacharya</i> edited by Anita Bagchi, Shymal Guharoy, Nurul Islam, Sudash Lama, Abhijeet Publications, ISBN 9789392816130
Dahlia Bhattacharya	A Discourse on Colonial, Discipline and Punishment: Prisons in Colonial Darjeeling (1835-1947), Book: <i>Darjeeling In search of People's History of the Hills</i> edited by Dinesh Chandra Ray and Srikanta Roy Chowdhury, Manohar Publishers & Distributors, 9789394262010
Dahlia Bhattacharya	Photography in Colonial Darjeeling: Identifying the Colonial Gaze(1835-1947), Book: <i>Tangible and Intangible Cultural Heritage of Sub - Himalaya an Region: Historical Changes and Possibilities.</i> , Abhijeet Publication, 9788192579979
Dr. Tahiti Sarkar	Transforming Land and Landscape in Colonial Darjeeling : Readings in History in <i>Darjeeling: In Search of People's History of the Hills</i> , Published by Routledge, Taylor & Francis Group, ISBN: 978-10-32424-45-3, 2022
Dr. Tahiti Sarkar	Collaboration Of Indian Princes And Colonial Hunters: An Experience With The Memoir Of Hunting Of An Indian Maharaja Of The Princely State Of Cooch Behar in <i>Tangible and Intangible Cultural Heritage of</i>

<b>Author(s)</b>	<b>Details of the Publication</b>
	<i>Sub Himalayan Region: Historical Changes and Possibilities</i> , Published by Akshaya Kumar Maitreya Heritage Museum, University of North Bengal, ISBN: 978-81-92579-97-9, 2022
Dr. Tahiti Sarkar	Colonial Encounters in Indian Forests: Revisiting Forest Conservation under the British Rule in <i>Social Science Language &amp; Literature</i> published by K .Y Publications, Guntur, Andhra Pradesh, ISBN: 978-93-87844-40-7, 2021
Dr. Tahiti Sarkar	Revisiting the History of Colonial Tea Plantations in Darjeeling Hills in <i>Plantation Workers: Issues &amp; Challenges</i> , Published by Mittal Publications New Delhi, ISBN: 978-9390692217, 2021
Dr. Varun Kr Roy	The Masan Art: An Intangible Cultural Heritage of North Bengal, Published in Tangible And Intangible Cultural Heritage of Sub-Himalayan Region: Historical Changes and Possibilities, NBU Press, 2022, ISBN-978-81-925799-7-9
Dr. Varun Kr Roy	The Physical and Economic Space in Early Colonial Bengal, N.L. Publishers, 2022, ISBN 978-93-85375-02-6
Dr. Varun Kr Roy	Urbanism, Social Body and Babu Culture in Early Colonial Bengal, N. L. Publishers, 2022, ISBN 978-93-85375-12-5

#### **Research Projects Details:**

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
A Study of Ethno-Music as Marker of Identity formation among the tribes of North Bengal	NBU	2022	1 year	1 Lakh	Sudash Lama



## DEPARTMENT OF LAW

### About the Department:

The journey of the Department of Law began in 1974 as University Law College and was housed in the building of Art. In the year 2000 it was upgraded to the status of a Department of North Bengal University. The Department is now located in the South Campus of the North Bengal University and has an independent building of its own with a sprawling and exclusive campus.

The Department aims at education that brings forth academic excellence, provides opportunities to nurture all round development of the young personality, stimulate and develop creative thoughts in them, so that they may become worthy citizens of India caring for others, ensuring justice to the tortured and having a sense of duty and responsibility to the society. It introduces students to a wider world of experience and a larger sphere of activities, cooperation with their fellowmen and inculcates habits of order, sense of responsibility and accuracy.

The year 2010 has been a landmark in the history of the Department of law as the publication of law journal entitled, 'Indian Journal of Law and Justice' (ISSN: 0976-3570) began in March, 2010. More than twenty issues of the UGC – CARE listed journal have been published since. In addition to the journal, edited books in the form of Conference and Seminar proceedings have been published since 2010.

### Courses Offered:

- LL. B.
- LL. M.
- Ph. D.

### Research Focus:

- Climate Change, Environment, Natural Disasters, Urbanisation and Sustainable Development
- Child Rights and Child Protection
- Human Rights of Vulnerable Groups and Humanitarian Laws and Socio-Legal Impact
- Food Security and Sustainability

### Faculty Details:

Name	Qualification	Designation	Email
Prof. Gangotri Chakraborty	PhD	Professor	gangotrichakraborty@gmail.com
Prof. Rathin Bandyopadhyay	PhD	Professor	rathinbanerjee@gmail.com
Dr. Sujit Kumar Biswas	PhD	Assoc. Professor	sujitkbiswas@yahoo.com
Ms. Purna Lepcha	LLM	Asst. Professor	prnalepcha18@nbu.ac.in

Name	Qualification	Designation	Email
Ms. Neelam Lama	LLM	Asst. Professor	neelamlama@nujs.edu
Dr. Sangeeta Mandal	PhD	Asst. Professor	sangeetanbu@gmail.com
Dr. Sanyukta Moitra	PhD	Asst. Professor	sanyuktamoitra@gmail.com
Dr. Soma Dey Sarkar	PhD	Asst. Professor	somadsarkar45@gmail.com
Dr. Chandrani Chatterjee	PhD	Asst. Professor	chandranidc@gmail.com
Dr. Dipankar Debnath	PhD	Asst. Professor	ddnslg@rediffmail.com
Dr. Sanjay Dutta	PhD	Asst. Professor	sanjaydutta.slg@gmail.com
Ms. Taniya Basu Majumdar	MA	Asst. Professor	taniyabasu2014@gmail.com
Mr. Shubhajeet Shome	MA	Asst. Professor	shubhajeet.777@gmail.com
Mr. Shubhajit Bhattacharjee	LLM	Asst. Professor	subhajitrupam94@gmail.com
Ms. Suparna Bandyopadhyay	LLM	Teaching Asst.	suparnabandyopadhyay21@gmail.com
Ms. Ashima Rai	LLM	Research Asst.	ashimairai1993@gmail.com
Ms. Sukanya Kar	MA	Guest Faculty	sukanyakar@outlook.com
Mr. Bijoy Saha	LLB	Guest Faculty	bs62943@gmail.com
Mr. Rahul Mishra	LLB	Guest Faculty	rahul.lawyer@gmail.com
Mr. Deepak Sharma	LLB	Guest Faculty	deepaksharma_advocate@rediffmail.com

#### Details of Non-Teaching Staff:

Name	Qualification	Designation
Mr. Arunava Choudhury	B.Com	Sr. Superintendent
Mr. Samir Kr. Roy	M. Sc., PGDIT	Technical Assistant Gr-III
Mr. Santanu Chanda	M.Sc. MLIS	Assistant Librarian(Sr. Scale)
Mr. Babla Nag	M.A.	Sr. Assistant
Mr. Bhaskar Pal	B.Com	Casual Gr-III Employee
Mr. Dilip Mondol	Madhyamik	Gr-D Casual Employee
Mr. Bechan Mallick	Class IX Pass	Gr-D Casual Employee
Ms. Mithu Dhar	Class IX Pass	Man-days Group –IV Employee

#### Details of PhD Students (Without Fellowship):

Name	Supervisor Name	Gender	Date of Registration
Pranay Rai	Prof. Rathin Bandyopadhyay	M	30.11.2012
Veerendra Mohan		M	07.01.2016

Name	Supervisor Name	Gender	Date of Registration
Joyjit Chowdhury		M	27.01.2020
Upala Basu		F	01.01.2020
Vijoy Kumar Sinha		M	11/03/2021
Souradipta Bandyopadhyay		M	11/03/2021
Shruti Kejriwal	Prof.Gangotri Chakraborty	F	13/02/2020
Hillol Poddar		M	14.02.2020
Prerna Lepcha		F	03.02.2020
Sagnika Das		F	01.01.2020
Suparna Bandyopadhyay		F	01.01.2020
Sahansheela Sharma		F	11/03/2021
Ashima Rai	Dr. Sujit Kumar Biswas	F	01.01.2020
Champa Mondal		F	01.01.2020

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar
Prof. Gangotri Chakraborty	Resource Person in UGC-HRDC Programme Organized by Guwahati University in Interdisciplinary Refresher Course on “Human Rights, Social Justice & Judicial Activism” Under RUSA, held on 17 – 19.02.2022
	Resource Person in the One Day Teacher’s Training Workshop through online mode on 20.12.2021, organized by the Department of Law, Coochbehar Panchanan Barma University
	Workshop on Empirical Research in Law and Interdisciplinary Studies: Methods & Application organized by the West Bengal National University of Juridical Sciences, Kolkata, held on 17 – 23.09.2021
	Resource Person for a lecture on Family Law at KIIT School of Law, KIIT University, Bhubaneswar, held on 18 – 27 .09.2021
	Special lecture on training on skill development and changing financial management system for non-teachers of universities and colleges organized by HRDC, NBU, held on 27.08.2021
	Delivered Keynote Address in the regional workshop on “internationalisation of curriculum: why and what for”, at Adamas University, Kolkata under the ongoing project of tuning india- RISHI (European and Indian Universities Collaborative Programme), Sponsored by European Union (EU) through Erasmus Plus Programme ( <i>Regional</i> , held on 24 <sup>th</sup> December, 2021
Prof. Rathin Bandyopadhyay	Delivered Lecture on “Build Back from Covid-19: Why We Need to Focus on Five UN SDGS?” in the 3 day orientation at Nelson Mandela International Summer School on Law, Policy and Sustainable Development 2021, at Centre Des Droits De l’homme (Centre For Human Rights), Universite’ Kongo, Democratic Republic of Congo, Africa In Collaboration with AYDF ( <i>International</i> ) , held on 18-20 June, 2021
	Delivered Invited Lecture In The Workshop On NAAC Accreditation, Organised By WB National University Of Juridical Sciences, Kolkata, held

Name	Details of Seminars / Conferences / Webinar
	on 07.06.2021
Dr. Sujit Kumar Biswas	“Crime Against Women” At The National Webinar Organised By The Department Of Social Work And Internal Quality Assurance Cell (IQAC), Sonamukhi College, Bankura, West Bengal In Collaboration With Anti-Corruption Branch, Government Of West Bengal, held on 19 <sup>th</sup> July 2021
Ms. Prerna Lepcha	“National Conference On Emerging Trends On Law And Development” Organised By The Legal Aid Committee, NMIMS Hyderabad, held on 27 <sup>th</sup> March, 2022
	National Seminar On “Ancient Indian Jurisprudence And Its Relevance In Contemporary Society” & The INCEPTION CEREMONY Of Justice (Late) A.M. Bhattacharjee Memorial Lecture Series Organised By The Sikkim Government Law College, held on 29 <sup>th</sup> - 30 <sup>th</sup> April 2022
Dr. Sangeeta Mandal Biswas	“Crime Against Women” At The National Webinar Organised By The Department Of Social Work And Internal Quality Assurance Cell (IQAC), Sonamukhi College, Bankura, West Bengal In Collaboration With Anti-Corruption Branch, Government Of West Bengal, held on 19 <sup>th</sup> July 2021
Dr. Sanyukta Moitra	Virtual regional workshop on internationalisation of curriculum, held at Erasmus and Adamus University, 24 <sup>th</sup> December, 2021
	AICTE Training and Learning (ATAL) Academy Online Elementary FDP on ‘ Faculty Development Programme in Management’ at Department of Management, University of North Bengal, held on 6 <sup>th</sup> - 10 <sup>th</sup> December, 2021
Dr. Soma Dey Sarkar	“Dimensions of Access to Justice in the Contemporary World”, held at Department of Law, Bankura University in Association with Aequitas Victoria Research Centre, Bihar, on 23 <sup>rd</sup> - 24 <sup>th</sup> July, 2022
	Virtual regional workshop on internationalisation of curriculum, held at Erasmus and Adamus University, held on 24 <sup>th</sup> December, 2022
Dr. Chandrani Chatterjee	Virtual regional workshop on internationalisation of curriculum, held at Erasmus and Adamus University, held on 24 <sup>th</sup> December, 2022
	State Level Webinar on Environmental Sustainability & Conservation: Issues and Challenges, Organized by Department of Environmental Science in Collaboration with the Internal Quality Assurance Cell, S. R. Fatepuria College, held on 19 <sup>th</sup> January, 2022
	International Symposium On “ International Commercial Arbitration In Digital World- Challenges And Opportunities”, Organized By Shankarrao Chavan Law College, Pune, held on 27 <sup>th</sup> January 2022
	National Webinar On “ Environment Conservation For A Balanced Ecosystem” Organized By IPEM Law Academy, Ghaziabad, held on 22 <sup>nd</sup> February, 2022
	“National Webinar on Law & Economics” Held By Legal Entrepreneurship & Incubation Cell, USLLS, Organised By University School Of Law & Legal Studies, Guru Gobind Singh Indraprastha University, held on 6 <sup>th</sup> March, 2022
Dr. Dipankar Debnath	International Seminar on Relevance of United Nations in the Context of Talibanisation of Afghanistan and Ensuing Humanitarian & Economic Crisis, Amity Law School, AUMP, Gwalior, held on February 25, 2022
	National Seminar on Identification of Abusive Relationships and Prevention of Domestic Violence, Symbiosis Law School, Nagpur, held on

Name	Details of Seminars / Conferences / Webinar
	<p>March 08, 2022</p> <p>Virtual 10<sup>th</sup> International Annual Research Conference on Rule of Law in Context: Climate Change And Sustainable Development -Indian and Global Perspectives (SYMROLIC 2022)., Symbiosis Law School, Pune, held on</p>
Dr. Sanjay Dutta	<p>35<sup>th</sup> National Conference on Agricultural Marketing, Indian Society of Agricultural Marketing (ISAM) And Department of Economics, University of North Bengal, held on 25<sup>th</sup> - 26<sup>th</sup>, March, 2022</p> <p>AICTE Training and Learning (ATAL) Academy Online Elementary FDP on ‘ Faculty Development Programme in Management’ at Department of Management, NBU, held on 06 – 10.12.2021</p>
Mrs. Taniya Basu Majumder	<p>7 Days’online Workshop on “Methodological significance of social science theories” organized jointly by the Department of Sociology, North Bengal University, held on 07 – 13.06.2022</p> <p>International Webinar on Trends in Care and Support for the Elderly – IWTCS jointly organised by Department of Sociology, Manomaniam Sundarnar University, Tirunelveli, held on 18<sup>th</sup> - 19<sup>th</sup> March 2022</p> <p>Two Day National Seminar on Contemporary Discourse on Development and the State Pof The Marginalised: Indian Experiences organised by the Centre for Development Studies, Department of Political Science North Bengal University, held on 25<sup>th</sup> and 26<sup>th</sup> March 2022</p>
Shubhajeet Shome	<p>International Webinar on “Perspective of Social Justice in India” by Department of Political Science, Banwarilal Bhalotia College, Asansol, held on 22<sup>nd</sup> February 2022</p> <p>National Seminar on Contemporary Discourses on “Development and the State of the Marginalised: Indian Experiences organised” by the Centre For Development Studies, Department of Political Science, University of North Bengal, held on 25<sup>th</sup> – 26<sup>th</sup> March, 2022</p>
Subhajit Bhattacharjee	<p>Online Orientation and Training Workshop: Organized by the SCC Online and the Eastern Book Company. Ltd, held on 3<sup>rd</sup> June 2021</p> <p>A Webinar on “Internationalisation of Curriculum: why &amp; what for, Organised by Adamas University, Kolkata, held on 24<sup>th</sup> December 2021</p> <p>Online Orientation and Training Workshop: Organized by the SCC Online and the Eastern Book Company. Ltd, held on 3<sup>rd</sup> June 2021</p>
Suparna Bandyopadhyay	<p>International Annual Summer School on Understanding Competition Law: Perspectives From Asian Countries – by CUSAT, held on July 26<sup>th</sup> – August 1<sup>st</sup>, 2021</p>
Ashima Rai	<p>National webinar entitled “Implementation of human rights in 21<sup>st</sup> century, with special reference to Covid-19 pandemic”, organised by Surendra Law College, Kolkata, held on 31<sup>st</sup> July – 1<sup>st</sup> August, 2021</p>
Sukanya Kar	<p>Young Researchers’ Conference on Indian Literatures, Organized By Department of Languages, Presidency University In Collaboration With Central Institute of Indian Languages, Mysuru and Sahitya Akademi, New Delhi, held on 22/01/2022</p> <p>International Seminar on Folklore 2022, Organized by Department of Folklore, Jatiya Kabi Kazi Nazrul Islam University and Department of Folklore, Rajshahi University, held on 03/03/2022</p>

**Details of Seminar/Conferences /Webinar Attended by Student:**

Name	Details of Seminars/Conferences / Webinar
Meghna Chhetri	National Webinar on “Carceral Feminism” organized by the School of Legal Studies, Babu Benarasi Das University, Lucknow on 08.03.2022
Prawesh Bhutia	National Webinar on “Carceral Feminism” organized by the School of Legal Studies, Babu Benarasi Das University, Lucknow on 08.03.2022

**Publications:**

Author(s)	Publication Details
Prof. Gangotri Chakraborty	"Body Shaming": Soft Offence, Softer Target, and Softest Law, Vol. 1 No. 2 (2021): April – June, GLS KALP Journal of Multidisciplinary study ISSN NO. 2583 2492.
Prof. Rathin Bandyopadhyay	Combating Climate Change and Global Warming: Issues, Challenges and Legal Initiatives; (jointly Written) (Chapter 21, pp. 253-260) in Edited volume on Natural Resources and Their Ecosystem Services, Vol. 2 , by Dr.Abhijit Mitra, M. Calma, Dr.S.P.Chakraborty, Dr.Sufia Zaman, Dr. Prasenjit Pramanik (ed.), HSRA Publication, Bangalore, India ( 2021) (ISBN: 978-93-5506-064-8)
	Administration of Civil Justice and It’s Glorious Uncertainty in Indian Legal System: A Long, Expensive Journey to Justice (pp.93-111) in Handbook of Research on Civil Justice by Dr. Elijah Tukwariba- Yin, Prof. Nelson F. Kofie, Dr. Peter A. Atupare (ed.), IGI Global Publication, Pennsylvania, USA , ISBN: 9781799878988(hardcover), DOI:10-4018978-1-7998-7898-8-Ch006 (2021)
Dr. Sujit Kumar Biswas	Rights of Hawkers: A study under the Indian Legal Framework [Indian Journal of Law and Justice, Vol 12 No. 1, Page 109-131, March 2021] published by The Registrar, University of North Bengal
	Joint Forest Management and Community Participation: A study in Indian Perspective [Indian Journal of Law and Justice, Vol 12 No. 2, Page 33 to 51, September 2021] published by The Registrar, University of North Bengal
	The Sabarimala Debate: An analysis of Indian Young Lawyers Association v. State of Kerala [Indian Journal of Law and Justice, Vol 13 No. 1, Page 121 to 137, March 2022] published by The Registrar, University of North Bengal
Dr. Soma Deysarkar	The Concept Of Citizenship In India: A Constitutional Evolution, Citizenship In India And Refugee Problem, Ed. By, Prof.(Dr.) C.B.Bhange Ajay Kumar, Arbind Kumar, 1 – 7 pp, Bharti Publications, 2021
	Building High Performance Boards In India: Prerequisites And Challenges, Corporate Governance: Emerging Dimensions, Ed. Dr. Ashish Srivastav and Dr. Vikesh Ram Tripathi, 62 – 73 pp, Thomson Reuters Legal, India, 2021
	Administration Of Civil Justice And Its Glorious Uncertainty In The

<b>Author(s)</b>	<b>Publication Details</b>
	Indian Legal System: A Long, Expensive Journey To Justice, Advancing Civil Justice Reform And Conflict Resolution In Africa And Asia: Comparative Analyses And Case Studies Ed. Elijah Tukwariba Yin University Of Cape Coast, Ghana and Nelson F. Kofie Northern Virginia Community College, USA, 93 – 111 pp, IGI Global, USA, 2021
	Legal Education in Siliguri and Surrounding Areas: A Legacy to Carry Forward, Purobarta: Noboparyay, Swadheenata Diwas Sankhya, 2021, Ed. Dr. Pronob Kr. Bhattacharya, Et. Al, Siliguri Municipal Corporation, 225-227 pp, 2021
Dr. Chandrani Chatterjee	“Modernisation and Development: Contemporary Social Legal Changes in India”, “Law & Social Transformation”, ed. Dr. Sangeeta Roy Moitra, pp 371-384 1 <sup>st</sup> Publication 2021, Satyam Law International. ISBN- 978-93-91345-86-0
	“India and Climate Change Policies: It’s Implication on Natural Resources and Development”, under Publication
Dr. Dipankar Debnath	Labour Rights under the Indian Labour Legislations: A Bird’s Eye view on the Protection of Rights of Labourers under the Recently Introduced Labour Code of India, published in Indian Journal of Law and Justice, ISSN NO- 0976-3570, Vol 12 No 2 March 2021
Shubhajeet Shome	Caste and the Census: An Analysis With Regard to the Enumeration of Backward Classes in the Census in India, Reflectivity, pp.102-115, Toucan Research & Development, 2022
	Book Review of Rohit De’s “A People’s Constitution” published in Indian Journal of Law and Justice, ISSN No- 0976-3570, Vol 12 No 1 March 2022
	A Study on the Application of Code of Criminal Procedure 1973, by Prosecutors in Siliguri Court, published in Indian Journal of Law and Justice
Suparna Bandyopadhyay	Domestic Violence and Violation of Child’s Right In India, GLS KALP, Journal of Multidisciplinary studies. Vol. 1 Issue No. 4 , Pp. 1-12 (October – December , 2021)
	The power of Precedent, by Michael J. Gerhardt. New York: Oxford University Press, 2008 Book Review, IJLJ, Vol. 12 No. 2, p. 301-311, (Sept. 2021)
	Live and Let Live: Animal Rights Jurisprudence in the Light of Karnail Singh v. State of Haryana, NLUA Law & Policy, Review Vol. V, page no. 273-300(2020) ISSN: 2455-8672
	A Legal Study of the doctrine of Stare decisis and overruling by the Supreme Court of India in the Evolution of Third Gender Rights, 8 <sup>th</sup> International Zeugma Conference on Scientific Research, Full Text Books, PP.835-840, (2022) ISBN: 978-625-8323-86-3
Dr. Sujit Kumar Biswas and Ashima Rai	Forest Management and Community Participation: A Study in Indian Perspective, Indian Journal of Law and Justice, Vol. 12 No. 02, pp 33 – 51, September 2021
Ashima Rai	Environmental Law in India (2 <sup>nd</sup> ed.2005) by P Leelakrishnan, Lexis Nexis Butterworths Pvt. Ltd, New Delhi, Pg 340
Sukanya Kar	Unearthing Voices: A Study of the Miscellaneous Social Customs and marriage Practices of the Rajbanshis of North Bengal. Lokaratna, Vol.

<b>Author(s)</b>	<b>Publication Details</b>
	XV (1), December 2022. ISSN No. 2347-6427. Folklore Foundation, India. Pp. 86-97

#### Research Projects Details: Minor Project

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
A Study of the Impact of New Education Policy on the Schools in District Darjeeling	NBU	2021	one year	1 Lac	Prof. Rathin Bandyopadhyay
A Study of the Influence of Buddhist Philosophy on Secular Laws and Legal Awareness of Monks	NBU	2021	one year	1 Lac	Dr. Sujit Kumar Biswas
A study of the Impact of New Education Policy on the Schools in District Darjeeling	NBU	2021	one year	1 Lac	Dr. Sujit Kumar Biswas

#### Placement/Higher Study Details:

<b>Name of the Student</b>	<b>Details</b>
Hirak Ray	Pursuing LL.M from NBU
Liza Das	Pursuing LL.M from NBU
Kingshuk Roy	Practicing Advocate
Jay Sharma	Practicing Advocate
Bodhisatya Dey	Practicing at Siliguri Court
Adv. Abdul Guffar Khan	Adv. Asish Sarkar ( Uttar Dinagpur Dist Court At Raiganj )
Afsana Begum	Adv. Sanauwer Alam ( Islampur Court)
Aparna Saha	Adv. Imtiyaj Hossian ( Malda Dist. Court)
Sujata Das	Practicing at Siliguri Court
Joydeep Das	Advocate
Neha Owsal	Pursuing LL.M from NBU
Saptarshi Sutradhar	Pursuing LL.M From NUJS, Kolkata
Shreya Chakraborty	Pursuing LL.M From Jalpaiguri Law College
Namrata Ghosh	Advocate
Muskan Bansal	Articleasst. , Aman Agarwal & S. Associate
Subham Chanda	Advocate of SJDA at Calcutta High Court (Circuit Bench)
Abir Chowdhury	Shyam Krishna Agarwal and Company (Advocate)
Purnima Darjee	Advocate
Sanjeevani Sundas	Advocate, Taking Coaching For Judiciary
Osmita Mukherjee	Practicing at Siliguri Court



<b>Name of the Student</b>	<b>Details</b>
Dulal Das	Practicing at Siliguri Court
Ankita Majumdar	Pursuing LL.M from Panchanan Barma University
Vaishnabi Sharma	Pursuing LL.M from Christ University, Bangalore
Habib Kabir	Practicing at Siliguri Court
Ananyashree Chatterjee	Pursuing LL.M from Christ University, Bangalore
Deepjyoti Sarkar	Practicing at Alipurduar Court
Shreyashi Das	Practicing at Baingai Gaun Dist. Court , Assam
Nibedita Ghosh	Adv. Rahul Mishra ( Siliguri Sub Divisional Court)
Gargi Sarkar	Preparing for Judiciary
Jyoti Kumar Gupta	Adv. Barnali Das
Dipanwita Das	Preparing For Judiciary
Nadim Yousus	Jaxation Practitioner
Pratiti Deb	Pursuing LL.M from Christ University, Bangalore
Riya Sarkar	Pursuing LL.M from Christ University, Bangalore
Suparna Sarkar	Junior Legal Associate Under Satyam Law Associates
Champa Bala	Practicing at Siliguri Court
Gourab Mandal	Legal Executive Officer Under Gajwada Grp of Companies
Md. Ramjan Ali	Practicing at Siliguri Court
Feben Lama	Preparing For Upsc Exam
Yash Sarkar	Pursuing LL.M from Christ University, Bangalore
Parikahit Roy	Pursuing LL.M from Panchanan Barma University
Vikrama Aditya	Practicing at Siliguri Court
Upasona Bishnu	Pursuing LL.M from NBU
Zeba Parveen	Practicing at Siliguri Court
Gaurav Agarwal	Pursuing LL.M from Panchanan Barma University
Prayani Saha	Pursuing LL.M from Panchanan Barma University
Arghyajyoti Chowdhury	Practicing at Siliguri Court
Ishita Rajak	Preparing For Judiciary
Susmita Naskar	Practicing at Siliguri Court
Serajul Islam Siraj	Practicing At Islampur Court
Sabakarim Noorie	Executive of Mzm Law Firm, Mumbai
Subha Chowdhury	Practicing at Siliguri Court

## DEPARTMENT OF LIBRARY & INFORMATION SCIENCE

### About the Department:

The Department of Library and Information Science, NBU was setup in the year 1990-91 under 7<sup>th</sup> plan of Govt. of India. Pioneered work of Prof. Krishna Nath Chattopadhyay, the then Vice Chancellor of the University and the untiring effort by Dr. Ajoy Ranjan Chakraborty led to development of this department to mitigate the long-standing social demands of entire North Bengal. Started with self-support the department made its strong footprint into the academic domain with active support from the professionals engaged in the university library.

Although BLIS was the prime course that had been taught near about 15 years, a gradual social demand for introducing master's course in Library Science was paramount. In the year 2005, Masters Course was started. Development of a separate building for the Department adjacent to the Central Library was a welcome move. During last 20 years it was the primary objective of the Department to develop skilled manpower. Updated and modernized syllabus, well equipped computer lab imbued the students to explore the profession in better way. The Department helps the students to explore the world of data and information management while preparing for a variety of creative and dynamic careers. Students majoring in the Department's programs gain expertise in information aggregators, information disseminators, information curators, publishing, teaching, and others. The past students of this Department excelled in the workplaces throughout India.

### Courses Offered:

- BLIS
- MLIS
- Ph. D.

### Research Focus:

- Big Data
- Knowledge Organization
- Information Retrieval
- Reference Services

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Saptarshi Ghosh	Ph. D.	Professor	sghosh@nbu.ac.in
Dr. Tapan Barui	Ph. D.	Asst. Professor	tapanbarui@nbu.ac.in
Mr. Mayukh Biswas	M. S.	Asst. Professor	mayukh biswas@nbu.ac.in

### Details of Non-Teaching Staff:

Name	Qualification	Designation
Naresh Chandra Singha	B.A.	Junior Assistant cum Typist
Sankar Saha	VIII Pass	Grade IV (Casual)

**Details of Research Scholars:**

Name	Fellowship	Supervisor's name	Gender	Date of Joining
Aditi Roy	JRF	Prof. Saptarshi Ghosh	Female	06.01.2020
Mousumi Saha	JRF	Prof. Saptarshi Ghosh	Female	06.01.2020
Vinay Anand	JRF	Prof. Saptarshi Ghosh	Male	06.01.2020
Tumpa Saha	JRF	Dr. Tapan Barui	Female	06.01.2020

**Details of PhD Students (Without Fellowship):**

Name	Supervisor's Name	Gender	Date of Admission in Ph.D. Course Work
Mr. Manas Esh	Prof. Saptarshi Ghosh	Male	07.01.2019
Ms. Moumita Bose	Prof. Saptarshi Ghosh	Female	07.01.2019
Ms. Parna Ghosh	Dr. Tapan Barui	Female	07.01.2019

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name of the Teacher	Name of the Seminars/Conferences	Venue & Date
Dr. Tapan Barui	International Webinar on The Use of Open Educational Resources in Online Learning: A Study of Students' Perception	Universal Briefing, Kolkata, 09-10.2021
	Refresher Course on Changing Role of Use of ICT Open Distance Learning Open Source Resources and Online Support System in Higher Education and Research	UGC-HRDC-NBU
	Refresher Course on Changing Role of Use of ICT Open Distance Learning Open Source Resources and Online Support System in Higher Education and Research	UGC-HRDC University of North Bengal
	5th Faculty Induction Programme (FIP-05)	UGC-HRDC-NBU
	5th Faculty Induction Programme (FIP-05)	UGC-HRDC-NBU

**Details of Seminar/Conferences /Webinar Attended by Students:**

Name	Name of the Seminars/Conferences	Venue & Date
Aditi Roy	Quality Improvement Program on Image Building and Reputation Management of Library and Information System and Services (IBRM-LISaS)	15-24.05.2021 (Online mode)
	67 <sup>th</sup> ILA conference on "Open Access Sources and Library Services during Post-Covid times: Challenges and Opportunities"	Dravidian University, Andhrapradesh, 24-26.03.2022

<b>Name</b>	<b>Name of the Seminars/Conferences</b>	<b>Venue &amp; Date</b>
Manas Esh	International Webinar on Emerging Trends in Computational Technologies (IWETCT)	Department of Computer Science and Application, NBU 01-03.10.2021
	Cosmic Ray Group of Astronomy (CRAGA) Online Colloquium series	High Energy & Cosmic Ray Research Centre, NBU, 04.09.2021
Mousumi Saha	Quality Improvement Program on Image Building and Reputation Management of Library and Information System and Services (IBRM-LISaS)	15-24.05.2021 (Online mode)
	67 <sup>th</sup> ILA conference on “Open Access Sources and Library Services during Post-Covid times: Challenges and Opportunities”	Dravidian University, Andhrapradesh, 24-26.03.2022
Vinay Anand	IndKoha 2021	Bengal Library Association, 02-03.10.2021
Parna Ghosh	Short term training program on Data Analysis using MS Excel, IBM SPSS & R	HRDC, University of Hyderabad, 14-19.06.2021
	International Workshop on Academic Writing & Publishing	Central Library & DLIS, Tripura University, 17-21.01.2022
	Two Day National Conference on “Sustainable and Modern Public Library System”	DLIS, Maharaja Bir Bikram University, Tripura, 15-16.03.2022
Tumpa Saha	Image building and reputation management of library and information systems and services (ibrm-lisas)	IASLIC, 15-24.05.2021
	Indkoha 2021	Bengal Library Association, 02-03.10.2021
	Role of librarian in new normal pedagogy	NBU, 12.08.2021
	Upcoming waves of pandemic: a call for preparedness	Siliguri B.Ed College, 17.07.2021
	Identification of rare books: describing the role of imprint	Universal Briefing 4 <sup>th</sup> Study Circle, 19.02.2022
	Library technology conclave, curtain-raiser seminar-2	Somaiya Vidyavihar University, Mumbai, 03.03.2022
	Five days international workshop on academic writing and publishing (online mode)	Tripura University, 17 -20.0.2022
	Strengthening relationship between users and library & information science professionals	4 <sup>th</sup> study Circle Universal Briefing Kolkata, 15.01.2022

## **Publications:**

### **Prof. Saptarshi Ghosh**

1. Roy, A & Ghosh, S. (2022). Web-based Prosodic Perspectives of Open Access Library and Information Science (LIS) Repositories in South and East Asia. *International Journal of Information Science and Management*.20(3):277-300
2. Esh, M., & Ghosh, S. (2021b). Tracing the Global Trend on the Study of Digital Literacy. *International Journal of Digital Literacy and Digital Competence*, 12(3), 32–46. doi:10.4018/ijdlcd.291971
3. Ghosh, S. (2021). Resource Sharing for Peers: Practice of Self-Archiving in the Changing ICT Realm.In, *What Next to Libraries? Trends, Space, and Partnerships*. Edited by Kishor Chandra Satpathy. Ahuja Publ., ISBN: 978-93-80316-10-9
4. Esh, M., & Ghosh, S. (2021a). Role in Contribution to Open Access Repository by the Northeast Universities in India. *DESIDOC Journal of Library & Information Technology*, 41(6), doi:10.14429/djlit.41.6.17027.
5. Esh, M., & Ghosh, S. (2022). Are They Really Aware? A Digital Venture for Addressing" Digital Literacy" among the University of North Bengal PG Students. *Proceedings of the 13th International CALIBER, 2022, BHU Varanasi*. pp 234-244. ISBN:978-93-81232-10-1
6. Esh, M., & Ghosh, S. (2022). Shodhganga and ShodhShuddhi" 2S"—Indian research Paragon: A Study. *Library Philosophy and Practice*, 1-16.
7. Esh, M., & Ghosh, S. (2021). A Scientometric Introspect of Literary Warrants Published in *Annals of Library and Information Studies (ALIS)* during the Last Decade. *Library Philosophy and Practice (e-journal)*.
8. Roy, A & Ghosh, S. (2022). Managerial cores in Open Science: Interpreting ‘Open’ with Library & Information Science. *Proceedings of the 13th International CALIBER, 2022, BHU Varanasi*. Pp 485-497. ISBN:978-93-81232-10-1
9. Roy, A & Ghosh, S. (2022). An Affirmative Approach to Evaluating Open Access Repositories in India.67th ILA CONFERENCE PROCEEDINGS International Conference on “Open Access Sources and Information Services during Post-Covid Times: Challenges and Opportunities” (Volume I & II) March 24-26, 2022, pp1055-1066.
10. Saha, M & Ghosh, S. (2022). A Psychological Perspective of Open Access. 67th ILA Conference Proceedings International Conference on “Open Access Sources and Information Services during Post-Covid Times: Challenges and Opportunities” (Volume I & II) March 24-26, 2022, pp975-981.
11. Anand, V, and Ghosh. (2021). Sentiment Analysis of Social Network for Information Professionals: A Case Study of LisLinks Discussion Forum. Accepted in *International Journal of Information Science and Management*.

12. Saha, M & Ghosh, S. (2022). Topic modeling in library and information science from the primary data: swing in thrust areas. Accepted in International Journal of Information Science and Management.
13. Anand, V, and Ghosh. (2021). Topics analysis of user-generated posts in Lislinks Discussion Forum. Accepted in International Journal of Information Science and Management.

**Dr. Tapan Barui**

1. Discovering Topics from the Titles of the Indian LIS Theses, Library Philosophy and Practice/Volume 2021,p.1-23,ISSN-1522-0222
2. Skills of Technical Writing for Academics, Subject Specialists and library professionals, Vidyawarta: International Multilingual Research Journal, Vol-37(1), ISSN-23199318
3. Understanding the Competencies of Library and Information Science Professionals: an Analytical Review, Library Philosophy and Practice/Volume 2021,ISSN-1522-0222

## DEPARTMENT OF LIFELONG LEARNING & EXTENSION

### About the Department:

The Department of Lifelong Learning & Extension (DLLE), University of North Bengal has been pursuing its mission along with philosophy of Lifelong Learning as a part of the creation of learning knowledge society. The Centre for Adult Continuing Education (CACE), University of North Bengal commenced functioning from August 1987 with financial assistant received from the University Grants Commission. Under UGC 10<sup>th</sup> Plan Guideline the CACE renamed as Department of Adult, Continuing Education, and Extension & Field Outreach (DACEEFO). As per the Eleventh Plan Guideline of UGC and the decision of the North Bengal University Executive Council, the Department has become a full-fledged Department with full academic status under University of North Bengal. The nomenclature has been changed as the Department of Lifelong Learning & Extension (DLLE) in October, 2009.

From its inception, the thrust area of the department has been the expansion of the third dimension of higher education in Northern part of West Bengal by meeting regional need of Adult Education, Continuing Education, Population Education, Health Education, Environmental Education and Rural Development Education as well as by taking up several successive educational extension and outreach activities that extend far beyond the traditional academic programme delivered through the University system.

The general objectives of DLLE is to contribute the lifelong learning to the development of the community as an advanced knowledge society with sustainable economic development and to facilitate in bringing the changes in the lives of the common people by providing professional, vocational, skill based courses, workshops, training seminars, sensitization cum awareness programmes. As such, the goals of the Department are:

- The strengthening process of human resource development
- To build up the linkage between the community and the university
- Conducting training-orientation programmes for different communities and members of Local Self Government to strengthen participatory democracy
- Extending the opportunity to the budding researchers in various areas of rural issues through Ph. D programme

### Courses Offered:

- MA in Rural Development
- PhD

### Faculty Details:

Name	Qualification	Designation	Email
Mr. Monotosh Bose	M.A.	Assoc. Professor	monotoshbose@nbu.ac.in
Dr. Sidhartha Sankar Laha	Ph.D.	Assoc. Professor	sidharthasnk09@nbu.ac.in

Name	Qualification	Designation	Email
Dr. Ratna Sarkar	Ph.D.	Asst. Professor (Contractual)	ratnasarkardlle@nbu.ac.in
Mr. Bijoy Das	M.A.	Asst. Professor (Part-time)	bijoy.23kmg@gmail.com

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Mr. Gautam Sarkar	B.A.	Senior Assistant
Mr. Ajay Singha	H.S.	Group-D (Casual)

**Details of Research Scholars:**

Name	Fellowship Name	Gender
Babita Dutta	UGC-JRF	F
Basudev Mahanto	UGC-JRF	M

**Details of Ph.D. Students (Without Fellowship):**

Name	Supervisor name	Gender
1	Gopal Saha	M
2	Shreya Sen	F
3	Apurba Mondal	M
4	Pratap Khati	M
5	Shankhadeep Mahato	M
6	Hari Sankar Saha	M
7	Md Sohel Rana	M
8	Rikhia Sarkar	F
9	Biswajit Roy	M
10	Dattaatreya Dey	F
11	Zinia Basu	F
12	Ananya Biswas	F
13	Birendra Dey Sarkar	M
14	Krishna Saha	M
15	Shilpi Das	F
16	Dipanwita Roy	F
17	Bijoy Das	M
18	Daymanta Roy	M
19	Bidhan Lama	M
20	Aparna Bhusan Rai	F
21	Alok Ranjan Debbhuti	M
22	Sadar Shaikh	M
23	Mikail Mondal	M
24	Kanad Sinha	M



**Publications:**

Name of the Author	Publication Details
Dr. S S Laha	Can MGNREGA be a Tool for Rural Livelihood Recovery after COVID-19? Published in edited book in Disadvantage Group and the Covid-19 Crisis in India: No One Left Behind edited by Anil Bhumali & Sujoy Kanti Ghosal, Author Press, New Delhi, 2021, ISBN: 9789390891474.
	Education of Lifelong Learning in the Age of COVID-19: A Review Perspective published in edited book in Education in India: Impact of Covid-19 Crisis and Contemporary Issue edited by Tapan Kumar Ghosh and Kanak Kanti Bagchi, Serials Publications Pvt. Ltd, New Delhi, 2021, ISBN: 9789391844226
	Empirical Paradigm of Education through Online: Pros and Cons published in edited book in Education in India: Impact of Covid-19 Crisis and Contemporary Issue edited by Tapan Kumar Ghosh and Kanak Kanti Bagchi, Serials Publications Pvt. Ltd, New Delhi, 2021, ISBN: 9789391844226.
	Employment Guarantee and Rural Poor: Reflections from West Bengal 2022, Reliance Publishing House, New Delhi, ISBN: 9788175102651
	India's Industrial Growth Scenario during COVID-19 Pandemic-A Time Series Analysis Stochastic Modelling and Application, Vol.26 No.3(January-June, Special Issue, 2022, Part-10), ISBN: 09723641
	NREGA'S Mission Drift? Rigmarole of workers on individual Land  Indian journal of Economics and Business, Vol.20 No.1(January-June, 2021), ISBN: 09725784 <a href="http://www.ashwinanokha.com/IJEB.php">http://www.ashwinanokha.com/IJEB.php</a>
Dr. Ratna Sarkar	Women's Participation in the Agricultural Sector: A Study in Jalpaiguri and Darjeeling Districts, West Bengal, IOSR Journal of Humanities And Social Science (IOSR-JHSS) Volume 27, Issue 1, Series 2 (January. 2022) 39-43 e-ISSN: 2279-0837, p-ISSN: 2279-0845. <a href="http://www.iosrjournals.org">www.iosrjournals.org</a>
Dr. Ratna Sarkar	Effect of Literacy on health related awareness among rural women from backward communities: A Study in Phansidewa Block, West Bengal, IOSR Journal of Humanities And Social Science (IOSR-JHSS) Volume 27, Issue 1, Series 5 (January. 2022) 42-48 e-ISSN: 2279-0837, p-ISSN: 2279-0845. <a href="http://www.iosrjournals.org">www.iosrjournals.org</a>

**Research Projects Details:**

Title of the Project	Funding Body	Year of Sanction	Duration	Budget	Name PI
Labour and Gender in Brick Kiln Industries: A Special Reference to Jalpaiguri District	University of North Bengal	2021	1 year	Rs. 1 Lakh	Prof. Monotosh Bose
From Safety Net to Sustainable Livelihood:	University of North	2021	1 year	Rs. 1 Lakh	Dr. Sidhartha Sankar Laha

Title of the Project	Funding Body	Year of Sanction	Duration	Budget	Name PI
Appraisal of Quality, Usefulness and Impact of NREGA Assets in Northern Region of West Bengal	Bengal				Associate Professor

**Placement Details:**

Name of the student	Name of Employer
Priyanka Saha	West Bengal Voluntary Health Association , oknath Nagar, Bagdogra, Darjeeling, PIN-734014
Moumita Mondal	WASH Project (UNICEF),World Vision india, 22E Gorachand Road, Kilkata, 700014
Annesha Kundu	Department of Lifelong Learning and Extension, University of North Bengal P.O. North Bengal University, Raja Rammohunpur , Dist. Darjeeling, West Bengal, India, PIN-734 013
Pritha Roy	Piramal Swastha, Srinagar Colony Main road, Sagar society, Arora Colony, Banjara Hills, Hyderabad, Telengana state, PIN-500073
Jayatri Roy	Linclon's Royal Academy, Bhatiapara, Natua, Jalpaiguri
Anuska Shah	Mini Miracles School, Pradhan Nagar, Siliguri

**Miscellaneous Events:**

**Socio-Economic Field Survey**

**Date:** 4<sup>th</sup> February 2022

**Study Area:** Takimari Village, Milanpally Village and Gajoldaba Village of Mantadari GP under Rajganj Block in Jalpaiguri

**Objective & Purpose:**

- To know the socio-economic condition of rural people
- To understand the socio-economic impact of tourism in study area

**Number of Participants: 90**

**Extension Activities of the Department:**

Name of the Programme	Date	Venue	No. of Participants
Two-Day intensive awareness Outreach Extension Programme on Disaster Management in collaboration with Ujjiban Society, Teor, Dakshib Dinajpur	February 18-19, 2022	Dakshin Dinajpur	91

<b>Name of the Programme</b>	<b>Date</b>	<b>Venue</b>	<b>No. of Participants</b>
Two-Day intensive awareness Outreach Extension Programme on Disaster Management in collaboration with 13 Bengal Bn. NCC unit, Tufanganj Mahavidhyalaya, Tufanganj, Coochbehar	March 12-13, 2022	Tufanganj Mahavidhyalaya	110
Two-Day intensive awareness Outreach Extension Programme on Disaster Management in collaboration with Rajganj College, Jalpaiguri	March 15-16, 2022	Rajganj College	57
Two-Day intensive awareness Outreach Extension Programme on Disaster Management	March 24 & March 25 2022	NBU	73
One Moth certificate Course on Health and Nutrition of Child	February 24 to March 30, 2022	NBU	67

## DEPARTMENT OF MANAGEMENT

### About the Department:

The Department of Management, University of North Bengal was established on 11<sup>th</sup> April, 2003 in order to provide quality management education and other services of global standard in a high quality ambience. The Department conducts full time Master of Business Administration (MBA) Programme approved by AICTE and recognized by UGC.

The Department endeavors for excellence in all aspects of its operations, including curricular activities, research, professional outlook, consultancy, student support, and outreach programs, all within a high-quality environment. The department has earned a reputation as an A+ category B-School in the National B-School survey conducted by Business India and other prestigious surveys like Businessworld, Business Today, and Competition Success Review. In addition, the department was rated a B1 category B-School according to the AIMA-IMRB National B-School Survey in 2010. The students and faculty members of the department have achieved numerous accolades, such as the 9th position in the "Earthian Annual Awards 2012" conducted by WIPRO and reaching the semi-finals in Asia's B- Plan competition organized by IIT Bombay. The Department of Management is an official member of the Association of Indian Management Schools (AIMS), alongside some of the most respected B-Schools in India. In the Times B-School survey report 2021, the department ranked 144th among 1500 B-Schools in India and 271st among 1100+ participating colleges across India in the Internshala Annual Ranking 2021. The Department is currently in the process of launching a new MBA program in Rural Management, as per the MoU which has been signed between the University of North Bengal and the Mahatma Gandhi National Council for Rural Education, Government of India. The present MBA program offers dual specialization in Marketing, Finance, HR & Systems, and the department organizes various National & International Conferences and an 'Industry-Institute Interface Program' called AHOVAAN every year with the participation of top industry personnel and eminent academicians. The department follows various effective internal assessment and grooming processes to develop industry-ready students.

### Courses Offered:

- MBA (CBCS) with Dual Specialization

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Deepak Subba	MBA, Ph.D	Asst. Professor	deepaksubba08@nbu.ac.in
Mr. Sanmoy Mallick	B. Tech, MBA, Ph.D (Registered)	Asst. Professor	sanmoy.mallick@nbu.ac.in
Dr. Nandita Pradhan	MA (Economics), Ph.D.	Asst. Professor (Contractual)	nbajrcharya15@nbu.ac.in
Dr. Subrata Ray	MBA, Ph.D.	Asst. Professor (Contractual)	ray.subrata@nbu.ac.in

Name	Qualification	Designation	Email
Dr. Dipanjan Maitra	Ph.D	Asst. Professor (Contractual)	dip_anjan@nbu.ac.in

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Mr. Somnath Ghosh	B. Com	Office Assistant (Contractual)
Mr. Deepak Kumar Chhetri	8 <sup>th</sup> Standard	Office Peon (Casual)
Mrs. Draupadi Mallik	-	Sweeper (Casual)

**Details of Seminars/Conferences/Webinar Organized:**

Name	Date	Number of Participants
AICTE Sponsored 'Online Faculty Development Programme in Management' under ATAL Academy	06/12/2021 to 10/12/2021	67
Introduction Programme for MBA Students	28/09/2021 to 30/09/2021	70
AHOVAAN 2022	16/03/2022	120

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name of the Teacher	Name of the Seminars /Conferences	Venue & Date
Dr. Deepak Subba	Vision 2070: Achieving sustainability through management and technology	05/02/2022
Sanmoy Mallick	Shruti 2022: International Conference On 'Strategic HR Under Technological Innovation	Calcutta Business School, Kolkata 10/03/2022 to 12/03/2022
	AICTE Sponsored ATAL Online Faculty Development Programme on "Faculty Development Programme in Management"	Department of Management, NBU, 06-10/12/2021
	Felicitation Ceremony of Internshala Annual Rankings 2021	Internshala, New Delhi, 29/01/2022
	Data Privacy Day conducted by the Cyber Security Centre of Excellence, Department of Information Technology and Electronics, Government of West Bengal	28/01/2022
Dr. Subrata Ray	Online Advanced FDP on "Intellectual Property Rights in Academia: Creation, Protection and Commercialization"	Andhra University (online) 07-11/02/2022
	Online Elementary FDP on "Pharmaceutical	Gujarat Technical

Name of the Teacher	Name of the Seminars /Conferences	Venue & Date
	R&D Ecosystem: From Bench toMarket"	University (online) 03-07/01/2022
	Online Advanced FDP on "Leveraging Analytics for Competitive Advantage"	VES Business School, Mumbai (online) from 17-21/01/2022
	Online Elementary FDP on "Strategic Management Issues in Technical Institutions"	NITTTI, Kolkata (online) 27-31/12/2021
Dr. Dipanjan Moitra	Resource Person in AICTE Sponsored ATAL Online Faculty Development Programme on "Faculty Development Programme in Management"	Department of Management, NBU 06-10/12/2021

#### Research Projects Details:

Title of the Project	Sponsored by	Year of Sanction	Duration	Budget (Rs.)
Sources and effects of stress: A qualitative research among the entrepreneurs in North Bengal and Sikkim.	NBU	2021	1 year	50,000
Assessment of Govt. schemes and programs for the development of Tourist Destinations infrastructures andtourism employment in Darjeeling Kalimpong and Jalpaiguri district.	NBU	2021	1 year	50,000

#### Special Guest Lectures:

Details of the ResourcePerson	Lecture Details and Duration
Dr. Vinay K. Nangia, Former Professor & Head of the Department (Retd.) Department of ManagementStudies, IIT Roorkee	Lecture on Management Studies on 17th November 2021
Dr. Om Prakash Sharma, Head of the Department Department of Law University of Gaur Banga	Special Guest Lecture on 'Business Regulatory Framework', 16th,17th, 23rd and 24th December 2021.
Dr. Subrata Roy, Associate Professor Department of Commerce Mahatma Gandhi Central University Motihari, Bihar	Special Guest Lecture on 'Marketing Management', 24th June & 04th July 2021.
Dr. Abhik Kumar Mukherjee, Assistant Professor Department of Business Administration The University of Burdwan	Special Guest Lecture on 'Financial Management', 24th June & 04th July 2021.
Shri. Angshuman Paul, Resource Person – Madhuban Educational Books & Motivational Speaker	Special Guest Lecture on 'Travel & Tourism Management, 14th and 15th December 2021.

**Publications:**

<b>Author</b>	<b>Name of the Book/Journal/Volume</b>	<b>Year</b>
Dr. Deepak Subba	Subba, D. (2021). Measuring the Differential Effects of Emotional Maturity on Turnover Intention Multiple Regression Analysis. Business Research And Innovation, 131.	2021
Dr. Dipanjan Moitra	Moitra, D., & Mandal, R. K. (2022). Classification of malignant tumors by a non-sequential recurrent ensemble of deep neural network model. Multimedia Tools and Applications, 81(7), 10279-10297.	2022

**Placement Details:**

<b>Name of the Students</b>	<b>Name of the Employer</b>
Pranay Kumar Paul	Bandhan Bank
Anshu Jha	eRevMax
Jibojyoti Chowdhury	Bandhan Bank Limited
Niharika Pal	ICICI Prudential Mutual Fund
Barsha Saha	ICICI Prudential Mutual Fund
Sulekha Sunwar	Aditya Birla Fashion And Retail
Arup Majumder	Bandhan Bank
Meghna Sarkar	Aditya Birla Fashion and Retail
Bishal Paul	ICICI Prudential AMC
Pritesh Chhetri	Bandhan Bank Ltd
Meghashree Ghosh	Aditya Birla Fashion and Retail
Roshni Pradhan	ICICI Prudential AMC
Nazmir Islam	Bandhan Bank Ltd.
Sayan Sarkar	Aditya Birla Fashion and Retail
Aditi Das	Uni-luxx
Souron Raha	Bandhan Bank Ltd
Susmita Biswas	EliteRecruitment
Dibyayan Ganguli	Bandhan Bank
Suruchi Verma	ICICI Prudential Mutual fund
Pritam Thakur	Bandhan Bank
Arup Ghosh	Creation the fertility center
Imran Biswas	S.S enterprises
Pinak Roy	Uniluxx Mattress
Meghashree Ghosh	Aditya Birla Fashion and Retail
Tarak Paul	Uni-luxx
Soumalya Pal	Nalanda Learning Systems Pvt. Ltd.

## DEPARTMENT OF MASS COMMUNICATION

### About the Department:

The Department of Mass Communication, University of North Bengal was established in 2009. Since then the infrastructure and facilities in the Department has been upgraded to meet the requirements of quality theory and practical courses. The Department has been made equipped with PD professional cameras, a couple of SLR digital cameras along updated editing softwares. The Department has two laboratories; one for the desktop printing and one for editing audio visual projects. There are good number of computers in the DTP lab and several desktops along with iMac machines in the audio visual lab. The vertical extension of the building has accommodated a seminar room, an audio visual lab and a reading room.

The students mostly do their class projects like recording and editing radio spots, editing films and documentaries in this audio visual lab. The reading room has books and dissertations of previous years for reference purpose along with 5 newspapers in different languages which can be accessed by the students anytime. Students direct, shoots and edits short films/documentaries as a project. A student's film festival 'Bioscope' is organized to screen the films made by the students. This platform has been initiated to showcase the talent and creativity of the students. Apart from regular theory and practical classes, the class routine also schedules a Media Club every Friday where various activities are planned to involve the students from practical classes. Every Friday a new topic or an activity like photography competition, interview techniques, classic movie screening with a discussion or designing a magazine etc are held. The upgraded syllabus includes a study tour to be conducted within the country which includes a visit to the various media organization and diverse community of those regions.

The Department conducts regular practical classes on cinematography and video editing, newspaper designing and so on. The students prepare vox pop, radio spots, design a newspaper etc. and are also given hands on training in making house journals and print advertisements by visiting the local corporate companies based at Siliguri. The Department conducts visit to the AIR at Kurseong, Doordarshan Kendra and Siliguri based FM stations every year.

### Courses Offered:

- M. A.
- Ph. D.

### Research Focus:

- Developed communication
- Community Media

### Faculty Details:

Name	Qualification	Designation
Mr. Subhrajyoti Kundu	MA (perusing PhD)	Asst. Professor
Dr. Abhishek Das	PhD	Asst. Professor (till 24/01/2022)



**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Dipak Dey	Madhyamik	Peon (Casual)

**Details of Research Scholars:**

Name	Fellowship Status	Gender	Date of Joining
Lakshmi Prabha P	UGC ET-JRF	Female	20/12/2019

**Details of PhD Students (Without Fellowship):**

Name	Gender	Date of Admission in Ph.D. Course Work
Vikram Rai	Male	02/01/2020

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar	Date
Subhrajyoti Kundu	National Webinar on <i>Role of Communication in COVID response: Recovery and Rebuilding</i> , organized by Dept. of Mass Communication, University of Burdwan	07/10/2021
	National Webinar on <i>Health Awareness Among Rural Scheduled Class Community – Role of Television Program</i> , organized by Dept. of Mass Communication, University of Burdwan	22/10/2021
	International Webinar on <i>Theories and Pragmatic Interventions in Health Communication: A Review of the Field</i> , organized by Dept. of Mass Communication, University of Burdwan	30/11/2021
	International Webinar on <i>Media on Health – Facebook, Dr. Facui and Vaccine Resisters</i> , organized by Dept. of Mass Communication, University of Burdwan	10/11/2021
	International Webinar on <i>Health Communication Research and COVID-19 Pandemic</i> , organized by Dept. of Mass Communication, University of Burdwan	28/11/2021
	International Webinar on <i>Conceptualizing Culture in India : Nation, Province and Locality</i> , Organized by Centre for Studies in Local Languages and Cultures, University of North Bengal	23/03/2022 24/03/2022

**Publication:**

<b>Name of the Author(s)</b>	<b>Publication Details</b>
Subhrajyoti Kundu	Editor, <i>Bairati (2021- 2022)</i> , Journal of Centre for Studies in Local Languages and Cultures, NBU, Publisher: NBU Press

**Placement Details:**

<b>Name</b>	<b>Designation</b>	<b>Name of the Employer</b>
Badsha Das	Educational Engineer	Salesian College, Siliguri
Ranit Sarkar	Assistant Professor	Salesian College, Sonada
Shikshita Dewan	Assistant Professor	Salesian College, Sonada
Soma Singh	Teacher	New Farakka High School, West Bengal
Sneha Sarkar	Teacher	Balasan Western English School
Abhijeet Chettri	Junior Associate	Pride India Noida Office
Sujoy Ghosh	Journalist	Siliguri Live
Sayanka Bose	Office Assistant	Informance
Birender Kujur	Public Relations Officer	Saluja Dhaba, Amber Company

## DEPARTMENT OF NEPALI

### About the Department:

The Department of Nepali, University of North Bengal was established in 1977 with a view to fulfill the aspiration of the cherished people of Darjeeling, Dooars, Jalpaiguri and its adjoining neighbour state Sikkim, and North Eastern states. Starting its journey in the Arts Building of the University, the Department was relocated in its own new building in 2001.

An academy within the Department was established under funding support of the State Government to develop and initiate the research work on Nepali Language and Literature, Culture, Folk lore of the people in Nepali speaking areas of North Bengal, Sikkim, Bhutan, North Eastern states and nearest Himalayan region.

Beside the Department activities, the faculty members of Nepali Department are time to time engaged in various National and state level confidential works in relation to the Nepali language and literature assignments under the UPSC, UGC, WBPS, WBCSC & etc.

### Courses Offered:

- M. A. in Nepali
- Ph. D.

### Research Focus:

- Folklore
- Modern Nepali Drama
- Poetry Fiction
- Children Literature
- Translation Work

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Ghanashyam Nepal	M.A., Ph.D.	Professor	nepalgs@gmail.com
Dr. Krishnaraj Ghatani	M.A., Ph.D.	Professor	ghatanikr@gmail.com
Dr. Sanjay Rai	M.A., Ph.D.	Professor	sanjaybantawa@gmail.com
Dr. Pushkar Parajuli	M.A., Ph.D.	Asst. Professor	pparajuli.nbu@gmail.com
Dr. Dup Tshering Lepcha	M.A., M. Phil, Ph.D.	Asst. Professor	duptsheringlepcha@nbu.ac.in
Smt. Krishnamaya Manger	M.A.	Asst. Professor	krishnamanger@gmail.com

### Details of Non-Teaching Staff:

Name	Qualification	Designation
Sri Gyan Prasad Chhetri	M.A. in Nepali	Superintendent (Technical)
Miss Rina Subba	M.A. in History	Office Assistant (Casual)
Sri. Rajib Sharma Ghimiray	Class XII	Record Supplier (man days)

**Details of Research Scholars:**

Name	Fellowship Status	Supervisor's Name	Gender	Date of Joining
Pritam Rai	NET (JRF)	Dr. Dup Tshering Lepcha	Male	02.01.2020
Bhim Kumar	NET (JRF)	Prof. Krishnaraj Ghatani	Male	02.01.2020
Chandrika Rai	NET (JRF)	Prof. Ghanashyam Nepal	Female	02.01.2020
Bunu Sharma	NET (JRF)	Prof. Krishnaraj Ghatani	Female	02.01.2020
Gopal Bista	NET (JRF)	Dr. Pushkar Parajuli	Male	02.01.2020
Ashish Tamang	NET (JRF)	Prof. Sanjay Rai	Male	02.01.2020
Shiben Sharma	NET (JRF)	Dr. Pushkar Parajuli	Male	02.01.2019
Shivam Sharma	NET (JRF)	Prof. Ghanashyam Nepal	Male	02.03.2021
Sachin Chhetri	NET (JRF)	Dr. Mamta Lama	Male	25.03.2021
Aayush Tamang	(NET-JRF)	Prof. Ghanashyam Nepal	Male	-
Renu Subba	(NET-JRF)	Dr. Gyanendra Subba	Female	-
Sara Tamang	(NET-JRF)	Prof. Krishnaraj Ghatani	Female	-
Mahesh Chettri	(NET-JRF)		Male	-
Bijaya Tamang	(N.F.H.E)	Dr. Amir Darjee	Female	-

**Research Projects Details:**

Title of the Project	Funding Body	Year of Sanction	Duration	Budget (Rs.)	Name of PI
Major Project Consortia Mode on National Language Translation Mission (NLTM-ISHAAN)	MeitY, Govt. of India	3 years	2022-2025	215.45 in lacs	Prof. G Nepal

**Awards and Recognitions:**

Prof. Ghanashyam Nepal received prestigious Siksha Ratna Award 2021 from the Govt. of West Bengal

## DEPARTMENT OF PHILOSOPHY

### About the Department:

The Department of Philosophy, North Bengal University, which was established in 1968, is one of the very accomplished centres of learning and research in Philosophy in India. The Department gives equal emphasis on quality research as well as on development and training of students through extensive teacher-student interaction.

The Department is a vibrant centre of higher education and research. Academic activities like taking up of research projects, publication of books and papers, organization of seminars/workshops and refresher courses have been a mark of the department over the years. An atmosphere of free discussion is encouraged in the department which helps the students to realize the significance of Philosophy in areas beyond the contours of the syllabus. Student-teacher interaction during classroom teaching as well as during seminars is not strictly confined to the limits of the syllabus, but transcends into other areas of importance and relevance. National and international seminars and lectures by well-known scholars are held regularly in the department. Faculty from various Indian and foreign universities visit us regularly, adding to the vitality of the academic discourse here. The faculty members of this department also visit universities abroad on visiting faculty programmes and for attending seminars/conferences. Students are encouraged to take part in academic discussions with visiting faculty and to participate in seminars/conferences.

The Department of Philosophy, University of North Bengal has been awarded Special Assistance DRS I (2002 -2009), DRS-II (2009-2014) and DRS-III (2015-2020) by the UGC to carry on research on '*The Problem of Meaning in Classical Indian Philosophy and Contemporary Western Philosophy*'.

### Courses Offered:

- M. A.
- Ph. D.

### Research Focus:

- Metaphysics
- Philosophy of Language
- Philosophical Logic
- Philosophy of Mind
- History of Analytic Philosophy
- Epistemology
- Normative Ethics
- Aesthetics

### Faculty Details:

Name	Qualification	Designation	Email
Prof. Debika Saha	Ph. D.	Professor	dsphil8@nbu.ac.in
Prof. Kantilal Das	Ph. D.	Professor	drkldas1963@nbu.ac.in
Prof. Jyotish Ch. Basak	Ph. D.	Professor	jyotishcbasak@nbu.ac.in

Name	Qualification	Designation	Email
Dr. Koushik Joardar	Ph. D.	Professor	koushikjoardar@nbu.ac.in
Dr. Nirmal Kr. Roy	Ph. D.	Professor	nkr.anirban@nbu.ac.in
Dr. Anirban Mukherjee	Ph. D.	Professor	anirban@nbu.ac.in
Dr. Laxmikanta Padhi	Ph. D.	Professor	lkpadhi@nbu.ac.in
Smt. Anureema Bhattacharyya	MA	Assoc. Professor	abhattacharyya4@nbu.ac.in
Dr. Ngaleknao Ramthing	Ph. D.	Asst. Professor	ngaleknaonbu15@nbu.ac.in
Dr. Swagata Ghosh	MA, M. Phil	Asst. Professor	ghoshswagatanbu@nbu.ac.in
Dr. Mayank Bora	Ph. D.	Asst. Professor	mayankbora@nbu.ac.in

#### Details of Non-Teaching Staff:

Name	Designation
Smt. Priyanka Roy	Jr. Asstt. Cum Typist

#### Details of Research Scholars:

Name	Fellowship Name	Supervisor's Name	Gender	Date of Registration
Jayanta Barman	UGC NET-JRF	Prof. K Das	Male	01/12/2020
Avhijit Ghosh	UGC NET-JRF	Prof. K Das	Male	01/12/2020
Kirtika Das	UGC-SJPSGCF	Prof. K Das	Female	01/01/2020
Nibita Rajak	UGC-NFSC	Prof. K Das	Female	12/03/2021
Sumana Soren	SVMCM	Prof. K Das	Female	14.02.2022
Beauty Das	UGC-NFSC	Prof. J C Basak	Female	16.10.2020
Apabrita Bhattacharyya	ICPR - JRF	Prof. J C Basak	Female	16.10.2020
Riya Ghosh	ICPR - JRF	Prof. J C Basak	Female	01.1.2020
Kheya Roy	UGC-NFSC	Prof. J C Basak	Female	09.02.2022
Neha Karmakar	UGC-SJPSGCF	Prof. J C Basak	Female	31.05.2023
Rana Das	ICPR - JRF	Prof. J C Basak	Male	01.1.2020
Deepanwita Dutta	UGC NET-JRF	Prof. J C Basak	Female	10.5.2023
Subhajit Dutta	SVMCM	Prof. D Saha	Male	01.01.2020
Krishna Paul	SVMCM	Prof. N K Roy	Male	09/12/2020
Sujan Mandal	UGC NET-JRF	Prof. N K Roy	Male	01/01/2020
Najmun Khatun	MANF	Prof. N K Roy	Female	01/12/2020
Bibhas Chakraborty	SVMCM	Prof. N K Roy	Male	01/12/2020
Subhankar Poddar	UGC-NET JRF	Prof. A Mukherjee	Male	22.01.2020
Nasima Begum	UGC- NETJRF	Prof. A Mukherjee	Female	03.01.2019
Ankita Paul	UGC- NET JRF	Prof. A Mukherjee	Female	02.01.2019
Subham Saha	UGC-NET JRF	Prof. A Mukherjee	Male	02.01.2019
Riya Saha	UGC -NFSC	Prof. L Padhi	Female	12-3-2021

Name	Fellowship Name	Supervisor's Name	Gender	Date of Registration
W L Tamang	UGC –NET JRF	Prof. L Padhi	Male	10.02.2022
Saddam Hossain	UGC- MANF	Prof. L Padhi	Male	
Debashish Mandal	SVMCM	Dr. N. Ramthig	Male	01.01.2020
Nikita Pradhan	SVMCM	Dr. N. Ramthig	Female	21.03.2018

**Details of PhD Students (Without Fellowship):**

Name	Supervisor Name	Gender	Date of Registration
Pradipta Mukhopadhaya	Prof. K Das	Female	01.01.2020
Niranjana Adhikary	Prof. K Das	Male	09.12.2020
Rupon Nag	Prof. D Saha	Female	19.12.2018
Harendra Nath Barman	Prof. N K Roy	Male	02/12/2020
Sondipa Ghosh	Prof. N K Roy	Female	24/04/2018 (Re. Regn)
Tapan Kumar Roy	Prof. N K Roy	Male	02.01.2020
Patha Shil	Prof. K Joardar	Male	16.02.2022
Soumitra Chakraborty	Prof. A Mukherjee	Male	15.04.2020
Kabita Roy	Prof. A Mukherjee	Female	29.02.2016
Soma Sarkar	Prof. A Mukherjee	Female	
Priyanka Hazra	Prof. L Pandhi	Female	09.09.2014
Dipankar Barman	Prof. L Pandhi	Male	06.01.2022
Nityanada Kodalia	Prof. L Pandhi	Male	11.03.2021
Samir Barman	Dr. N. Ramthing	Male	03.12.2018
Sanjay Baro	Dr. N. Ramthing	Male	31.12.2018

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars/Conferences / Webinar	Title of the Paper Presented
Prof. Kantilal Das	One Day State level Webinar organized by the Department of Philosophy, Cooch Behar College, 12.07.2021	The Role of Philosophy in the Present Pandemic Crisis
	National Seminar entitled Philosophy and Life organized by the Department of Philosophy, Purbasthali College, Burdwan, West Bengal, 25.07.2021	Language, Meaning and Forms of life
Prof. Nirmal Kumar Roy	International Webinar “Niskam Karma” organised by Dept. of Philosophy, Panchmura Mahavidyalaya, Bankura, 28 & 29.06.2021	Some Indian Philosophical Issues in Practical and in Principle

<b>Name</b>	<b>Details of Seminars/Conferences / Webinar</b>	<b>Title of the Paper Presented</b>
	State Level Webinar organised by Department of Philosophy, Cooch Behar College, 07.07.2021	Some Important Issues of Advaitavada of Sakkara
	National Level Webinar “Different Contemporary Philosophical Issues” organised by Department of Philosophy, Khalisani Mahavidyalay, Hoogly, 14.12.2021	The Philosophy of Swami Vivekananda as a Means to Resolve the Crisis of the Present Era
	State Level Webinar organised by Department of Philosophy, Cooch Behar College, Cooch Behar, 27.09.2022	Application of Bhagavadgita in Our Practical Life
Prof. Koushik Joardar	Covid-19 Pandemic, Evil effects on Children and Teenagers (online), Vashistha Institute (Cooch Behar), 21.08.2021	Attended
Prof. Anirban Mukherjee	Seven-day workshop (7 – 13 March 2022) on ‘Methodological Significance of Social Theories’ organized by Department of Sociology, and the HRDC, University of North Bengal , 09.03.2022	‘A Researcher’s Guide to Surviving Social Theory’
	Webinar organized by Skeptics, the Philosophy association of the Department of Philosophy, Daulat Ram College. Delhi University, 29.09.2021	‘Philosophy as a Life Skill’
	International Seminar on ‘One Hundred Years of Tractatus’ organized by Centre of Advanced Studies, Department of Philosophy, Jadavpur University, 22-23.11.2021	‘On the Making and Unmaking of the Tractatus Logico - Philosophicus’
Prof. Laxmikanta Padhi	International series of lectures on the theme „The Mutual Sensibilities of Dharma, Mazhab, and Religion’ organized by INADS (Institute of AdvancedSciences), Dartmouth, USA, 20.12.2021	Does Dharma Reform a Human Being and make him Responsible?
	International Webinar on Darkness visible: Explorations on disease, Pandemic and Redemption organized by Dept. of English, Sanskrit, History and Philosophy under the aegis of the IQAC at Sri Ramkrishna Sarada Vidyamahapitha Kamarpukur, Hooghly, West Bengal., 16-17.07.2021	Why we be moral in this Pandemic?: an East-West Analysis
	25th International Congress of Vedanta, 23 – 31.10.2021	A Critical Understanding of Advaita Vedānta on Environmental Ethics



Name	Details of Seminars/Conferences / Webinar	Title of the Paper Presented
	National Seminar on Philosophy and the Method: Phenomenology and Indian Philosophy in the Department of Philosophy, Assam University, Silchar, 06-07.12.2021	Methods of Doing Applied Ethics
	ICPR sponsored National Seminar entitled: Problems and Solutions of Applied Ethics in the 21st Century with Special reference to North-East India by the Dept. of Philosophy, Bilaspada College, Assam, 21-23.02.2022	Do Animals Deserve Moral Status? : Debates and Dimensions
	ICSSR-ERC sponsored Two days International Seminar on the Sub theme– some martyrs/revolutionaries of odisha and their activities organized by Department of Political Science, Suryasen Mahavidyalaya, Siliguri, 22-23.03.2022	Shaheed Baghajatin: The Unsung Revolutionary of Odisha in the Indian Nationalist Movement
	Refresher Course in Theory of Knowledge: Indian and Western by UGC – Human Resource Development Centre, University Allahabad, 07.02.2022	Theory of Knowledge: From Plato to Keith Lehrer
	National Webinar on Ethics in Politics(Rajnitit Naitikata), conducted by UGC-HRDC, Jadavpur University, 18.02.2022	An Analysis of Kautilya's Theory of State, Diplomacy and Moral Values
Dr. Swagata Ghosh	National Level ICPR-Sponsored Lecture Series on the theme Classical and Contemporary Indian Philosophers and their Thoughts: Revisiting and Rethinking in Department of Philosophy, Sonamukhi College, Bankura, 28.06.2021	'The Abhisambandha between Puruṣa and Prakṛti: A Critical Study of the Binary in Sāṃkhya Philosophy'
	5 week FIP from Bhimrao Ambedkar Marathwada University HRDC, 02-08.09.2021	Attended
Dr Mayank Bora	World Philosophy Day 2021 Seminar on Posthumanism, organized by Department of Philosophy, NBU, 11.01.2022	Attended
	International Women's Day 2022 Seminar organized by Department of Philosophy, NBU, 08.03.2022	Attended

**Publications:**

<b>Author(s)</b>	<b>Publication Details</b>
Prof. Kantilal Das	The Paradigm of Justice: A Contemporary Debate between John Rawls and Amartya Sen, Routledge (U K Edition), ISBN 9781032072296, August 19,2021
	Set Theory, (Bengali Version), (2021), Moha Bodhi Book Agency, Kolkata.
	Avaraha Samketik Juktivijnaner Ruprekha, (Bengali Version), Moha Bodhi Book Agency, Kolkata. India, 2021.
	“Putnam on the Magical Theory of Reference” was published in the journal Philosophy and the Life-world, Vidyasagar University Journal of Philosophy, (UGC-Care Enlisted Journal, ISSN: 0975-8461), Vol.23, 2020-2021
Prof. Jyotish Ch. Basak	<i>Artha: Its Meaning and Aetiology of its Emergence as Central Puruṣārtha</i> , ‘ <i>Philosophical Papers: Journal of the Department of Philosophy</i> , University of North Bengal, Vol.-XVII, March 2021, ISSN No.: 0976-4496, Pp. 65-83. (Link: <a href="http://jpp.nbu.ac.in">jpp.nbu.ac.in</a> ) (UGC Enlisted).
	<i>ĀnvīkṣikīVidyā: An Enquiry into its Nature and Development</i> , <i>Philosophical Papers: Journal of the Department of Philosophy</i> , University of North Bengal, Vol.-XVIII, March 2022, ISSN No.: 0976-4496, Pp. 22-37. (Link: <a href="http://jpp.nbu.ac.in">jpp.nbu.ac.in</a> ) (UGC-CARE Enlisted).
	Decoding Democracy, <i>Conditions for Becoming a Democratic State</i> , (Edt.) Prof. Samar Kumar Mondal, Jadavpur University, Kolkata, 2021, Suroydaya Publishers, New Delhi.
	Jointly edited <i>Language, Meaning and Interpretation: East and West</i> published by Northern Book Centre, New Delhi, 2022, ISBN 978-81-7211-395-7.
Prof. Nirmal Kumar Roy	Cārṣvāka’s Hedonism: A Critical Study, <i>Philosophical Papers: Journal of the Department of Philosophy</i> , Volume- XVII, pp. 110- 121, 2021
	Some Aspects of <i>Niskāmakama</i> : a Critical Study, <i>Philosophical Papers: Journal of the Department of Philosophy</i> , Volume- XVIII, pp. 38-54, 2022
	True Buddhism in the Eye of Swami Vivekanand, Published in the book “Multidimensional Personality of Swami Vivekananda”, Edited by Dr. Bonani Sinha & Abhishek Choudhury Booksclinic Publishing, Chhattisgarh, ISBN No. 978-81-94935-83-4, Pp.- 33-42, 2021.
	The Role of Virtues to Resolve Crisis, Published in the book “Erosion of Values: Causes, Consequences and Remedies”, Editedby Ranjit Kumar Barman, Abhijeet Publications, New Delhi, ISBNNo. 978-93-92816-10-9 pp. 44-55, 2022.
Prof. Koushik Joardar	Heraclitus’ River and Poetry of Alokranjan (on Philosophy of a Poet), Mallar (literary Journal) , 2022 ISSN 2345811
	Words: Autobiography of Sartre, Chhapakhanar Goli (literary Journal),

Author(s)	Publication Details
	2022 ISSN 23471808
Prof. Laxmikanta Padhi	Eco feminism: Debates and Dimensions in JAOPA, Volume-VII, Number- I January, 2021, p. 49-62 (ISSN: 2395-2784)
	The Concept of Morality, Moral Development and Moral Training: Perspectives And Dimensions in <i>Design and Innovation in Moral training</i> edit. P. Das, Design and Innovation Centre, Department of Philosophy, Ravenshaw University, 2022, p.41-53
	Philosophy of Religion and Religious Conflicts: Perspectives and Dimensions in <i>Language, Meaning, and Interpretation: East and West</i> (edit) Das, K. L. and Basak J. C. Northern Book Centre, New Delhi, 2022, pp. 235-251. (ISBN:-978-81-7211-395-7)
	Why be Moral? A Quest in Moral Philosophy and Value Education in the edited volume <i>Transforming Mind through Value Education</i> Naya Pustak Mahal, Agartala, Tripura, 2022.
	The Development and Methods of Applied Ethics in MANAN: Journal of the Department of Philosophy, West Bengal State University, Vol. 3, 2022.
Dr. N. Ramthing	An Ethical Consideration of Preferential Treatment, Journal of Philosophy, Dept. of Philosophy, University of North Bengal, (ISSN: 0976-4496), Vol-XVII, March-2021
	Kant's Morals and Respect for Persons, JIJÑĀSĀ, A Philosophical Journal, Volume VI, 2021, (ISBN: 978-93-5593-141-2)
Dr. Swagata Ghosh	'The Contrast between the Natures of the Binary in Sāṃkhya Philosophy: Some Observations', March 2021, pp. 363-372 in <i>Philosophical Papers: Vol. XVII</i> Journal of the Department of Philosophy, NBU, ISBN- 0976-4496 (UGC Care enlisted Refereed Journal)
	'The Notion of Bondage and Liberation in Sāṃkhya Philosophy: A Critical Study', March 2022, pp. 110-141, in <i>Philosophical Papers: Vol. XVII</i> Journal of the Department of Philosophy, NBU, ISBN- 0976-4496 (UGC Care enlisted Refereed Journal)
	'Gettier's Objection and Lehrer's Solution Concerning the Problem of Knowledge: An Analysis based on the Logical Structure of Cognition', in <i>Language, Meaning and Interpretation: East and West, 2021, ISSN - 7211-383-1-978-81-7211-395-1</i> , Northern Book Centre, New Delhi
Dr. Maynak Bora	"Scope and Substitution", <i>Language, Meaning, and Interpretation: East and West</i> , (eds.) K. L. Das and J. C. Basak, Northern Book Centre, 2022, p 319-336. [ISBN: 9788172113957]
	"Justice and Responsibility in a Care Ethical Framework", <i>Justice and Responsibility: Relearning to be Human, South Asian Philosophical Studies, Volume 17</i> , (eds.) B. Devarakonda and S. Velassery, CRVP publications, 2021, p 201-212. (with Anumita Shukla) [ISBN: 9781565183483]

### Research Projects Details:

Title of the Project	Funding Body	Year of Sanction	Duration	Budget (Rs.)	Name of PI
Jainism and Ecology in 21 <sup>st</sup> Century	NBU	2021	1-4-2021 to 31-3- 2022 Rs. 1,00,000/-	1,00,000/-	Laxmikanta Padhi

### Awards and Recognitions:

- Prof. Laxmikanta Padhi from the Department of philosophy is an Associate Editor, Journal of Indian Council of Philosophical Research, (Ministry of Education, Govt. of India) published by Springer, 2022
- Prof. Laxmikanta Padhi from the Department of philosophy is a Visiting Professor in the Department of Education, University of North Bengal in 2022
- Prof. Laxmikanta Padhi from the Department of Philosophy is a Nominee of the Hon'ble Vice- Chancellor of Delhi University to the Selection Committees in Philosophy, Delhi University, 2022.
- Prof. Laxmikanta Padhi from the Department of philosophy was the Editor-in-Chief of the UGC CARE enlisted journal *Philosophical Papers, Journal of the Dept. of Philosophy*, (ISSN 0976 – 4496) Vol- XVIII, March, 2021. ([jpp@nbu.ac.in](mailto:jpp@nbu.ac.in))
- Prof. Laxmikanta Padhi from the Department of Philosophy is a Subject Expert in Philosophy, SLET Commission, Assam, 2022
- Prof. Laxmikanta Padhi from the Department of Philosophy is a Visiting Professor in the Department of Business Management, University of North Bengal in 2022.
- Prof. Laxmikanta Padhi from the Department of philosophy is a Sectional President on the theme *Ethics and Social Philosophy* in the 95<sup>th</sup> Session of Indian Philosophical Congress at Mahatma Gandhi Antarrastriya Hindi Viswavidyalaya, Wardha, Maharashtra from 27<sup>th</sup> to 30<sup>th</sup> December, 2022.
- Prof. Laxmikanta Padhi from the Department of philosophy has received Prestigious Award for EXCELLENCE IN HIGHER EDUCATION in the discipline of Humanities and Social Sciences by VIF, 2021.

## DEPARTMENT OF POLITICAL SCIENCE

### About the Department:

The Department of Political Science is one of the oldest Departments with which North Bengal University began to cater to the needs of higher education in North Bengal and Sikkim since 1962. The Department revised PG syllabi in 2016 and introduced CBCS at the level of every semester for M.A. The Department also introduced CBCS for M. Phil and Ph. D. Course Work.

The students are assessed through continuous evaluation and 5% marks are reserved for attendance in every M.A. Semester. Students are also offered one practical Research Methodology training based on field survey. There are National Fellows working under the supervision of faculty. The Department has research programme under SAP DRS III.

A substantial number of scholars are pursuing their research works under the departmental PhD programme. The Faculty actively train teachers at the college level through workshops, refresher courses etc. at regular intervals. The Department also collaborates with the Centre for Himalayan Studies for the M.A. programme on Strategic & Area Studies, teaching of P.G. Diploma in Rural Development, Education & Extension with the Department of Lifelong Learning and research activities of the Centre for Women's Studies, NBU.

### Courses Offered:

- M. A.
- Ph. D.

### Research Focus:

- Political Thought and Theory
- Political Economy of Development
- Public Administration
- Indian Politics
- Foreign Policy
- Strategic Studies

### Student Strength:

Course	Year	Male	Female	Total	SC	ST	OBC-A	OBC-B	Gen
MA	Sem -I	36	50	86	33	11	10	12	20
MA	Sem - III	19	53	72	23	14	5	10	20

### Faculty Details:

Name	Qualification	Designation	Email
Prof. Sourmitra De	Ph. D	Professor	soumitrade@nbu.ac.in
Prof. Arun Kanti Jana	Ph. D	Professor	arunkantijana@nbu.ac.in

Name	Qualification	Designation	Email
Prof. Ranjita Chakraborty	Ph. D	Professor	ranjitachakraborty@nbu.ac.in
Shri Dyutis Chakrabarti	M.A	Assoc. Professor	dyutishc@gmail.com
Dr. Ramesh Dural	Ph. D	Assoc. Professor	rameshdural@nbu.ac.in
Prof. Rabi Bera	M.A	Asst. Professor	rabibera@nbu.ac.in
Prof. Souradeep Sen	M.A	Asst. Professor	souradeepsen@nbu.ac.in
Dr. Isha Tirkey	Ph. D	Asst. Professor	ishatirkey@nbu.ac.in
Ms. Sovna Khati	M.A. , M.Phil	Asst. Professor	sovnakhati@nbu.ac.in

#### Details of Non-Teaching Staff:

Name	Qualification	Designation
Sri Ramprosad Bhattacharjee	Graduate	Sr. Assistant
Sri Amiri Mandal	Graduate	Peon (Casual)

#### Details of Student Fellowship:

Name	Fellowship Status	Gender
Lob Singh (M.Phil)	UGC/NET/JRF	Male
Diksha Tamang (M.Phil)	UGC/NET/JRF	Female
Narayan Barman	State JRF/State Fellow	Male
Sunandita Sur	State JRF/State Fellow	Female
Raja Lohar (M. Phil)	NFSC	Male
Laxmi Das	NFSC	Female
Sulochana Ramudamu	NFSC	Male

#### Details of Research Scholars without Fellowship:

Name	Supervisor Name	Gender
Jaya Kepchaki	Dr. Ramesh Dural	F
Sanjib Lama	Dr. Ramesh Dural	M
Nivia Goswami	Dr. Ramesh Dural	F
Abinash Darnal	Dr. Ramesh Dural	M
Chandan Kumar Roy	Dr. Arun Kanti Jana	M
Barnana Bhattacharya	Dr. Arun Kanti Jana	F
Abhirupa Mazumdar	Dr. Arun Kanti Jana	F
Zakiya Sahanaj	Prof. Soumitra Dey	F
Soumalya Ghosh	Prof. Soumitra Dey	M
Laxmi Das	Prof. Soumitra Dey	F
Jitendra Shah	Prof. Ranjita Chakraborty	M
Shubhajit Shome	Prof. Ranjita Chakraborty	M
Bimal Ray	Prof. Ranjita Chakraborty	M

Name	Supervisor Name	Gender
Sohini Datta	Dr. Isha Tirkey	F

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details
Prof. R Chakraborty	ICSSR sponsored 1 day short term course on Research Methodology organized by Institute of Tai Studies and Research, April 3-9, 2021
	Online Workshop on Public Administration. Institute of Leadership and Governance, Maharaja Sayaji Rao University , Baroda, 26-27 <sup>th</sup> April 2021
	Delivered a Keynote Address in a One Day National seminar on Perspectives of Social Justice in India, 22 <sup>nd</sup> February,2022, Organized By Banwarilal Bhalotia College, Asansol.
	Delivered a Special Lecture on Breaking the bias in the Siliguri Institute of Technology on 8 <sup>th</sup> March,2022
	Presented a Plenary Speech, “Covid Conundrum: Global Challenges in Human Rights” in UGC-Stride C-1 sponsored international seminar on “Human Rights and Global Pandemic: Issues and Response”,held on 10 <sup>th</sup> & 11 <sup>th</sup> December, 2021, Kula College, Manipur
	Delivered an Invited Speech on “Public Administration” in the 1 day national Workshop, held on 26 <sup>th</sup> -27 <sup>th</sup> April,2021, organized by Institute of Leadership and Governance, the Maharaja SayajiRao University of Baroda, Gujarat.
	Delivered an Invited Speech on “Gandhi and His Ideas for India” in the 1 day International Webinar on Understanding gandhiji’s Ideas and Philosophy, held on 2 <sup>nd</sup> October,2021, organized by Coochbehar college
	Delivered an Invited Speech on “Proposal to Increase the Legal age of marriage for Girls to 21 ” in the 1day Panel Discussion held on 23 <sup>rd</sup> December,2021, organized by Atal Bihari Institute for Public Policy and International Studies,MSU Baroda, Gujarat.
Prof. A K Jana	Invited Lecture Delivered on 23 <sup>rd</sup> March 2022 ICSSR-Eastern Regional Centre Sponsored Two Day Offline International Seminar organized by Department of Political Science, Surya Sen Mahavidyalaya, Siliguri in Collaboration with IQAC from March 22-23, 2022.
Sovna Khati	Panelists in the Inter-College one day student seminar on ‘Contemporary Social and Political Movements’, organized by the Department of Sociology and Political Science in collaboration with IQAC Salesian College, Siliguri Campus (December 20, 2021)

**Publications:**

<b>Author</b>	<b>Details</b>	<b>ISBN/ISSN</b>
Prof. A. K. Jana	The Ascendance of Hindu Nationalism and the Consequent Escalation of Fear Among the Minority Muslims in India's Plural Society in Bikash Ranjan Deb, <i>Culture of Fear in World Politics: Origin and Ramifications</i>	978-93-91741-32-7
	Liberalisation of the Indian Economy and the Demand for Resources by State Governments in Federal India in Saroj Kumar Verma (ed.), <i>Cooperative Federalism in India: Myth or Reality</i> ,	ISBN 978-93-87294-46-2
Prof. R. Chakraborty	Political Trust, Democracy and The Pandemic: The Indian Scenario, in Rauth, Amit. And Arunlal,K.(ed) <i>Covid Narratives and Politics of the New Normal</i>	978-1-403-94456-6
	Citizenship: Reflecting on Shifts and Fluidity, in Muhindro(ed) <i>Citizenship, Illegal Migration and Politics</i> ,	978-93-91374-69-3
	Caste Networks and Women Migrant Workers: Traps in “New Normal” Times, in Deb,Papia,(ed). <i>The Silent Crisis over Social Security in the Pandemic Era</i> ,	978-93-90692-38-5
	Pandemic and The Social Fabric: Reflections on India, in ,Gour Ch.Ghosh(ed) <i>Decoding Covid 19 and the Associated Issues</i> ,	978-93-84104-90-0
	National Education Policy2020:Recharting Regulationand Governance in the Higher Education Sector, in G.V.Arora &Debashish Poddar(ed) National EducationPolicy 2020:The Road Ahead(With special focus on North-East India), Centre for Law, Public Policy and Governance, National Law Universityand Judicial Academy,Assam.	978-81-954276-1-1
Dr. R. Dural	Decentralized Governance and the Pandemic Challenges: The Darjeeling Hills in Context in in Deb,Papia,(ed). <i>The Silent Crisis over Social Security in the Pandemic Era</i> ,	978-93-90692-38-5
Sri R. Bera	‘Rashtro Tatwer Ruprekha; Vaab baad, Udar Baad, Marx Baad O Gandhi Baad’ in Mukherjee, Pradipta (ed.), <i>Rajnoitik Tatwa; Dharona O Bitarka</i>	818064328
Dr. S. Sen	India and the Global South' in the 21st Century: Foreign Policy Perspectives in a Complex World, (ed.) Aneek Chatterjee	9788126934386
Dr. S. Sen	India and the United Nations' in India in the 21st Century: Foreign Policy Perspectives in a Complex World, (ed.) Aneek Chatterjee	9788126934379



<b>Author</b>	<b>Details</b>	<b>ISBN/ISSN</b>
Dr. S. Sen	Review: Bangladesh at 50: Development and Challenges, Jadavpur Journal of International Relations, Vol. 25, No. 1, pp. 1-5	0973-5984; Online : 2349-0047

**Research Projects Details:**

<b>Title of the Project</b>	<b>PI</b>	<b>Sponsored by</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>
Free legal aid services and advocacy organizations: a review of the civil society organizations in the districts of Jalpaiguri, Alipurduar and Darjeeling	Prof. Ranjita Chakraborty	NBU	2020	1 year	1,00,000
Measuring Women Empowerment: A study of Darjeeling Hills in the Context of Empowerment of Women Through Self Help Groups (SHGs)	Dr. Ramesh Dural	NBU	2019	1 year	1,00,000
Literary organizations and Public Sphere in Uttar Pradesh: Study of Hindi Sahitya Sammelan and Anjuman Tariqq-I Urdu (Hind). Funded by University of North Bengal	Sovna Khati	NBU	2021	1 year	1,00,000

## DEPARTMENT OF SANSKRIT

### About the Department:

The Department of Sanskrit started its journey at the Jalpaiguri Campus, University of North Bengal with Master of Arts programme from 16<sup>th</sup> August 2013. The Department offers four optional specializations in the groups of Veda, Vyakarana, Darsana and Kavya in the Post Graduate level.

The Department organizes Seminar, Workshop and Lecture Programmes so as to enrich the students with curriculum beyond the Syllabus. Since inception the department has remained engaged in popularizing the Study of Sanskrit language and literature in the region. The Faculty Members regularly participate in different Faculty Development Program, Seminar, Workshop and Conference for improving their teaching skills in higher education. Simple Sanskrit speaking courses are regularly organized within and outside university campus to enable the learners speak in simple Sanskrit.

### Courses Offered:

- MA in Sanskrit

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Sudip Mandal	M. Phil, Ph. D.	Asst. Professor	sudipmandal@nbu.ac.in
Rafikul Alam	M.A., M. Phil	Asst. Professor	rafikulalam@nbu.ac.in
Lagnajeeta Chakraborty	M.A., M. Phil	Asst. Professor	lagnajeetachakraborty@nbu.ac.in

### Details of Seminar/Conferences /Webinar Attended by Faculty:

Name	Conference/Seminar Details	Date	Organiser
Sudip Mandal	Dr. Malay Bhattacharyya Memorial Lecture Series	24-27.04.2021	Shyamsundar Chatuspathi
	Special Lecture on Mahabhaaya-Paspasa Section	20.02.2022	Falakata College
	Special Lecture on Bakyapadiya-Brahamakanda	26.02.2022	Falakata College
	Special Lecture on Laghusiddhantakaumudyanusarena Sanjnaprakaranam	02.11.2021	Department of Sanskrit, Sitalkuchi college
	Chairman PhD Viva-voce Examination	21.04.2022	National Sanskrit University

**Publications:**

<b>Name</b>	<b>Title</b>	<b>Journal/Book</b>	<b>IISN/ISBN</b>
L Chakraborty	Literary Evidences of Agricultural Development in Ancient India	Anantaa	2394-7519
S Mandal	Sanskritajagati Taranathatarkavacaspateh Avadanam	Sanskrit Studies in The East	978-93-92622-23-6
S Mandal	Tathyabhandaravyavasthapane Anubandhanam Upayogah	Sodhanidhi	-

## DEPARTMENT OF SOCIOLOGY

### About the Department:

The Department of Sociology, initially as a combined Department of Sociology and Social Anthropology, was established in the year of 1976. In 2002 Anthropology was emerged as a separate Department the University and then onwards Department of Sociology progressed further on its own.

As part of PG curriculum the Department undertakes team field work with the students of final semester for two weeks every year. Besides teaching, the faculties are active in conducting research projects, writing research articles, books and project reports. The teachers participate in national and international seminars and workshops, visit academic institutions of repute within and outside the country, and participate in extension and administrative activities of this University and other Universities.

The Department undertakes the task of revising and updating the Post Graduate and undergraduate syllabi regularly. The Department has the distinction of producing a group of vibrant research scholars who have been actively involved in research and in taking part in Seminars/Conferences and Workshops held at different places within India as also in Nepal.

### Courses Offered:

- M. A.
- Ph. D.

### Research Focus:

- Urban Sociology
- Refugee Studies
- Sociology of Religion and Health
- Tribal Studies

### Faculty Details:

Name	Qualification	Designation	Email
Prof. Sanjay Roy	M.A. , Ph.D.	Professor	sanjayroy@nbu.ac.in
Prof. Saswati Biswas	M.A. , Ph.D.	Professor	saswatibiswas@nbu.ac.in
Ms. Priyanka Karmakar	M.A.	Asst. Professor	priyankakarmakar@nbu.ac.in

### Details of Non-Teaching Staff:

Name	Qualification	Designation
Mr. Shambhu Das	B. Com.	Sr. Assistant
Mr. Premananda Ghosh	M.P. (pass)	Gr-D (Casual Peon)

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinar	Date	Title of the Paper Presented
Prof. Sanjay Roy	The 46 <sup>th</sup> Indian Sociological Conference held at Mumbai University	08-10 Dec 2021	“Preserving Freedom and Agency in Everyday Life”

**Publications:**

Name of the Author(s)	Publication Details
Roy S.	<ol style="list-style-type: none"> <li>1. The Partition Impact: Looking through the Prism of a Village Community in Present Bangladesh'. In Kanchan Mukhopadhyay and Ratna Dhar (eds.) <i>Boundaries and Beyond: Studies in Trans-Border Communities and Cultures</i>. Anthropological Survey of India, Kolkata and Bookwell, Delhi. 2021: 97-115. (ISBN 978-93-86578-57-0).</li> <li>2. “The Aesthetics of Living: The Deepening Crises”, <i>Social Trends: Journal of the Department of Sociology of North Bengal University</i>, Vol. 8, 2021 (ISSN: 2348-6538): 246-270.</li> <li>3. ‘Need for an Anti-Spitting Abhiyan”, <i>Social Trends: Journal of the Department of Sociology of North Bengal University</i>, Vol. 8, 2021: 1-3.</li> <li>4. “Cultural Appropriation and Consumption in Neo-Liberal Times” <i>Social Trends</i>, Vol. 9, 2022 (ISSN: 2348-6538): i-ix.</li> </ol>
Karmakar P.	Published a paper titled ‘Self Formation and Life of Daughter in Marwari Community in Siliguri’ <i>Social Trends: Journal of the Department of Sociology of North Bengal University</i> , vol.90, 2022: 107-130.

**Miscellaneous:**

Prof. Sanjay Roy was elected s Convener of RC 28: Sociology of Everyday Life of the Indian Sociological Society in the 46<sup>th</sup> Conference of All India Sociological Conference held at Mumbai University on 8-10 December 2022 for a period of two years.

## DEPARTMENT OF WOMEN'S STUDIES

### About the Department:

The Department of Women's Studies was initially an UGC sponsored Centre and introduced M A in Women's Studies from the Academic year 2021-22.

Briefly, the purpose behind the establishment of the Centre for Women's Studies at the University of North Bengal was two-fold, namely

- a. To articulate the situations of women in general and their developmental needs through academic research, teaching programmes with an ultimate policy focus;
- b. To fulfill critical gender needs and to build self-awareness and self-confidence among women in the region, through grass root empowerment activities that would encourage their articulate participation in the institutions of governance.

Since its establishment in 2000, programmes undertaken at CWS have sought to reach out to women of all sections from the North Bengal districts and Sikkim, in order to fulfill these objectives. The core activities undertaken by CWS in framing a regional research programme in Women's Studies are an integral part of the CWS Action Plan. CWS also provides critical community support services, and networks with Government institutions, women's organizations and NGOs in order to generate Community Action for the fulfillment of regional women's needs.

Keeping the basic objectives in view, the Centre for Women's Studies has endeavored to coordinate multidisciplinary activities that can synergies the expertise into a definite core for Women's Studies pertaining to the North Bengal region. The Department has also undertaken programmes to extend research and training skills of individual scholars and departments, within and without the University system. Projects and programmes undertaken by the Department have sought to formulate development policies for the betterment and empowerment of the women of this region. To realize and attain the above, the Centre has established an interface of technical, academic and administrative skills throughout the region. Various departments at the University have already established programmes in Women's Studies with a significant research component in addition to their teaching content. The Centre has endeavored to consolidate and strengthen these studies and capabilities under its umbrella.

Considering the growing responses in the field of Women's Studies P.G. Course in Women's Studies was started from the academic session 2021-22.

### Course Offered:

- M. A. in Women's Studies

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Zinia Mitra	M.A, Ph. D	Director	ziniamitra@nbu.ac.in
Dr Beethika Moni Dutta	M.Sc. Ph. D	Assistant Professor	beethicws@yahoo.co.in

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Asit Singha	Madhyamik	Peon

**Details of Seminar/Conferences/Webinar Attended by Faculty:**

Name	Details of Seminars / Conferences / Webinars	Date	Title of the Paper Presented
Prof. Zinia Mitra	Refresher Course in 'Gender Discourse: Theory and Practice' organized by UGC - Human Resource Development Centre, University of North Bengal	31.08.21-13.09.21	"Gender Trouble?"
Prof. Zinia Mitra	International Seminar on 'Non Fiction Now' organized by Massy University, New Zealand	02.12.21-03.12.21	"Local Feminisms Global Conversations."
Prof. Zinia Mitra	Refresher Course-04 in 'Postcolonial Thought and Indian Literature' organized by UGC – Human Resource Development Centre, University of North Bengal	13.01.22	"What is 'Postcolonial' in Postcolonial Indian English Poetry?"
Prof. Zinia Mitra	7th Faculty Induction Programme (FIP-07) organized by UGC – Human Resource Development Centre, University of North Bengal	07.02.22	"Poetry and Silence"
Prof. Zinia Mitra	International Women's Day	08.03.2022	Attended
Dr. Beethika Moni Dutta	International Women's Day	08.03.2022	Attended

**Details of Seminar / Conferences / Webinar Attended/Organized:**

Name / Organizer	Details of Seminars / Conferences / Webinars	Date
Dept. of Women's Studies	Refresher Course	31.08.2022 – 13.09.2022
Dept. of Women's Studies	International Women's Day	08.03.2022

**Publication:**

<b>Name of the Author(s)</b>	<b>Publication Details</b>
<b>Zinia Mitra</b>	Vasentasena: The Marginalised Centre, <i>Sudraka's Mrcchakatikam : A Reader</i> , ed. Saptarshi Mallick, 2022
Soumyadip Ghosh and <b>Zinia Mitra</b>	'Who says Language needs words? Newness and Difference in the Selected works of K. Satchidanandan', Vol. 36, no.XIV 2021. ISSN - 0976-0822

**Research Projects Details:**

<b>Title of the Project</b>	<b>Funding Body</b>	<b>Year of Sanction</b>	<b>Duration</b>	<b>Budget (Rs.)</b>	<b>Name of PI</b>
Body Positivity	NBU	2021	10 months	100000/-	Zinia Mitra
Status of Women in Dhimal Community	NBU	2021	10 months	100000/-	PI – Prof. Zinia Mitra Co-investigator – Dr. Beethika Moni Dutta





**CHAPTER – IV**  
**RESEARCH CENTRES**



## BIOINFORMATICS FACILITY

### About the Centre:

The science of Bioinformatics, which is the melding of molecular biology with computer science, is essential to the use of genomic information in understanding human diseases and in the identification of new molecular targets for drug discovery. Bioinformatics involve the use of techniques including applied mathematics, informatics, statistics, computer science, artificial intelligence, chemistry, and biochemistry to solve biological problems. Major research activities in the field include sequence alignment, gene finding, genome assembly, protein structure alignment, protein structure prediction, prediction of gene expression and protein-protein interactions, and the modeling of evolution.

The Bioinformatics Facility of the University of North Bengal was established in November 2006 with the help of the grant from the Department of Biotechnology, Govt. of India. Since then the facility has marched forward steadily. The Centre has every modern facility of information and communication including necessary hardware and software and provides access to the faculty members, research scholars and students from nearby universities, colleges and research institutions interested in working in the field of bioinformatics.

The Coordinator's group is actively engaged in research in the field of genomics and proteomics of nitrogen fixing bacteria and food pathogenic bacteria. Protein structure prediction, biological sequence analysis, phylogenetic study, molecular modeling and molecular docking are the major thrust areas.

### Recent Projects Conducted by the Centre:

- Indo-Tunis Project on “Phytoremediation of Heavy Metal-Contaminated Soils in Tunisia and India using Frankia-Alnus symbiosis”.
- A Bioinformatics perspective to impede the tubercle bacillus (TB) devastation in West Bengal
- Sequencing and analysis of FIVE Frankia genomes, Sponsored by US Department of Energy
- Development of novel methodology for understanding the mechanism of nitrogen fixation through codon usage analysis related genes and protein structure modeling of relevant gene product (protein) and its implication, sponsored by the DBT, Govt. of India
- DST sponsored project for production of transgenic tea for fungal resistance
- UGC sponsored project on detection of best Alder-Frankia symbiosis using molecular markers

### Centre Coordinator:

Name	Qualification	Email
Prof. Arnab Sen	Ph. D.	arnab.sen@nbu.ac.in

**Publications:**

<b>Author</b>	<b>Title of the Paper</b>	<b>Journal</b>	<b>Date of Publication</b>
Dr. Arnab Sen	Metagenomic outlooks of microbial dynamics influenced by organic manure in tea garden soils of North Bengal, India.	Archives of Microbiology, ISSN 0003-9276	2021-09-21
	Effect of actinorhizal root exudates on the proteomes of <i>Frankia soli</i> NRRL B-16219, a strain colonizing the root tissues of its actinorhizal host via intercellular pathway.	Research in Microbiology, ISSN 0923-2508	2021-01-26
	A natural derivative from ethnomedicinal mushroom potentiates apoptosis, autophagy and attenuates cell migration, via fine tuning the Akt signaling in human Lung Adenocarcinoma Cells (A549).	Environmental Toxicology, ISSN 1382-6689	2021-07-28
	Synthesis of silver nanoparticles using underutilized fruit <i>Baccaurea ramiflora</i> (Latka) juice and its biological and cytotoxic efficacy against MCF-7 and MDA-MB 231 cancer cell lines	South African J. Bot, ISSN 0254-6299	2021-12-03
	Biochemical and microbial profiling establish “Eu” (a traditional fermented beverage of Toto people) as a probiotic health drink.	J Ethnic Food, ISSN 23526181	2021-04-01
	Structural insight into the binding of cyanovirin-N with the spike glycoprotein, Mpro and PLpro of SARS-CoV-2: protein-protein interactions, dynamics simulations and free energy calculations.	Molecules, ISSN 1420-3049	2021-04-27
	Structural elucidation and chemical characterization of underutilized fruit silverberry ( <i>Elaeagnus pyriformis</i> ) silver nanoparticles playing a dual role as anti-cancer agent by promoting apoptosis and inhibiting ABC transporters.	South African J. Bot., ISSN 0254-6299	2021-09-21
	Synthesis, physicochemical characterization and biological activity of synthesized Silver and Rajat Bhasma nanoparticles using medicinally important <i>Clerodendrum inerme</i>	Journal of Phytology, ISSN 2075-6240	2021-04-28
	In silico inquest reveals the efficacy of Cannabis in the treatment of Post-Covid-19 related neuro-degeneration.	Journal of Biomolecular Structure and Dynamics, ISSN 1538-0254	2021-03-02

## **CENTRE FOR FLORICULTURE & AGRI-BUSINESS MANAGEMENT**

### **About the Centre:**

The Centre for Floriculture & Agri-Business Management (COFAM) was initially conceived as a research project on horticulture under aegis of the Department of Bio-Technology, North Bengal University. The idea behind the project was to promote horticulture in a region where it was not practiced on a regular basis, despite favourable soil and climate. A detailed proposal was then prepared and a request for funds was processed through the then Department of Food Processing, Government of West Bengal, to the Ministry of Commerce, Government of India. A grant of Rs. 2.74 crores were made available by the Ministry and the project was implemented in 2006.

After the project period was over, the University considered it as one of the best practices and decided to continue its functioning under the Department of Bio-Technology. Since then, COFAM has been undertaking demonstrative horticultural practices and extending core technology transfer to the growers and cultivators. At present the practice of COFAM is successful in popularizing cultivation of organic cauliflower, strawberry and dragon fruit in Nepal, Bhutan and Assam in addition to North Bengal.

COFAM is playing an instrumental role to bring back maximum number of deprived farmers especially women self-help group in the mainstream society and thus making them self-reliant by skilling them with innovative agriculture practices which yield more in short duration of time as compared to traditional chemical based method. COFAM has introduced high value cash crops like strawberry, capsicum, lettuce, broccoli, cherry tomatoes, pak-choy, basil, early cauliflower; etc. which does not require huge capital but gives high return. These organically produced crops have high demand in the urban areas and also fetch high revenue for the farmers, keeping this in view, COFAM has been Organizing a “the Sunday hat” on every Sunday from 10 am to 2 pm without any middle-men to bridge the gap between the farmers and consumer.

### **Certificate/Training Courses Offered:**

- a. Certificate course on sustainable Ecological Agriculture practices for organic farming
- b. Certificate course on cultivation Ilium, Orchid, Anthurium & Gerbera for cut flowers under semi-automated Green House condition.
- c. Certificate Course in plant tissue culture and Mushrooms spawn culture
- d. Short-term course on high value fruit orchard like Dragon Fruit, Strawberry, Red diamond Guava, Malta, (Citrus), Red lady Papaya, Mango, Litchi, and its Management.
- e. Hands-on training on Hydroponic farming
- f. Hands on Training on Edible Mushrooms like Oyster, Button, Shitake, Cordycep Militaris

**Research Focus:**

- Tissue culture activities
- Pearl farming
- Scaling up of vermicomposting to the industrial level

**Details of Non-Teaching Staff:**

Name	Qualification	Designation
Amrendra Pandey	M. Sc. (Horticulture)	Practical Demonstrator
Ranjan Sarkar	B.A.	Office Assistant
Swati Chowdhury (Saha)	BSc.	Laboratory Attendant
Anil Sarki	8 <sup>th</sup> Standard	Field Man
Niranjan Mandal	B.A.	Casual Worker
Subhash Singha	8 <sup>th</sup> Standard	Casual Worker

**Activities of the Centre:**

Sl. No.	Details of the Programme	No. of Participants	Date
1	Stakeholder meets on medicinal plants in West Bengal in association in Regional cum Facilitation Centre (RCFC), Eastern Region	75	24.11.2021
2	Developed “Miyawalki forest” in SSB camp Ranidanga, and trained the newly recruited SSB Personnel on ideas of making a mini (high-density) forest to presence our mother nature and increase oxygen concentration the atmosphere, maintain ground water level, during in aspect SARS COVID-19 situation in the August presence of Commandant Shri P.C. Negi.	300	25.11.2021
3	Inauguration of “Strawberry Village” in Patiramjote, Matigar block of Darjeeling by Dr. Nupur Das, Secretary, UG Council, NBU which was developed by COFAM in five years, with an adjective to promote Agro-tourism in the region and bring in idea of “pluck your own” so that farmer get more value for their produce.	-	20.12.2021
4	Two days seminar on Flowers cultivation for cut flower like lillium, orchid, gerbera, carnation anthurium and loose flower such as tuberose, jasmine, marigold to boost floriculture in North Bengal and incese the trade and live hood of the marginal farmers of this region.	75	19.02.2022
5	National seminar entitled “Advance technology in	100	11.03.2022

<b>Sl. No.</b>	<b>Details of the Programme</b>	<b>No. of Participants</b>	<b>Date</b>
	Organic Farming” for sustainable and ecological balance in which farmers from across North Bengal and Sikkim had participated in the August presence of Honorable Vice-Chancellor, Dean, and Registrar, selected farmers were also felicitated for using natural fertilizer and pesticide in their field.		

**Entrepreneurs trained in COFAM:**

<b>Sl. No.</b>	<b>Name of the Entrepreneur</b>	<b>Place</b>	<b>Crop</b>
1	Mr. Gopal Biswas	Mynaguri	Strawberry
2	Mr Surojit Mondal	Mynaguri	Strawberry
3	Mr Sachin Mitruka	Aambari	Seedless cucumber
4	Mr Biplab Das	Coochbehar	Coloured capsicum
5	Mr Farooq Hussain	Dhupguri	Dragon fruit
6	Mr. Chako Sebastian	Bagdogra	Dragon fruit
7	Mr. Ashok Dey	Kanki	Red lady papaya
8	Ms. Vinita Choudhury	Mathabhanga	Coloured Capsicum



## **CENTRE FOR HIMALAYAN STUDIES**

### **About the Centre:**

The Centre for Himalayan Studies, University of North Bengal is an Area Studies Centre funded by the University Grants Commission under Area Studies Programme. It was established on 11<sup>th</sup> December, 1978. Since its inception the Centre's research strategy has been aimed mainly at studying the Himalayan history, geography, economy, society, polity in general and the environment, development, people and culture in particular in the Eastern Himalayan region. The Centre has regular M. Phil. and Ph. D. programmes in Himalayan Studies/Area Studies.

Since 2005, the Centre has started a two-year post-graduate programme in Strategic and Area Studies. The course is multi-disciplinary, and honours graduates from all branches of Social Science, namely, History, Geography, Economics, Political Science, Sociology can join the course. In addition, graduate defense personnel can also take admission.

The Centre receives grant from the University Grants Commission under its Area Studies Programme. The grant is utilized by undertaking various field-based research projects, inviting visiting faculty from different parts of the country, organizing seminars and special lectures, purchasing books, journals, documents and equipment, publishing journals and serials. The Centre has a Documentation Cell which collects and stores published and unpublished documents, e-resources, newspaper clippings, periodicals, journals and books on the Eastern Himalayas and caters to eclectic researchers interested in Himalayan Studies.

### **Courses Offered:**

- MA in Strategic and Area Studies
- Ph. D.

### **Research Focus:**

- Social, Politico and Economic issues in Bhutan, Sikkim, Darjeeling Hills, Arunachal Pradesh and adjoining areas of Tibet Autonomous Region.

### **Faculty Details:**

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>
Karubaki Datta	MA, PhD	Professor
Maitreyee Choudhury	MA, PhD	Professor
Swatahsiddha Sarkar	MA, M. Phil, PhD	Professor
Ujjwal Bhui	MA, PhD	Professor
Binayak Sundas	MA, M. Phil, PhD	Assistant Professor
Adwitya Thapa	MA, M. Phil	Assistant Professor

**Details of Officer:**

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>
Sri Apurba Paul	MA, MLIS	Documentation Officer

**Details of Non-Teaching Staff:**

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>
Sri Manotosh Ghosh	HS	Junior Office Assistant cum Typist (Group C)
Smt. Munna Mangar	Primary	Senior Peon
Sri Ajay Takur	Graduation	Group D (Casual)

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

<b>Name</b>	<b>Seminar/Conference Name</b>	<b>Date</b>	<b>Organizer</b>
Dr. Swatasiddha Sarkar	Mountain, Modernity and the search for epistemic routes in Himalayan Studies	25-27.03.2022	Himachal State Museum
	National Conference on Contemporary Issues in Sociology of Nepal	21-22.11.2021	Central Department of Sociology, Tribhuvan University

## CENTRE FOR STUDIES IN LOCAL LANGUAGES AND CULTURES

### About the Centre:

The Centre for Studies in Local Languages and Cultures was established in May 2001 by the University of North Bengal with the broad aim to capture and highlight the spectrum of plurality and richness of the ethnic languages and culture of North Bengal and in the process to become a platform for study and research.

North Bengal offers a scenario of immense diversity of cultures, ethnicities, languages and histories, existing here over a very long stretch of time. There was a strong demand that the University should take effective steps to preserve and conserve this heritage as well as initiate research into the various languages and cultures of the region. It was also felt to be an imperative to promote interaction with the people and artists of the various ethno-linguistic communities of the vast cultural terrain. To meet these basic objectives, the Centre for Studies in Local Languages and Cultures was set-up at the University of North Bengal in 2001.

The Centre carries out research and field work on the local language of the region, while the folk cultural side consisting of folklore, folk arts, folk crafts, rituals, festivals, folk tales, folk dramas, proverbs, and so on are taken care of by the cultural unit of the Centre. The Centre has been actively organizing cultural meets, seminars, workshops, special lectures and hands on training to promote various ethno-linguistic communities of the massive cultural topography.

### Faculty Details:

Name	Qualification	Designation	Email
Dr. Koushik Joardar	M.A, Ph. D	Director	koushikjrdr@gmail.com

### Details of Non-Teaching Staff:

Name	Qualification	Designation
Jolly Majumdar	MA, BLIS, BCA	Project Assistant
Chandan Mallick	Madhyamik	Peon

## FISHERIES RESEARCH AND TRAINING CENTRE

### About the Centre:

Fisheries Research and Training Centre of Department of Zoology, University of North Bengal has mandate of research, training and extension in different aspects of freshwater aquaculture in North Bengal region including Darjeeling hills. The Centre has eleven numbers of ponds of assorted types namely nursery, rearing and stocking occupying an area of 1.5 ha. The ponds are located in the University campus alongside the flowing Magurmari river. The Centre has also facilities like onsite Field Laboratory having the facility for research and training, extended aquaculture unit with cemented and Fibreglass Reinforced Plastic tanks of varying shape and size and a circular eco-hatchery.

The concept of the Centre was initiated in 1994 under funding support from 'Jawahar Rojgar Yojna' and routed through the Department of Fisheries, Government of West Bengal and Siliguri Mahakuma Parisad. After the successful completion of the construction of the ponds of different categories and a Field Laboratory, the Centre was inaugurated in 1998.

Presently one pond is being maintained for rearing the Indian Major Carps viz. *Catla catla* (Catla) to carry out current research work on the somatic growth and reproduction in carps. In addition to the *Catla catla*, the rearing of *Labeo rohita* (Rohu), *Cirrhinus mrigala* (Mrigala), *Danio rerio* (Zebrafish), *Puntius sp.* (Punti) are also being maintained simultaneously for time to time research aptitude. The other two stocking ponds primarily shelter the air-breathing fishes viz., *Heteropneustes fossilis* (Singhi), *Clarias batrachus* (Magur), etc. Besides, all the ponds are also house various kinds of phytoplankton and zooplankton, which serve the natural food for fish, and serve as a vital component of the pond ecosystem in maintaining primary productivity.

### Research Focus:

- Survey and study of Ichthyofaunal diversity of Rivers of Eastern Himalaya hills and Terai region of West Bengal
- Production of fish food organisms and study of nutrient requirements of indigenous hill stream fish for their propagation
- Captive breeding and rearing of some indigenous and exotic ornamental fishes
- Formulation of probiotics for Indian Major & Minor Carps

### Activities of the Centre:

- To augment fish seed and fish production using modern technology through its retained derelict water areas
- To create a durable asset, capable of generating future employment opportunity for the small and marginal farmers in aquaculture. In doing so, the fish farmers of the area get the counseling benefit of soil and water quality of tanks and ponds

- To produce table sized fish; propagate endangered species of fish (edible and ornamental) of Darjeeling hills and Terai region
- To undertake biotechnological investigations on the low cost fish food production using simple techniques benefitting the ecological conditions of North Bengal and the small to marginal fish farmers

## HIGH ENERGY & COSMIC RAY RESEARCH CENTRE

### About the Centre:

The Centre was established jointly by the University Grants Commission and the Government of West Bengal in 1991 under the program “Improvement of Research in the Universities”. The Centre is engaged in theoretical as well as experimental advanced research in different branches of High Energy Astrophysics and Astroparticles including Cosmic Rays. The Centre has expertise on cosmic rays and Monte Carlo Simulation study of cosmic ray air shower which is globally recognized by the experts in the field. Research Scholars from different universities and even premier Research Institute of the Country visited the Centre to get training on the mentioned subjects.

### Research Focus:

- Astroparticle Physics
- High energy astronomy
- General Relativity and Astrophysics
- High Energy Physics
- Stellar Data Analysis
- Computational Physics

### Details of the Officers:

Name	Qualification	Designation	Email
Dr. Arunava Bhadra	Ph. D.	Principal Research Physicist	abhadra@nbu.ac.in
Shri Arindam Mukherjee	M. Sc.	Principal Research Officer	am.hecrre@nbu.ac.in
Dr. Tamal Sarkar	Ph. D.	Scientific Research Officer Gr II	tsarkar@nbu.ac.in

### Details of Non-Teaching Staff:

Name	Designation
Sadhan Paul	Helper Gr. - II

### Details of Research Scholars:

Name	Supervisor	Co-Supervisor	Gender
Arundhati Chakraborty	Dr. S. K. Sarkar	A. Bhadra	Female
Samrat Ghosh	Prof. A. Mukhopadhyay	A. Bhadra	Male

**Seminar/ Conference/Workshop Attended:**

Name	Details of the Seminar/ Workshop/ Programme
Dr. Arunava Bhadra	Exploring The Cosmos: An International Conference on Relativistic Universe, organised by HECRRC, NBU, 15-16.03.2022
Dr. Tamal Sarkar	International Conference on Cosmology & Gravity, organised by Gurukul Kangri (Deemed to be University), Haridwar, Uttarakhand, India, 23-24.03.2022
	National Science Day 2022: Life & Works of Sir C V Raman, organised by Indian Institute of Social Reform & Research, Kolkata, 13.03.2022
	International Seminar on Astrophysics and Cosmology, organised by ICARD, Physics Department, NBU, 03-Mar-2022
	65 <sup>th</sup> DAE-BRNS Symposium on Nuclear Physics, 2021, organised by BARC at DAE Convention Centre, Mumbai, 02-16.12.2021
	International author workshop on “Academic Writing and Publishing”, organised by Manipur University , 21-9.10.2021
	Chandra’s Contribution in Plasma Astrophysics, organised by School of Physical Sciences, JNU, New Delhi, 19.10.2021 – 02.11.2021
	Workshop on High Performance Computing in Astronomy and Astrophysics, organised by Centre for Computational and Data Sciences, IIT Kharagpur, 20-23.09.2021

**Professional / Faculty Development Programme Completed:**

Name of the Officers (Scientists)	Professional Body / Agency	Name of the FDP/Course	Duration
Dr. Tamal Sarkar	NPTEL- AICTE	FDP on Electronic Waste Management-Issues and Challenges	24-Jan-2022 to 18-Feb-2022
	NPTEL- AICTE	Physics of Renewable Energy Systems	26-Jul-2021 to 15-oct-2021
	TLC of IUCAA under the PMMMNTT scheme, DOE, Government of India	Astronomical data analysis using Python	08-Nov-2021 to 12-Dec-2021
	Positron Foundation CITTIC, Cochin University of Science and Technology, Cochin	DATA DRIVEN ASTRONOMY	10-Sep-2021 to 13-Oct- 2021
	Clarivate	Web of Science Certification Program	01-Jan-2022 to 28-02-2022

**Seminar/Webinar Organized:**

Name of Seminars/Conference/Webinar Organized	Date
Exploring The Cosmos: An International Conference on Relativistic Universe	15-16.03.2022

Name of Seminars/Conference/Webinar Organized	Date
Convener: Dr. Tamal Sarkar Program Director: Arindam Mukherjee	
Webinar on Fundamental of High Performance Computing Program Director: Arindam Mukherjee	04.09.2021
Puzzle of Dark Mmatter Program Director: Arindam Mukherjee	02.06.2021
The role of NSS & its Volunterees in dealing with mental stress issues during Covid-19 lockdown situations Program Director: Arindam Mukherjee	30.05.2021
Non-Commutative fluids, a Hamiltonian description and NC effects in cosmology Program Director: Arindam Mukherjee	23.05.2021

### Research Publications:

Authors(s)	Publication Details
Bhadra, Arunava and Bhattacharya, Mahasweta	A quest for the origin of the Uneven Spread pf Covid-19 cases , <i>Journal of Extreme Events</i> , ISSN 2345-7376, Vol. 08, No. 03, 2150020 (2021), pp. 1-17
Raychaudhuri, B, Ghose , S. and Bhadra, A.	A New Thought Experiment on Relativistic Length Contraction, <i>The Physics Educator</i> , ISSN: 2662-3395, Vol. 03, No. 03, 2150012 (2021), pp. 1-8
Ghosh, S., Bhadra, A. and Mukhopadhyay, A.	Gravitational lensing study of cold dark matter-led galactic halo, <i>International Journal of Modern Physics D</i> , ISSN: 0218-2718, Vol. 30, No. 12, 2150089 (2021), pp. 1-17
Sarkar, K., Samrat Ghosh, S. Arunava Bhadra, A, and Mukhopadhyay, A.	Test of global monopole based alternative dark matter model from gravitational lensing studies, <i>Classical and Quantum Gravity</i> ISSN: , Volume 38, Number 13(2021), pp. 1-11
Ghose, S., & Bhadra, A.	Is non-particle dark matter equation of state parameter evolving with time? , <i>The European Physical Journal C</i> , ISSN: 1434-6044, volume 81, Article number: 683 (2021), pp- 1-6
Banik, P.,& Bhadra, A.	An interacting molecular cloud scenario for production of gamma-rays and neutrinos from MAGIC J1835-069, and MAGIC J1837-073, <i>The European Physical Journal C</i> , ISSN: 1434-6044 volume 81, Article number: 478 (2021), pp. 1-10
Ghosh, S., Bhadra, A. , Mukhopadhyay, A. & Sarkar, K.	Baryonic Tully–Fisher Test of Grumiller’s Modified Gravity Model, <i>Gravitation and Cosmology</i> , ISSN: 0202-2893 volume 27, pages 157–162 (2021),
Bhadra, A., Mukherjee, A. & Sarkar, K.	Impact of population density on Covid-19 infected and mortality rate in India. <i>Model. Earth Syst. Environ.</i> ISSN: 2363-6203, 7, 623–629 (2021). <a href="https://doi.org/10.1007/s40808-020-00984-7">https://doi.org/10.1007/s40808-020-00984-7</a>
Banik, Prabir and Bhadra, Arunava and Bhattacharyya, Abhijit	Interpreting correlated observations of cosmic rays and gamma-rays from Centaurus A with a proton blazar inspired model, <i>Monthly Notices of the Royal Astronomical Society</i> , Volume 500, Issue 1, January 2021, Pages 1087–1094, <a href="https://doi.org/10.1093/mnras/staa3343">https://doi.org/10.1093/mnras/staa3343</a>



Authors(s)	Publication Details
Dey, R.K., Basak, A., Ray, S. and Sarkar, T.	Newly Born Extragalactic Millisecond Pulsars as Efficient Emitters of PeV Neutrinos. <i>Braz J Phys</i> ISSN : 1678-444851, 1406–1415 (2021). <a href="https://doi.org/10.1007/s13538-021-00958-9">https://doi.org/10.1007/s13538-021-00958-9</a>
Sarkar, T.	E-Waste threat and solution to the impending e-waste threat in India with special reference to West Bengal, IISRR- <i>International Journal of Research</i> ISSN: 2394-885X, Vol-7; Issue- II; pp. 131-146
Sarkar, T, Chaudhury, K, and Dey, Rajat K.	Variation of efficiency of accretion with spin around rotating black hole, <i>Proceedings of the DAE Symp. on Nucl. Phys. 65 (2021)</i> , ISBN : 8183720846, pp. 364-365
Basak, A, Sarkar, T., Dey R. K,	A hadronic cascade is a superposition of several electron-photon sub-cascades initiated by neutral pions, <i>Proceedings of the DAE Symp. on Nucl. Phys. 65 (2021)</i> , ISBN : 8183720846, pp. 504-505
Dey R.K., Basak A., Ray S. and Sarkar T.	PeV neutrinos from centrifugally accelerated electrons in extragalactic new born pulsars, <i>Proceedings of the DAE Symp. on Nucl. Phys. 65 (2021)</i> , ISBN : 8183720846, pp. 506-507

#### Project:

Title of the Project	Funding Agency	Year of Sanction	Duration	Budget	Name of PI
Influence of Dark sector on local and kinematics	SERB, Govt. of India	2020	3 years	Rs. 19,42,231	Dr. Arunava Bhadra

#### Awards and Recognition:

- Dr. Arunava Bhadra was awarded with Reviewer Excellence 2020 by Indian Academy of Sciences in recognition of outstanding contributions as a Reviewer for the Journal of Astrophysics & Astronomy in June 2021
- Dr. Tamal Sarkar has been recognized as senior member of InSc International Publishers (IIP) in recognition of Professional Standing on 2021-05-29

#### Miscellaneous:

- Dr. Tamal Sarkar served as the Director of the Centre for the period of two years with effect from 01.01.2020 to 31.12.2021. Mr Arindam Mukherjee took charge of the Director with effect from 01.01.2022

- Apart from the regular activities, Dr Tamal Sarkar of the Centre shouldered additional charge of the Development Officer with effect from 21.05.2019 to 16.03.2022. Dr. Arunava Bhadra has been acted as Chairman of the Committee for conducting Physics Classes at the Undergraduate Level
- Dr. T. Sarkar acted as Guest faculty to teach Basic Physics course for M.Sc. Bio-Technology, department of Bio-Technology, University of North Bengal (1st Semester Student-2022).
- Dr. T. Sarkar and Mr. A. Mukherjee acted as Faculty for BSc General Physics Course offered by NBU to Geology (Hons) UG student (Ref: 303/UG-19, Dated 24-09-2019, Office of the Secretary, Council for Undergraduate Studies).
- Dr. Tamal Sarkar has been selected as a Visiting Associate for three years from August 1, 2019, Under the Associateship Programme of IUCAA.
- Mr. Arindam Mukherjee and Tamal Sarkar acted as a content developer for the astronomy site 'CRAGA' url: <https://sites.google.com/view/cosmicraga>
- On 15/03/2022, the Centre conducted one observation event to moon. The program was coordinated by Mr. A. Mukherjee of the Centre as Event Director.

## **IUCAA CENTRE FOR ASTRONOMY RESEARCH & DEVELOPMENT**

### **About the Centre:**

The Inter-University Centre for Astronomy and Astrophysics (IUCAA) is an autonomous institution set up by the UGC to promote the nucleation and growth of active groups in astronomy and astrophysics at Indian universities. IUCAA aims to be a centre of excellence within the university sector for teaching, research and development in astronomy and astrophysics. For the last three decades, IUCAA has been promoting Astronomy and Astrophysics in Universities and Colleges across the country. Since its inception in 1988, it has become the nodal agency for research, teaching and science popularization activities in the country in the field of Astronomy & Astrophysics and allied fields.

IUCAA has set up six Reference Centers (IRC) in India with an aim to provide some basic facilities to university or college teachers and students in different regions for working in projects related to Astronomy & Astrophysics. IRCs provide up to date modern computing facilities, books and necessary software which are utilized by the students and researchers of the nearby region.

IRC at the University of North Bengal is one of such Centre started functioning from July 31, 1999. Thereafter IRC Data Centre was inaugurated on February 21, 2011. Recently, the name of IRC is changed to IUCAA Centre for Astronomy Research and Development (ICARD) which is housed at the Department of Physics, NBU with effect from 31<sup>st</sup> March, 2019. To meet the goal, the Centre strives to become an active center for Astronomy research & development through Astronomy teaching, promoting research and getting involved in public outreach program.

Presently, ICARD NBU is one of the seventeen ICARDs established by the IUCAA and thrives to become much enhanced Astronomy activities in West Bengal and North Eastern India.

### **Functions of the Centre:**

- To contribute to develop innovative teaching methods designed for Astronomy. This includes development of up to date course structures and new kinds of experiment/data analysis sessions which can be a part of a starting or existing Astronomy course in a University.
- To hold frequent workshops/schools/meetings at various levels at the University/College and at nearby regions.
- To have an active public outreach program for Astronomy.
- To be visiting Centre where nearby Astronomers can visit.

### **Research Focus:**

- Relativistic Astrophysics
- DATA analysis of X-ray Sources
- Cosmology
- Non-linear Dynamics

- Compact Objects

**Centre Coordinator:**

Name	Qualification	Email
Prof. Bikash Chandra Paul	Ph. D.	bcpaul@nbu.ac.in

**Activities of the Centre in 2021-22:**

- Research Scholars are engaged to analyze X-ray data of NASA to investigate Different X-ray emitting Pulsars. At present four Research Scholars are engaged in doing research using the facilities of the ICARD DATA Centre. It is proposed to use ASTROSAT-data from IUCAA soon.

**Research Publications:**

Authors(s)	Publication Details
<b>B. C. Paul</b> , B. C. Roy, A. Saha	Bianchi-I anisotropic universe with Barrow holographic dark energy, Euro. Phy. Journal C 82, 1-7 (2022)
A. Saha, A. Chanda, S. Dey, S. Ghose, <b>B. C. Paul</b> ,	R\enyi Holographic Dark Energy Models In multidimensional Universe, IJGMMP, 19 2250043 (2022)
R. Deb, P. Mandal, <b>B. C. Paul</b> ,	Wormholes in $f(R, T)$ – gravity with density dependent $\$B\$$ parameter in SQM, Euro Physics J Plus, 137 481 (2022)
<b>B. C. Paul</b> , S. D. Maharaj, A. Beesham,	Reconstruction of modified Gauss–Bonnet gravity for emergent universe- Reconstruction of modified Gauss–Bonnet gravity for emergent universe, Int. Journal of Modern Physics D, 2250045 (2022)
<b>B. C. Paul</b> , A Chanda, S Maharaj, A Beesham,	Late time cosmology in $f(R,G)$ gravity with interacting fluids, Class. Quantum Grav. 39, 065006 (2022)
R. Sengupta, <b>B. C. Paul</b> and P. Paul	Skyrme Fluid in Anisotropic Universe, Pramana, J. of Physics 96, 114 (2022)
<b>B. C. Paul</b> . Shyam Das, Ranjan Sharma,	Anisotropic Compact Objects with colour-flavour-locked equation of state in Finch-Skea geometry, Euro Phys. J. Plus 137, 525 (2022)
A. Chanda, <b>B. C. Paul</b> ,	Evolution of Primordial Black Holes in $f(Q)$ gravity with non-linear equation of state, Euro. Phys.l Journal C 82, 616 (2022)
Bibhash Das, S. Dey, S. Das, <b>B. C. Paul</b> ,	Anisotropic Compact Objects with Finch-Skea geometry in EGB gravity, Euro. Phys. Journal C 82, 519 (2022)
Ruchi Tamang, M. Ghising, M. Tobrej, Binay Rai, <b>B. C. Paul</b> ,	Spectral and Timing analysis of Be/X-ray Binary EXO 2030+375 during its giant 2021 outburst, Mon. Not. Roy. Astron. Soc. (MNRAS) 515, 5407-5415 (2022)



**CHAPTER – V**  
**DISTANCE EDUCATION**



## DIRECTORATE OF DISTANCE EDUCATION

### About the Directorate:

The University of North Bengal is recognized by the UGC under Section 2 (f) and 12 (B) of its Act and is accredited by the NAAC. The Directorate of Distance Education (DDE) of NBU is recognized and accredited by the Distance Education Bureau, UGC, New Delhi.

The University of North Bengal, through Directorate of Distance Education, provides quality undergraduate and post graduate in various subjects. These courses can be taken by students of any location and age in the comfort of their home.

### Courses Offered:

- B.A.
- B.Com.
- M. A. in Bengali
- M. A. in English
- M. A. in History
- M. A. in Nepali
- M. A. in Philosophy
- M. A. in Political Science
- M. A./M. Sc. in Mathematics

### Faculty Details:

Name	Qualification	Designation	Email
<b>Subject: English</b>			
Dr. Priyanka Chatterjee	M.A., Ph.D	Asst. Professor	site_ddenbu@nbu.ac.in
<b>Subject: Bengali</b>			
Dr. Nandita Mondal	M.A., Ph.D	Asst. Professor	dde.nandita@nbu.ac.in
Ms. Nabanita Pramanik	M.A., NET	Asst. Professor	nabanita@nbu.ac.in
<b>Subject: Nepali</b>			
Mr. Bikram Biswakarma	M.A. NET	Asst. Professor	bikramdalsing@nbu.ac.in
Mr. Birendra Chhetri	M.A. NET	Asst. Professor	birendra@nbu.ac.in
<b>Subject: History</b>			
Mr. Manoranjan Sarkar	M.A. NET	Asst. Professor	monoranjanodb04@nbu.ac.in
Mr. Abhishek Poddar	M.A. NET	Asst. Professor	abhisek@nbu.ac.in



<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Email</b>
<b>Subject: Philosophy</b>			
Dr. Juhi Routh	M.A. Ph.D	Asst. Professor	juhirouth@nbu.ac.in
Ms. Reshmee Sarkar	M.A. NET	Asst. Professor	reshmeenil2015@nbu.ac.in
<b>Subject: Political Science</b>			
Dr. Anindya Guha	M.A. Ph.D	Asst. Professor	anindyaguha2011@gmail.com
Dr. Bimalendu Bhaumik	M.A. Ph.D	Asst. Professor	bimalendubhaumik25@gmail.com
<b>Subject: Mathematics</b>			
Mr. Jayanta Roy	M.Sc. NET	Asst. Professor	jayanta2017math@nbu.ac.in
<b>Subject: Commerce</b>			
Mr. Parijat Nath	M.A. NET	Asst. Professor	dde_parijat@nbu.ac.in
Ms. Soumili Bishnu	M.A. NET	Asst. Professor	dde_soumili@nbu.ac.in

**CHAPTER – VI**  
**UGC RELATED CENTRES**



## INTERNAL QUALITY ASSURANCE CELL (IQAC)

### About the Cell:

The Office of the Internal Quality Assurance Cell (IQAC) of University of North Bengal was established on 10<sup>th</sup> July 2003. At present, the Cell has fourteen members with the Vice-Chancellor as the Chairperson and the Director as the Coordinator of IQAC.

One of the important functions of IQAC is to develop realistic and attainable quality bench marks for each of the academic and administrative activities. One of the most critical functioning of IQAC is to keep the institution abreast of and abuzz with quality sustenance activities on a wide gamut of pertinent issues.

### Composition of IQAC:

1	Dr. Subires Bhattacharyya, Hon'ble Vice Chancellor, NBU	Chairperson
2	The Dean, Faculty Council for PG Studies in ACL, NBU	Member
3	The Dean, Faculty Council for PG Studies in Science, NBU	Member
4	Prof. Suparna De Sarkar, Dept. of Mathematics, NBU	Member
5	Prof. Pranab Ghosh, Dept. of Chemistry, NBU	Member
6	Prof. Subir Sarkar, Dept. of Geography & Applied Geography, NBU	Member
7	Prof. Ranjita Chakraborty, Dept. of Political Science, NBU	Member
8	Prof. Mohan Prasad Dahal, Dept. of Nepali, NBU	Member
9	Prof. Anirban Misra, Dept. of Chemistry, NBU	Member
10	Registrar, NBU	Member
11	Swami Atmapriyananda, Vice Chancellor, Ramakrishna Mission Vivekananda University, Howrah	Member
12	Dr. Indrila Guha, Principal, Basanti Devi College, Kolkata	Member
13	Sri Harshavardhan Neotia, Chairman, Ambuja Neotia Group	Member
14	Sri Goutam Deb, Minister-in-Charge, Dept. of Tourism, Govt. of WB	Member
15	Prof. Soumitra De, Dept. of Political Science, NBU	Director

IQAC is supported by the following Administrative Staff -

- Shri Nilkantha Biswas
- Shri Jyotirmoy Biswas

### Major Activities & Quality Initiatives (2021-22)

- Self-Study Report was prepared for validation

## UGC - HUMAN RESOURCE DEVELOPMENT CENTRE

### About the Centre:

The Human Resource Development Centre (HRDC) aims at making Higher Education teachers and administrators able, adjust their attitudes, hone their skills and enhance their knowledge to be a competent teachers about the fundamentals of Higher Education in domestic and global contexts, making them learn the basics of profession of teaching, keeping them abreast of latest development taking place in their fields, enabling them capable to use various teaching and learning aids and strategies specifically ICT, educating them with functioning of higher education institution, and their job description and role in a higher education institution and national growth and relationship with industry and society and so on. In short, HRDC conducts Refresher Courses, Faculty Induction Programmes (Orientation Programmes), Disaster Management for the College / University Teachers, Principals' Workshop and Short Term Courses for the Non-Teaching Staffs and Research Scholars and collaborative research and training programmes throughout the year. The then Academic Staff College (ASC) was started in the University of North Bengal in 17<sup>th</sup> November, 2009 in a portion of the Arts-building under the directorship of Prof. S. K. Ghoshal, a renowned Physicist. Now, HRDC has three classrooms and one Seminar Hall for 150 participants with moderns ICT tools and state-of-the-art facilities and a room for the library. HRDC has its own guest house to provide accommodation facility for the outside participants.

### Faculty Details:

Name	Designation	Email
Dr. Anjan Chakrabarti	Professor-Director	dirhrdc@nbu.ac.in
Dr. Sanjib Bhattacharya	Associate Professor	ddirhrdc@nbu.ac.in
Dr. Mossaraf Hossain	Assistant Professor	adirhrdc@nbu.ac.in

### Details of Non-Teaching Staff:

Name	Designation
Sanjoy Roy Hakim	Jr. Peon
Pankaj Mandal	Office Assistant (Casual)
Bikram Roy	Peon (Casual)
Alokananda Chaudhury	Hostel Attendant (Casual)
Sanjit Kumar Mallik	Sweeper (Casual)

**Research Scholars:**

<b>Nam of the Supervisor</b>	<b>Name of the PhD students</b>	<b>Broad Area of Research</b>
Dr. AnjanChakrabarti	Vaskar Barman	Economics
	Abinash Rai	
	Neha Agarwal	
	Subhrajit Saha	
Dr. Sanjib Bhattacharya	Prolay Halder	Experimental Condensed Matter Physics
	Rakesh Ram	
	Jiban Ghosh	
Dr. Mossaraf Hossain	Imran Habib	Organic Chemistry
	KoustavSingha	

**Programs Conducted:**

<b>Course Type</b>	<b>Subject/Details</b>	<b>Duration</b>	<b>No. of Participants</b>
Faculty Induction Programme (5 <sup>th</sup> FIP)	All Subjects	23.08.2021 to 22.09.2021	50
Faculty Induction Programme (6 <sup>th</sup> FIP)	All Subjects	15.11.2021 to 15.12.2021	50
Faculty Induction Programme (7 <sup>th</sup> FIP)	All Subjects	23.08.2021 to 22.09.2021	50
Faculty Induction Programme (8 <sup>th</sup> FIP)	All Subjects	11.02.2022 to 14.03.2022	48
Refresher Course (Theme: Gender Discourse: Theory and Practice)	Social Sciences, Commerce, Philosophy, Education, Physical Education, Law, Management Studies, Mass Communication and Journalism, Geography and Any Other Allied Subjects of Social Sciences	31.08.2021 to 13.09.2021	50
Refresher Course (Theme: New Frontiers of Advancement in Natural and Biological Sciences)	Botany, Zoology, Bio-Technology, Microbiology, Environmental Science, Geology, Bio-Chemistry and Any Other Allied Subjects	10.09.2021 to 23.09.2021	38
Refresher Course (Theme: Changing Role of Use of ICT, Open	All Subjects	22.09.2021 to 07.10.2021	42

<b>Course Type</b>	<b>Subject/Details</b>	<b>Duration</b>	<b>No. of Participants</b>
Distance Learning, Open Source Resources and Online Support System in Higher Education and Research)			
Refresher Course (Theme: Post-Colonial thought and Indian Literature)	All Major Indian Languages	07.01.2022 to 21.01.2022	50
Refresher Course (Theme: Recent Advancement in Science and Technology)	Physics, Chemistry, Mathematics, Materials Science, Computer Science, Electronics and Communication, Applied Electronics, Instrumentation and Information Technology	15.02.2022 – 28.02.2022	49
Refresher Course (Theme: Sustainability of Earth: Challenges and Mitigation Strategies)	All Subjects	16.02.2022 to 02.03.2022	50
Short Term Course (Theme: Training on Skill Development and Changing Financial Management System for Non-Teachers of Universities and Colleges for Group-C Categories and above)	All Subjects	26.08.2021 – 02.09.2021	40
Short Term Course ( Theme: MOOCS, E-content development and Open Educational Resources)	All Subjects	01.10.2021 to 09.10.2021	42
Short Term Course ( Theme: Nature and Society of Indian Himalayan Region)	All Subjects	23.11.2021 to 29.11.2021	34
Short Term Course ( Theme: Society,	All Subjects	03.03.2022 to	34

Course Type	Subject/Details	Duration	No. of Participants
Culture and Development in North-Eastern States of India)		09.03.2022	
Total No. of Participants			627

**Details of Seminar/Conferences /Webinar Attended by Faculty:**

Name of the Faculty	Details of Seminars/Conferences / Webinar
Dr. Anjan Chakrabarti	<ol style="list-style-type: none"> <li>1. Delivered lecture titled ‘Sustainable Development and Sustainable Development Goals’ on 15<sup>th</sup> June 2022 in Faculty Induction Programme conducted by UGC Human Resource Development Centre, Kumaun University, Nainital. 15<sup>th</sup> June 2022</li> <li>2. Delivered two lectures titled ‘Development Discourse and Sustainable Development’ on 6<sup>th</sup> January 2022 in Refresher Course on Disaster Management and Sustainable Development Goals (Inter-Disciplinary) (5<sup>th</sup> January-19<sup>th</sup> January 2022) organised by School of Oceanographic Studies and UGC Human Resource Development Centre, Jadavpur University. 6<sup>th</sup> January, 2022</li> <li>3. Delivered two lectures titled ‘Sustainable Development Goals’ on 13<sup>th</sup> January 2022 in Refresher Course on Disaster Management and Sustainable Development Goals (Inter-Disciplinary) (5<sup>th</sup> January-19<sup>th</sup> January 2022) organised by School of Oceanographic Studies and UGC Human Resource Development Centre, Jadavpur University, 13<sup>th</sup> January, 2022</li> <li>4. Delivered three lectures titled ‘Development Discourse and Gender: A Critical Review -I &amp; II’ on 8<sup>th</sup> January 2022 and Gender &amp; Marriage on 10<sup>th</sup> January 2022 in Refresher Course in Gender Issues: Social Justice and Empowerment (04.01.2022 to 17.01.2022) organized UGC Human Resource Development Centre, Burdwan University, 10<sup>th</sup> January, 2022</li> <li>5. Delivered special lecture titled ‘Sikkim and its Neighbouring Himalayan Region: Reflections on Sustainable Development’ on 26<sup>th</sup> January 2022, organised by People’s Campaign for Manipur (<a href="https://resurgentmanipur.org/">https://resurgentmanipur.org/</a>), 26<sup>th</sup> January, 2022</li> <li>6. Delivered lecture entitled ‘Gender Gap: Hidden Scars of COVID-19 as invited speaker in International Conference on ‘How Firms and Institutions React to Global Shocks: Risk, Resilience, and Recovery organized by Heritage Business</li> </ol>



Name of the Faculty	Details of Seminars/Conferences / Webinar
	<p>School, India and Lincoln International Business School, UK on 18-19<sup>th</sup> February 2022.</p> <p>7. Delivered invited lecture titled ‘Post-Colonial India: A Few Critical Observations’, and organized by National Service Scheme Unit of Women’s Christian Colleges, Kolkata.</p> <p>8. Delivered special lectures on 16<sup>th</sup> November, 2<sup>nd</sup> December and 11<sup>th</sup> December 2021 at Department of Sociology, Calcutta University in special lecture series titled ‘Understanding and Interpreting Contemporary Issues and Challenges in Society.’</p> <p>9. Delivered lecture on Sustainable Development in Faculty Induction Programme (11.11.2021 to 11.12.2021) on 25<sup>th</sup> November 2021 at UGC Human Resource development Centre, Kumayun University, Nainital.</p> <p>10. Delivered lecture titled ‘Silk Route to Act East: Northeast India in Perspective’ in Refresher Course on ‘India and the World: Trends in Global Politics’ (1.12.2021 to 14.12.2021) organized by Dept. of International Relations and UGC Human Resource Development Centre, Jadavpur University.</p> <p>11. Delivered lecture as invited resource person at the Webinar on Gender conducted by the A.B. N. Seal College, Cooch Behar on 13<sup>th</sup> July 2021.</p> <p>12. Delivered lecture as invited resource person in ICSSR sponsored Online Workshop on ‘Advanced Empirical Economics and Econometrics’ on 3<sup>rd</sup> June 2021, organised by School of Economics, Xavier University (XIM University), Bhubaneswar, Orissa.</p> <p>13. Delivered lecture as invited resource person in ICSSR sponsored Online Workshop on Ten-Day Workshop on Research Methodology and Quantitative Techniques in Social Sciences and Humanities on 11 January 2021, organised by Centre for Studies in Human Development, Assam University, Silchar, Assam.</p> <p>14. Delivered two lectures as invited resource person in Refresher Course in Economics, organised by the UGC-Human Resource Development Centre, Kumaun University, Nainital on 5<sup>th</sup> March 2021.</p>

Name of the Faculty	Details of Seminars/Conferences / Webinar
Dr. Sanjib Bhattacharya	<ol style="list-style-type: none"> <li>1. Webinar (National Level): “3rd Indian Materials Conclave (IndMac) and 32nd Annual General Meeting of MRSI”, organized by IIT Madras, Chennai 600036 Tamil Nadu, India, 20-12-2021 to 23-12-2021</li> <li>2. Delivered popular lecture (invited) on “Science, Technology and Innovation for Self Reliance“ as a part of week-long “VigyanSarvartraPujyate” celebrations organized by North Bengal Science Centre, Siliguri in collaboration of VigyanPrasar on February 25, 2022</li> <li>3. Delivered invited lecture in 6<sup>th</sup> online Faculty Induction Programme organized by UGC-Human Resource Development Centre, JamiaMilliaIslamia, New Delhi on November 09, 2021</li> <li>4. Delivered invited lecture in Faculty Induction Programme organized by UGC-Human Resource Development Centre, Kumaun University, Nainital on November 30, 2021</li> <li>5. Delivered invited lecture in 7<sup>th</sup> online Faculty Induction Programme organized by UGC-Human Resource Development Centre, JamiaMilliaIslamia, New Delhi on December 18, 2021</li> <li>6. Delivered invited lectures in 114<sup>th</sup> online Faculty Induction Programme organized by UGC-Human Resource Development Centre, Goa University on July 23, 2022</li> </ol>
Dr. Mossaraf Hossain	<ol style="list-style-type: none"> <li>1. Delivered lecture in National Webinar on “Recent Developments in Chemistry” organized by Post Graduate Department of Chemistry, Kokrajhar Govt. College, 23<sup>rd</sup> December, 2021</li> </ol>

**Publications:**

Author(s)	Publication Details
Dr. Anjan Chakrabarti	<ol style="list-style-type: none"> <li>1. Chakrabarti, Anjan, Sharma Pooja (2022), ‘Revisiting Development Discourse amidst Informal Sector Crises COVID-19 Pandemic’, International Journal on Responsibility, Vol. 5, Issue 1.2, Fall 2022, A publication of the Mahatma Gandhi Center for Global Nonviolence at James Madison University, pp. 54-68; ISSN: <a href="https://commons.lib.jmu.edu/ijr/vol5/iss2/1">https://commons.lib.jmu.edu/ijr/vol5/iss2/1</a>; ISSN: 2576-0955</li> <li>2. Chakrabarti, AnjanAnupSeakhar Chakraborty (2021), ‘Colonial Forst Policies, Forests and Graziers in Darjeeling, Kurseong and Kalimpong’, Asian Studies, Vol.XXXIX, Jan 2021-Dec.2021,</li> </ol>

Author(s)	Publication Details
	<p>No.1 &amp;2: 15-24, ISSN: 0970-7301</p> <ol style="list-style-type: none"> <li>3. Chakrabarti, Anjan; Chaudhuri, Rimu&amp; Chatterjee Arindam (2021), ‘Polyandry Amidst the Dominance of Monogamy: An Explortory Model with Reference to Sikkim, India’ International Journal of Sociology of the Family, Vol. 46-47, No. 1-2: 60-79; ISSN: 0973-2039; <a href="https://serialsjournals.com/abstract/42195_4-polyandry.pdf">https://serialsjournals.com/abstract/42195_4-polyandry.pdf</a></li> <li>4. Chakrabarti, Anjan (2022), ‘From Silk Route to Look East/Act East and India’s North East: Will the Region Become the Gateway to South-East Asia?’ in Md. Salim (ed), Society and State in South Asia, Institute of Social and Cultural studies in India &amp; The University Press Limited, Dhaka, Bangladesh, pp. 240-265 [ISBN 978-954876-4-6]</li> <li>5. Chakrabarti, Anjan&amp; Pooja Sharma (2022), ‘Mapping Linkages between the Agricultural Sector, Informal Economy and Inequality amid Pandemic’ in S. Saha, M. Mishra &amp; A Bhuilimali (ed.), Economic and Societal Transformation in Pandemic Trapped India: Emerging Challenges and Resilient Policy Prescription:55 (New Frontiers in Regional S: Asian Perspectives), Springer Nature, Singapore ISBN 978-981-16-5755-9 (eBook)]</li> <li>6. Chakrabarti, Anjan (2021), Mapping the Development Paradigm of Northeast India from ancient past to present in the realm of Political History and Economy in SumanNath and Debraj Bhattacharya (Edited), Theory, Policy, Practice, Development and Discontent in India pp. 80-98, Routledge, UK/India (Taylor &amp;Francis Group) [eISBN: 9781003159940]</li> </ol>
Dr. Sanjib Bhattacharya, etal	“Description of AC conductivity via Meyer-Neldel rule: A comparative study between oxide and chalcogenide systems”, <i>Journal of Non-Crystalline Solids</i> , 577, 121307, 2022
	“Hopping frequency and conductivity relaxation of promising chalcogenides: AC conductivity and dielectric relaxation approaches”, <i>Materials Research Express</i> , 8, 085203, 2021
	“Density of states, DC conductivity and physical properties of Ag <sub>2</sub> S-Ge-Te-Se chalcogenide glassy system”, <i>Applied Physics A</i> , 127, 655 (10 pages), 2021

**Research Projects Details:**

<b>Title of the Project</b>	<b>PI</b>	<b>Project Duration</b>	<b>Sponsored by</b>	<b>Year of Sanction</b>	<b>Budget (Rs.)</b>
Study of Electrical Properties and Electrochemical Activities of Some Sodium Incorporated Solid State Glassy Electrolytes	Dr. Sanjib Bhattacharya	38 month(s)	SERB	2019	33,55,520
Design and Synthesis of Novel Heterodimer of N-Heterocyclic Carbene (NHC) and Cyclic Alkyl Amino Carbene (CAAC) type Scaffolds: C-F and C-H Activated Functionalization catalysis	Dr. Mossaraf Hossain	36 month (s)	UGC	2021	10,00,000



**CHAPTER – VII**  
**CENTRAL FACILITIES**



## AKSHAYA KUMAR MAITREYA HERITAGE MUSEUM

### About the Museum:

The Akshaya Kumar Maitreya Heritage (A.K.M.H.) Museum which had a humble beginning in 1962. It was initially developed from the generous presentation from persons like Nirmal Chandra Chowdhury and Santipriya Raychaudhuri who contributed their lifelong collections to the University to the cause of scholarship. The faculty members of the Department of History, North Bengal University helped in the organization with unrelenting attention for its development. However, only in February 1965 was it partially opened for inquisitive public exclusively, those who were genuinely interested in some kind of historical research.

The Museum was opened to general public on 28<sup>th</sup> December, 2006 when it was shifted to new building, and formally inaugurated by the then Chief Minister of West Bengal. The Museum has become the repository of the culture of the people of the northern districts of West Bengal. It is the most useful representative of the material culture of the region. Now the museum legitimately takes pride in its substantial collection of stone and metal images, terracotta works, coins, manuscripts etc. Major portion of such collections belong to the period between 8<sup>th</sup> Century and 12<sup>th</sup> Century through even older pieces are also in the possession of the Museum. The Museum at present has emerged as one of the favored destinations of scholars, researchers and students. Scholars from different parts of India and some even from China, Bangladesh, Sri Lanka, Japan, Taiwan and other countries visit the Museum.

### Details of the Director:

Name	Qualification	Designation	Email
Dr. Sudash Lama	M.A. Ph.D.	Director	lamasudash@nbu.ac.in

### Details of the Officer:

Name	Qualification	Designation	Email
Dr. Malay Saha	M.A., B.Ed., Ph.D.	Assistant Curator	assistantcur@nbu.ac.in

### Details of Non-Teaching Staff:

Name and E-mail	Qualification	Designation
Shri Bijoy Sankar Chakraborti	B.A.	Office Assistant (Casual)
Shri Mahesh Modak	Class IX Appeared	Record Supplier
Shri Arun Mallick	Class IX Appeared	Office Attendant (Casual)



**Activities of the Museum:**

- i) The N.B.U. A.K.M. Heritage Museum organized a donation programme
- ii) Installed LED TV
- iii) Installed Burglar Alarm system
- iv) Installed PA system

Through these installations the environment of the Museum has been changed from previous time because maximum number of visitors spent their time while they visited our exhibits. Besides they collected more knowledge about our glorious past history and culture as well.

**Visitors:**

A large number of Indian and Foreign visitors, scholars, academicians from different institutions like Schools, Colleges, Universities visited the Museum during the period under consideration. A group of Research Scholars & Students of History Department and also students from the various schools and colleges visit the Museum and prepare their project for school and college work. More than 13,780 visitors visited our Museum during 2021-2022.

## CENTRE FOR INFORMATION AND RESOURCE MANAGEMENT

### About the Centre:

University Computer Centre is serving as a central hub for IT-related services on the campus since 1983 to meet the academic and research needs of the academic community of the University, including students and researchers. This state-of-the-art establishment got renamed as Centre for Information and Resource Management (CIRM) in 2020.

Keeping education and research in synchronization with modernization, NBU has been leveraging ICT as a tool to induce strategic improvement and changes in both academic and administrative practices. The CIRM plays an important role in creating an enabling environment for teaching-learning, research, and governance. All activities related to ICT implementation is governed by a well-formed IT Policy

### Details of the Officers:

Name	Designation	Email
Shri Anirban Biswas	System Manager & Head	systemmanager@nbu.ac.in
Shri Sudeep Basu	System Engineer	systemeng@nbu.ac.in
Shri Amitava Deb Barman	Programmer	programmer1@nbu.ac.in
Shri Utpal Mandi	Programmer	programmer2@nbu.ac.in

### Details of Non-Teaching Staff:

Name	Designation
Avijit Bagchi	Office Assistant (on contract)
Gyanandra Narayan Chakraborty	Office Attendant (on contract)
Santosh Mandal	Jr. Peon (Casual Staff)

### Core Services at CIRM:

**Help & Advice:** In partnership with authorized ICT vendors, CIRM offers the help, support and advice required to keep IT working across the University academic and administrative departments on 24 X 7 basis, including the smart campus support.

**Network & Internet:** CIRM provides a centrally managed enterprise-class campus-wide network is the most effective and efficient method for achieving University's goals in information transport. The current bandwidth is more than 1 Gbps. Under the NMEICT project, the CIRM is provided with a leased line (1:1) from BSNL for its main Campus at

Raja Rammohanpur, Siliguri – 13, w.e.f. 2011 – 12 and a 400 Mbps Leased Line connectivity from Vodaphone Idea.

**Manage Institutional Emails:** To promote collaboration among the academic and administrative staff of the University, CIRM has implemented Google Suit for education with the premiere facility of institutional emails for all academic stakeholders.

**Teaching & Learning:** CIRM help University's teaching and learning community get the most from IT for teaching and learning, and promote innovative use of learning management environment, cutting-edge technologies for teaching on a virtual platform.

**Web Publishing & Hosting:** CIRM is responsible for design, develop and maintain the entire website, and is liable to coordinate all the matters related to governance of the website and its content, following the Web Development & Management Policy.

**Virtual Private Network (VPN)/Remote Access:** To access University subscribed resources from any geographies, CIRM provides access through NBU's Virtual Private Network (VPN) clients to the centrally-provided service only, to authorized users over Secure Socket Layer.

**Training & Research:** CIRM offers a huge range of customized IT trainings for academics, students and staff in our state-of-the-art IT learning environment. CIRM provides advice and support to researchers in planning, delivering and disseminating research.

**Information Systems:** CIRM information system portfolio ranges from core IT services and business applications to IT innovation in research. The MIS road-map advocates for in-house development with a formal project management approach. The NBU Pay Roll Management System, Finmin, is designed to view salary bills, PF balance and Income Tax information almost in real time. The Hostel Management System is designed to capture the application for accommodation in hostel, validation and auto allotments following the university polices

**Software Installation Services:** University does not allow any pirated/unauthorized software installation on the computers connected to the university network. CIRM takes care of the installation of licensed software subscribed centrally by the University.

**Information Security:** CIRM works to make sure that all IT services keep to a high standard of information security in accordance with the latest Information Security standards. Authorization to access University information must follow the University IT policy.

**Cluster Computing:** CIRM houses a high-performance computing cluster with 20 head nodes and 20 computing nodes, centrally used by researchers from University LAN and from an external network using a pre-configured VPN client.

**NAAC & NIRF:** CIRM is responsible for data warehousing related to NAAC, NIRF, and other for other relevant bodies as per the directive of the university authority. Team CIRM executes the data submission and required validation on the DCS Portals.

## ENGINEERING BRANCH

### About the Branch:

The Engineering Department of North Bengal University is catering their services on 24x7 basis. The engineers and staffs of this department are working relentlessly from the inception of this department. The department is engaged with the new construction and as well as maintenance of the existing assets. Apart from that the department is also providing comprehensive services for day to day electrical, civil, S&P, water supply works for the hostels, quarters, academic and administrative buildings throughout the year and most of the works are being carried out departmentally. The department has taken few flagship projects, few of which are ongoing and few are in the pipeline.

The Chief Engineer is having the headship to lead the engineering team. Three officers and around 60 staffs are accompanied him to accomplish the entire works as a team. A good number of substantive staffs are lying vacant (around 43 posts in different categories) at the moment under this department, instead of that the department is handling their duties and responsibilities efficiently round the clock.

### Details of Ongoing and Completed Projects:

Sl. No.	Name of the Project	Project Cost (Rs.)	Funding Agency	Status of work
1	Construction of one Womens' Hostel	4,30,46,305	RUSA	Ongoing
2	Horizontal Extension of Philosophy Department.	1,03,86,887	UGC + State Govt./ University own fund	Ongoing
3	Construction of Toilet Block, CCTV monitoring cell, Information Centre, Career Counselling and Placement cell	65,22,090	RUSA	Ongoing
4	Construction of Boys' Hostel at Jalpaiguri 2nd campus	8,53,22,440	State Govt.	Ongoing
5	Construction of Girls' Hostel at Jalpaiguri 2nd campus.	8,72,39,858	State Govt.	Ongoing
6	Major renovation of Humanities Building (Civil + Electrical)	1,13,61,220	RUSA+ State Govt.	Completed
7	Thorough internal upgradation and external repairing & renovation of existing Life Science Building of the University of North Bengal	83,76,582	State Govt.	Ongoing
8	Construction of Boundary Wall from Gate no. 2 to Rammohun statue upto Magurmari bridge within the campus of University of North Bengal in the	21,65,160	State Govt.	Completed

Sl. No.	Name of the Project	Project Cost (Rs.)	Funding Agency	Status of work
	District of Darjeeling.			
9	Construction of new Post Office at first floor of existing SBI building at N.B.U. Campus (Civil + Electrical)	19,15,438	State Govt.	Ongoing
10	Roof treatment work with P.U. Roof Coat at the roof of R.S. Boys Hostel at N.B.U. Campus.	11,33,901	State Govt.	Ongoing
11	Replacement of old dilapidated asbestos sheet with new zinc alloy tin sheet at Vidyasagar Mancha including repair, painting of interior and exterior area at NBU Campus.	23,62,301	State Govt.	Ongoing
12	Construction of Boundary Wall for Health Center, Genome Center, MBA Department and repair of boundary wall for Children's Park, Mushroom Culture area and nearby Chemistry building and Administrative building at N.B.U. Campus	15,28,822	State Govt.	Ongoing
13	Repair & painting works of Law Boys' Hostel including construction of a Duty Room within NBU Campus.	16,52,694	State Govt.	Ongoing
14	Repair and renovation works at kitchen, dining, common room, mummy room along with plinth protection work of Vidyasagar Hostel within NBU campus.	9,99,583	State Govt.	Ongoing
15	Repair, painting and other allied works at dining, kitchen, corridor & common room /visitors room at VK Boys' Hostel within the campus of N.B.U.	9,66,333	State Govt.	Ongoing
16	Providing fencing, Boundary Wall around the Salbagan area, playground of Eastern Sector and in front of Chemistry Department at N.B.U. Campus.	16, 11,721	State Govt.	Ongoing
17	Construction of a new toilet at Hon'ble Vice Chancellor's residence (at 2nd floor) along with tiling work for roof areas, exterior painting of Engineering Branch and maintenance works for Day Care Centre at N.B.U. Campus.	6, 26,786	State Govt.	Completed
18	Essential repair of roof, parapet	9,17,617	State Govt.	Ongoing

Sl. No.	Name of the Project	Project Cost (Rs.)	Funding Agency	Status of work
	including providing roof treatment and tiles for outside parapet wall with other allied works for A.K. Museum at N.B.U.			
19	Repair and maintenance of room nos. 239, 345, 342 & 353 at Department of Chemistry at N.B.U. Campus.	9,20,831	State Govt.	Ongoing

**Details of Upcoming Projects:**

Sl. No.	Name of upcoming projects
1	Construction of Vigyan Bhavan cum Auditorium
2	Construction of Siksha Bhavan
3	Construction of Gymnasium
4	Construction of Post Matric ST Girls Hostel
5	Construction of Teachers', Officers', Staffs' Quarters
6	Horizontal Extension of Engineering Department
7	Construction of 2 (two) new Electrical Substation
8	Installation of DG and other allied works for Department of Law
9	Construction of new Over Head Tank at Eastern Sector of NBU.
10	Installation of Submersible pumps at different location of NBU for capacity enhancement
11	Construction of Boundary Wall along the Asian Highway
12	Annex Building of MBA Department
13	Annex Building of Computer Science and Technology
14	Construction of new Animal House
15	Construction of new Ration Shop
16	Extension of Watch and Ward Department
17	Vertical Extension of Pharmaceutical Technology Building
18	Vertical extension of Food Technology Building
19	Horizontal Extension of USIC Building

## ESTATE OFFICE

### About the Office:

The Estate Office is maintaining the 316 acres of the University land including maintenance of twenty numbers of flower garden and more than three hundred numbers of fruits and other plants of the campus round the year. The Division works wholeheartedly to keep the University campus green and beautiful.

Apart from the above duties, the Division extend the following duties and responsibilities –

- Maintenance service provided to the University Guest House at Raja Rammohunpur Campus and Salt Lake Campus
- Maintenance and service provided to Vidyasagar Manch, Rabindra Bhanu Manch and Conference Hall of the Administrative building
- Plays major role in conducting Annual Convocation, Celebration of Independence Day, Republic Day, Netaji Birth Day and other Occasion as directed by the authority
- Management of the total residential quarters for Teachers/ Officers/ Non-Teaching employees
- Maintenance of the all Water Purifiers of the University

### Details of the Officer:

Name	Designation	Email
Shri Kamala Kanta Ghosh	Sr. Estate Officer	kkgeo@nbu.ac.in

## HEALTH CENTRE

### About the Centre:

Health Centre of the University provides OPD services from 8.30 a.m. to 5.30 p.m. and emergency on-call services for the rest of the day. The services provided are doctor consultation with specialization in general physician, eye, pediatrics, gynecology, pathology and dentist, emergency management with referral services to higher centre if needed and laboratory services.

The Medical Officer acts as liaison between the State Health service and the University to provide preventive and promotive health services to the students and staff and carry on the National Health Programmes inside the campus as applicable. Periodical Information, Education and Communication (IEC) materials are provided to the students both online and offline and awareness programs are held to promote health awareness.

### Services Provided the Health Centre:

- OPD services from 08.30 am to 05:30 pm
- Laboratory services (Hematology, Urine and Stool Examination, Bio-Chemical, Serology, etc.) from 09:00 am to 04:00 pm
- Pharmacy services from 08.30 am to 05.30 pm
- 24 hours Ambulance services

### Details of the Officer:

Name	Designation	Email
Zakia Banu	Medical Officer	zakiabanu@gmail.com

### Details of Supporting Staff:

Name	Designation	Qualification
Abir Hom Roy	Tech. Asstt. Gr. II	DMLT,
Manju Singha Roy	Jr. Asstt. Cum-Typist	B.A, BLIS,MLIS
Aritri Das	Jr. Pharmacist	M. Pharma
Babli Mazumdar	Helper Gr. III	Non-matric
Binoti Oraon	Sr. Peon	Non-matric
Subir Kumar Das	Gr.III-Casual Worker	B.Com

### Doctors Available in Health Centre:

Name	Qualification	Specialty	Timing
Dr. Subarna Kr. Paul	M.B.B.S	General Physician	8:30 am to 10:30 am



Dr. Siddhartha R. Basak	M.B.B.S, D.C.H	Child Specialist	3 pm to 5 pm
Dr. Ravi Prakash Agarwalla	M.B.B.S. M.D.	Pathologist	11 am to 1 pm
Dr. Amlan Ghosh	B.D.S	Dentist	2 pm to 4 pm
Dr. Bipul Das	M.B.B.S, D.O, M.A.I.O.S	Eye specialist	Fri-12 noon to 2 pm

**Details of Equipment/Instrument Available:**

Name Of the instrument	Purpose
Slit lamp	To see Anterior Sigma of eye (Not properly function)
Auto Refectrometer	To do power test of eye (Inactive)
Tonometer	To record IOP
Trial Set	Power setting by trial(damaged)
Ophthalmoscope	To see fundus
ERBA CHEM-7	Bio-chemistry tests
CL-1001	Hemoglobin tests
Olympus cx21i	Microscope
Incubator	Bio-chemistry tests
Dental Chair	dental treatment
Compressor machine	
Ultrasonic Scales	

**Details of Services Provided in 2021-22:**

Number of Patients examined at the Health Centre	1504
Number of Patients examined investigated at the clinical Pathology Laboratory of Health Centre including ECG	446
Total amount of earnings from the services at the Clinical Pathology Laboratory	Rs. 87,744.00
Number of Samples investigated at the Clinical Pathology Laboratory	11,350
Total amount of earnings from the DENTAL Treatment	Rs.344.00

## SPORTS BOARD

### About the Board:

Sports is a means of physical and mental development besides creating harmony in the country. Sports is like a matrix where persons of all creeds, color, religion and socio-economic status have the level playing ground. It is a melting pot where all and sundry have equal rights and opportunities. Sports is, thus, a glowing example of national integration. The participation in sports makes a nation fitter and also reduces the burden of morbidity and mortality in the population.

The basic rationale of the policy is to reach out to all registered students of the University by addressing their sporting and recreation needs. The policy aims to encourage students to undertake all such activities that develop healthy and long lasting life styles. The nodal point of sports in the University is the North Bengal University Sports Board. As per the Rules of the University, Sports Board is responsible for implementation and ensure compliance with this policy.

The major aim and objective of the Sports Board, University of North Bengal are –

- To organize, control, manage and supervise inter-collegiate sports and games amongst the students of the university, colleges, and institutions affiliated thereto
- To send the University teams in the Inter-University Tournaments organized by A.I.U in different sports and games through selection trials and coaching camps
- To undertake, control and conduct inter-university competitions
- To award trophies, cups, certificates, blues etc.
- To conduct adventure sports with the students of different colleges.

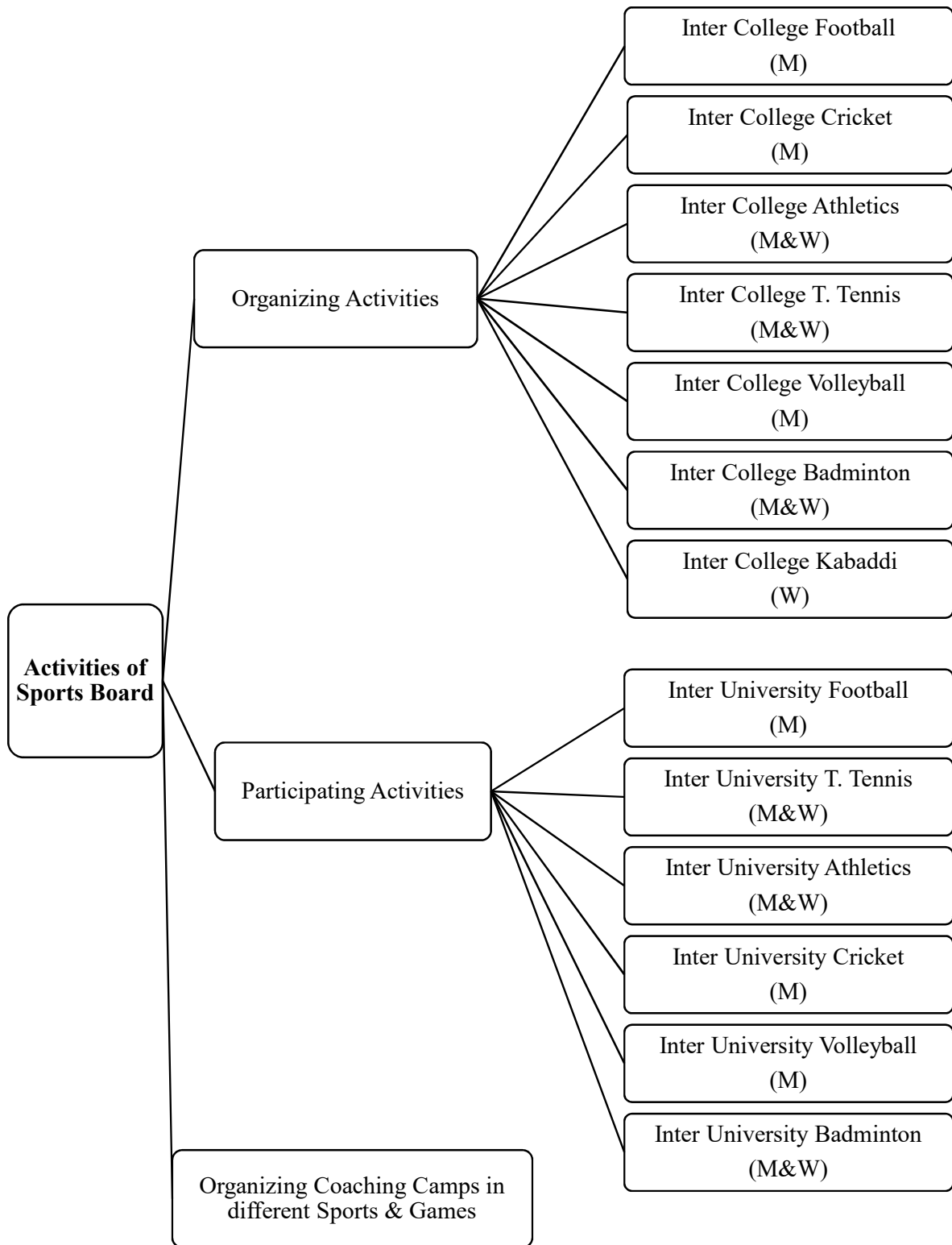
### Details of Chairman and Secretary:

Name	Designation	Email
Prof. Manoranjan Singha	Chairman	manoranjan.math@nbu.ac.in
Shri Surajit Das	Secretary	dassuraonbu@nbu.ac.in

### Support Staff:

Treasurer, Sports Board(Honorary)	1No.
Assistant Secretary, Sport Board	1No.
Office Assistant,	1No.
Mali	1No.
Office Assistant, (Casual)	1No.
Peon (Casual)	1No.

**Activities of Sports Board:**



### Existing Infrastructure:

Infra-structure development is always an on-going process and accordingly, the University of North Bengal is marching in right path to provide the best possible facilities with modern sports equipment to the students.

The Sports Board has its own building known as the “Khela Ghar” comprising of an indoor hall. The carpet area of the hall is around 4000 sqft. This hall is used for conducting Inter-College Indoor Games and also available for the P.G. students of this University for their uses. As a part of the Social outreach programme the existing infrastructures of the Sports Board are also being available for the various Sports Bodies/ Associations (viz. Schools, Colleges etc.). The same is being used community development of neighboring locality. The stakeholders of the University are also using the Multi-Gymnasium and Indoor hall for the fitness purpose.

The facilities available at present in the University are as follows:

<b>Sports</b>	<b>Available Infrastructure Facilities</b>
Football	The University is having two football grounds at the campus with required basic facilities.
Cricket	The University cricket ground is in front of the Humanistic Building. The said ground and the natural turf wickets are well maintained. The games are played on the turf wicket. Other necessary facilities viz. Score Board, Sight Screen Cricket Kits etc. are also available. One Motorized Pitch Roller is also available.
Table Tennis & Badminton	These games are played in the University Indoor hall. Three nos. of Table Tennis Board (Stag make) out of which one no. of Table Tennis Board has been procured by this University which is funded by the “UGC under XIth Plan Merged Scheme”. A Badminton court with Synthetic surface (Hoba Court), Yonex make is also available. The indoor metallic halogen lights are up to the mark for organizing Standard Tournaments.
Volleyball	The Volleyball court of the University is in front of “Khela Ghar” Building.
Athletics	The ground used for the cricket, is also used for the athletics and the track is prepared by the authority as and when required. In the last financial year, a High Jump Pit and other have been procured by this University which is funded by the “UGC under XIth Plan Merged Scheme”. One underground Water storage tank is also available at the ground of 50000lts for ground preparation.
Multi-Gym	A 16 Station Multi-gym (Latest) is available at the indoor hall of the University. The said equipment is totally funded by the “UGC under XIth Plan Merged Scheme”. In addition to that several modern equipments for the physical exercise (light & heavy) are also provided to the students. The concept of Heath Spa is the ultimate dream of the Board.
Kabaddi	A set of Synthetic Mat (Stag make) is available at the Indoor Hall to organize the Kabaddi Tournaments at the Indoor hall. The said equipment is totally funded by the “UGC under XIth Plan Merged Scheme”.

In addition to above, the University organizes coaching camp with professional trainers for the students who are going to participate in any of Inter-University sports tournaments. The entire cost of the camp is borne by the University. The sports gears are also provided to the players participated in Inter-University tournament. One time scholarship is also provided to the recipients of 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> position in any event of All India Inter-University sports tournament.

### **Activities of Sports Board in 2021-22**

No Inter College Tournaments were organized due to health protocol imposed by the Govt. of West Bengal. However the University has participated in the following Inter University events -

#### ***Badminton (M&W)***

The University Badminton women team participated in the East Zone Inter University Badminton (Women) Tournament held at Royal Global University, Assam from 17th to 19th December, 2021. The University Badminton women team lost in the pre-quarter final round against Calcutta University. The University Badminton Men team participated in the East Zone Inter University Badminton (Men) Tournament held at Royal Global University, Assam from 27th to 31st December, 2021. The University Badminton team lost in the 3rd round against Guwahati University.

#### ***Kho-Kho (M)***

The University of North Bengal Men's Kho-Kho team participated in the East Zone Inter University Kho-Kho (M) Tournament 2021-22 which was organized by Fakir Mohan University during 3rd January to 6th January, 2022. The University of North Bengal Men's Team lost in the Pre Quarter final round.

#### ***Kho-Kho (W)***

The University of North Bengal Women's Kho-Kho team participated in the East Zone Inter University Kho-Kho (W) Tournament 2021-22 organized by KIIT University during 27th to 30th June, 2022. The University Kho-Kho (W) team lost in the close contested match in the Quarter Final against KIIT University.

#### ***Table Tennis (M)***

The University of North Bengal Men's Table Tennis team participated in the East Zone Inter University Table Tennis (M) Tournament held at KIIT University, Bhubaneswar from 25th to 28th February, 2022. The University of North Bengal Men's Team secured 3rd Position in the said Tournament and the team qualified for the All India Inter University Table Tennis Tournament.

The University of North Bengal Men's Table Tennis team participated in the All India Inter University Table Tennis Tournament held at held at Chandigarh University and lost in the group stage in the said All India Inter University Tournament.

### ***Table Tennis (W)***

The University of North Bengal Women's Table Tennis team participated in the East Zone Inter University Table Tennis (W) Tournament held at L.N.Mithila University, Darbhanga from 23rd to 25th February, 2022. The University of North Bengal Women's Team secured 3rd Position in the said Tournament.

The same Team secured 3rd Position in the Khelo India University Games held at Jain University, Karnataka from 24th April to 3rd May 2022.

### ***Athletics (M)***

Two member Athletics men team participated in the All India Inter University Athletics Meet held at Mangalore University, Karnataka from 4th January to 7th January 2022. No significant results.

### ***Athletics (W)***

Four member Athletics men team participated in the All India Inter University Athletics Meet held at KIIT University, Bhubaneswar from 21st February to 24th February 2022.

## UNIVERSITY LIBRARY

### About the Library:

The University Library was established along-with the establishment of the University in 1962 in order to meet the academic and research needs of the Students, Research Scholars and the Teachers. The University Library provides books, journals as well as current information on various topics to fulfil the need of the various components of the university community viz. teachers, research scholars, students, officers and staff towards the fulfilment of their objectives. It is the only Library in North Bengal region, which facilitates research and higher learning by providing books, journals and other documents to the teachers, research scholars and students.

The Library is a three storied building with 3108.13 sq. m. carpet area. The location of the University Library is at the Western side of the University Administrative Building and North of Padmaja Park. University Library has built up a rich collection on all branches of Science, Arts, Commerce and Management. The library is the member of E-ShodhSindhu: Consortium for Higher Education Electronics for on line subscription of journals. Library LAN has become a part of campus wide network, which has made it possible for the academic community of various Departments to access information from their adobe. The Library Committee regulates Policy, Planning, Process and all the developmental activities of the library. It renders instructions regarding management of funds set apart for the functioning of the University Library system. The Chairman of the Library Committee is the Hon'ble Vice-Chancellor and the Librarian of the University is Secretary, Ex-Officio member.

### Details of the Officers:

Name	Designation	Email
Dr. Mriganka Mandal	University Librarian	nbulibrarian@nbu.ac.in
Shri Brindaban Karmakar	Joint Librarian	b_karmakar@nbu.ac.in
Shri Shubhrangshu Kumar Mistri	Deputy Librarian	shubhrangshu@nbu.ac.in
Shri Santanu Chanda	Assistant Librarian	santanu.library@nbu.ac.in
Smt. Yangzee Sherpa	Assistant Librarian	yangzee@nbu.ac.in
Shri Manash Esh	Sr. Information Scientist	manash@nbu.ac.in

### Details of Support Staff:

Sl. No.	Name	Designation
1	Dr. Parimal Chandra Roy	Superintendent of Library Service
2	Shri Anup Chandra Singha Roy	Asst. Librarian Gr. I
3	Shri Naresh Chandra Barman	Sr. Assistant
4	Smt. Ranjita Roy	Sr. Assistant

<b>Sl. No.</b>	<b>Name</b>	<b>Designation</b>
5	Sri Sanatan Barman	Sr. Binder
6	Shri Bisu Das	Record Keeper
7	Shri Kabiraj Biswakarma	Record Supplier
8	Shri Rakesh Lakra	Jr. Peon
9	Shri Dinesh Mallick	Jr. Superintendent
10	Shri Gyan Narayan Pradhan	Sorter
11	Shri Avijit Chakraborty	Library Professional (Casual Gr. III)
12	Shri Pratap Singha	Library Professional (Casual Gr. III)
13	Shri Aniruddha Sarkar	Library Professional (Casual Gr. III)
14	Shri Pravakar Sharma	Library Professional (Casual Gr. III)
15	Smt. Paramita Sen	Office Assistant (Casual Gr. III)
16	Smt. Minakshi Bhowmick	Casual Gr. III
17	Shri Semanta Singha	Casual Gr. D
18	Sri Sanjay Sarkar	Casual Gr. D
19	Shri Mintu Singha	Casual Gr. D
20	Shri Surajit Singha	Casual Gr. D
21	Shri Anil Roy	Casual Gr. D
22	Shri Ashok Das	Casual Gr. D
23	Shri Sovan Ghosh	Casual Gr. D
24	Shri Mriganka Raha	Casual Gr. D
25	Shri Rakesh Mallick	Casual Gr. D
26	Shri Arun Kumar Biswas	Contractual Gr. D
27	Smt. Susmita Chanda	Library Professional (Casual Gr. III, Mandays)
28	Shri Sanjib Modak	Library Professional (Casual Gr. III, Mandays)
29	Shri Juboraj Roy	Library Professional (Casual Gr. III, Mandays)
30	Smt. Sangeeta Biswas	Data Entry Operator (Casual Gr. III, Mandays)
31	Smt. Anamika Biswas	Data Entry Operator (Casual Gr. III, Mandays)

**Library Details:**

**Service Hours** : 10 a.m. to 5-30 p.m.

**Service Days** : Monday – Sunday (7 days except holidays)

**Carpet Area** : 3108.13 sq. m.



<b>Total Collection (as on 31.03.2022)</b>	: 3,05,779
<b>Library Access</b>	: Open Access & Closed Access
<b>Library Security system</b>	: Manual Security, CCTV Surveillance, RFID IASLIC ILA BLA
<b>Institutional Membership</b>	: British Council Library American Library DELNET NDL Club
<b>Status of Automation</b>	: Fully Automated
<b>Library Software</b>	: SOUL 2.0
<b>Membership of Library Network</b>	: INFLIBNET DELNET
<b>Library Consortia</b>	: e-ShodhSindhu Consortium for HE E-Resources
<b>Library Web Portal</b>	: <a href="http://11.0.98.17/nbulib/default">http://11.0.98.17/nbulib/default</a> (Internal) <a href="http://118.185.209.245:8081/nbulib">http://118.185.209.245:8081/nbulib</a> (External)
<b>NBU Information Repository</b>	: <a href="https://ir.nbu.ac.in">https://ir.nbu.ac.in</a>

**Services, Facilities and Functions of University Library:**

- Bibliographic Service
- Reference Service
- Information Service
- Reprographic Facilities
- Internet Facilities
- Online access to journals through E-ShodhSindhu and Subscribed Journals
- Database Search through INDCAT-INFLIBNET
- Study and Research Support Service

- Information Hub for Students, Teachers & Research Scholars
- Journals of National and International repute
- Provision for Accessing the Rare Books
- Lending facilities for books
- Display of Information regarding the new arrival of Books and Journals
- OPAC and Web OPAC
- Career Guidance Service
- Resource Sharing/Inter Library Loan
- Facilities for the Retired Teachers, Officers and Employees
- User Orientation
- Daily News Papers
- Facilities for other colleges & Research Organizations
- Services extended to Jalpaiguri Campus
- Plagiarism Checking up of Theses/Dissertations/Articles
- Online access to databases
- Institutional Repository has rich variety of collection like thesis, university publication, rare book collection, administrative documents etc.
- Access to Online and Offline Census report
- Journal Contents Service
- Facility for Specially-abled Users
- Scanning Facility (Free)
- Remote Access facilities for all kind of online resources

#### **Library Facilities:**

- Uninterrupted Power
- Suggestions & Complaint Box
- Shaded Cycle Stand
- Way for facilities for differently abled persons
- Periodically sanitization of the library
- Facility for Specially-abled Users
- wheelchair for physically challenged users
- Washroom for physically challenged users

#### **Functions of University Library:**

- **E-shodhsindhu Consortium:** The members of the library can access a significant number of online publications for free through E-shodhsindhu Consortium and the Library provides a very essential and beneficial service for members by offering low-cost online printing of e-resources. The library has also implemented a printing passbook facility service.
- **Open Access:** To give the users an option to look through all their requirements. The library provides open access facility.

- **Index Database for Back Volume Periodicals:** An initiative is underway to build an index database of back volume publications in order to enable the convenience of accessing all back volume periodicals at a glance.
- **Thesis Index Database:** Library has generated the complete thesis index database to create a common platform for all the scholars to look through the index of their ancestors' works and has also sent the same to the INFLIBNET Centre, Ahmedabad for Union Database.
- **Membership Database:** Library has generated the complete computerized membership database of all members by using SOUL 3.0 software.
- **CCTV surveillance:** CCTV for electronic surveillance of the library is being implemented.
- **Extended of Information Hub for Students, Teachers & Research Scholars:** By establishing an Information Hub with 45 nodes, the library has expanded its services to include checking emails, browsing the internet, and downloading articles for University Students, Teachers, and Research Scholars.
- **RFID tag & Bar Coding:** RFID tags & Barcoding of all books has been completed for fast and smooth circulation.
- **Contribution to Union catalogue of INFLIBNET:** University library has contributed 1,46,985 data with bibliographical details regarding books, journals, and theses in the union catalogue of INFLIBNET till the date.
- **Institutional Repository (Archive):** Using open-source software "DSpace" version 6.3, the library has launched the University Archive and digital repository to digitize theses, rare books, Departmental publications, and selected University Administrative documents.
- **Digitization of Theses:** The ShodhGanga Project of INFLIBNET is helping to establish the library by digitizing old theses and submitted same to the portal of ShodhGanga and the Institutional Repository of the Library.
- **Digitization of University Publication:** The library has begun digitizing all departmental publications and storing them in the institutional repository.
- **RFID (Radio-frequency identification):** This service is available in the University of North Bengal Central library for Self-Check In/Out, Book drop, Self-Management, Anti- Theft Detection, and Stock verification.
- **Journal Contents Service**

**Library Statistics (as on 31st March, 2022):**

Particulars	Numbers
Total number of documents accessioned	305779
Text Books	251054
Reference Books	9080

<b>Particulars</b>	<b>Numbers</b>
Rare Books	648
Bound Periodicals	38745
Theses	2005
Non-Print Materials	1049
Census	2350
Reports	1794
Gazetters	180
Debates	201

**Journals/Periodicals Subscription in 2021 – 22:**

<b>Journals/Periodicals</b>	<b>Numbers</b>
Indian	74
Foreign	114
Online	29
<b>Total</b>	<b>217</b>

**Digitalization in 2021 – 22:**

<b>Journals/Periodicals</b>	<b>Numbers</b>
Retrospective theses	78

**Other Details (during 2021-22):**

<b>Particulars</b>	<b>Details</b>
Total number of documents added in 2021-22	311
Total expenditure for subscription of current Journals/Periodicals in 2021-22	Rs. 2,02,25,419/-
Total number of E-Journal/E-Periodicals available on On-line through e-ShodhSindhu Consortium in 2021-22	14
Creation of computerized membership database in 2021-22	1989
Total Number of data entered in the SOUL database in 2021-22	3351
Existing number of users of online journal in 2021-22	168876
Contribution to Union catalogue of INFLIBNET in 2021-22	146985
Total number of student members	1839
Total number of others members	661
Average issue/return of books (daily)	41/41
Present seating capacity of the library	150

**Book Budget (during 2021-22):**

<b>Grant</b>	<b>Amount (Rs.)</b>
State Grant	Nil
SAP	Nil
University Grant	84,273/-
<b>Total</b>	<b>84,273/-</b>

## UNIVERSITY LIBRARY – JALPAIGURI CAMPUS

Total No. of Books	: 5714
Library Hours	: 11:00 am to 5:00 pm (Monday to Friday)
Book Lending Hours	: 12:00 noon to 4:00 pm
No. of Teacher Member	: 4
No. of RS Member	: 2
No. of Student Member	: 194

### Details of Library Staff:

Sl. No.	Name	Designation
1	Dr. Susmita Misra	Librarian-In-Charge (Addl.)
2	Mr. Abhijit Sarkar	Group-D (Man-days)

### Student Membership Details:

Name of the Department	Nos.
Bengali	63
English	30
Geography & Applied Geography	45
Sanskrit	56

## UNIVERSITY PRESS

### About the Press:

University Press, University of North Bengal was established in the year 1972 with the objective of Printing & Binding of articles of various academic and administrative Departments, mainly Examination related works. It started its journey in a hall with mono color Letter Press machine, cutting machine and accessories. With passing of time, various machines were installed with the change of technology.

Though in early years Press used to do the work of Controller of Examination in major but in later years it expanded its job periphery. Presently North Bengal University Press has been successfully engaged in printing Annual Journals of various Departments besides printing of routine jobs, prospectus of different courses, abstracts and other materials of seminars, different reports and newsletters.

Presently University Press building has 3 blocks -

Office & Store block	: 3450 sq. ft.
Printing & Compose block	: 1700 sq. ft.
Binding & Store Room	: 3450 sq. ft.

The University press extends printing services for -

- Confidential works of Examination branch
- Various Forms, Challans, Fee Book
- Various Reports like Annual Report, Annual Accounts, Budget, etc
- Study material of Directorate of Distance Education, NBU.
- Placement and Information Brochures and Souvenirs.
- Greetings Card, Display Card and Invitation Card of Workshops and Seminars.
- Journals of various departments.
- Books
- Certificates
- Visiting Card, Identity Card, Vehicle Stickers, etc.
- Printing materials for various National & International Seminars.

Presently University Press is functioning with three segments –

- a. Compose Section
- b. Printing Section
- c. Binding and Finishing Section

**Facilities Available at University Press:**

Sl	Particulars	Working condition	Out of order	Total
01	Offset Printing machines	3	2	5 Nos.
02	Letter Press machines	1	2	3 Nos.
03	Perfect Binding machine	1	NIL	1 No.
04	Cutting machine	1	1	2 Nos.
05	Folding machine	1	NIL	1 No.
06	Lamination machine	1	NIL	1 No.
07	Stitching machine	1	NIL	1 No.
08	Perforating cum Creasing machine	1	NIL	1 No.
09	A3 size Color Printer	1	2	3 Nos.
10	A4 size Color printer	1	NIL	1 No.
11	B & W printers	2	3	5 Nos.
12	Desktop Computers	2	3	5 Nos.

**Details of Officer Details:**

Name	Designation
Uttam Nunia	Superintendent

**Staff Details:**

Sl. No.	Name	Designation
01	Indraneel Roy	Assistant Superintendent
02	Naresh Ch. Roy	Sr. Assistant
03	Debasish Chakraborty	Sr. Assistant
04	Hemanta Kr. Singha	Sr. Binder
05	Bidhan Ch. Roy	Helper (Gr-III)
06	Anup Ghosh	Sr. Peon
07	Kamalendu Mallick	Offset Machine man, Contractual (Gr-C)
08	Bimal Das	Offset Machine man, Contractual (Gr-C)
09	Md. Malek Hossain	Offset Machine man, Contractual (Gr-C)
10	Dil Bahadur Thapa	Computer Operator (Casual) Gr-C
11	Chandan Singha	Machine man (Casual) Gr-C
12	Probhat Nag	Helper (Casual) Gr-D
13	Atindra Das	Helper (Casual) Gr-D
14	Ajoy Ghosh	Helper (Casual) Gr-D
15	Jagannath Singha	Helper (Casual) Gr-D
16	Pranab Kr. Singha	Helper (Casual) Gr-D
17	Motilal Singha	Helper (Casual) Gr-D
18	Naba Kr. Singha	Helper (Casual) Gr-D

In the year 2021-22 University Press has completed 170 indents and earned around Rs. 31.43 lakhs



## UNIVERSITY SCIENCE AND INSTRUMENTATION CENTRE

### About the Centre:

University Science Instrumentation Centre (USIC) was established in the year 1978 with its aim to offer services in terms of maintenance, repairing and fabrication of scientific equipment to the students, research scholars, and faculty members of all departments of the University. It is a Level- II centre and provides these services when a request from the departmental head concerned as well as the lab-in-charge is received. The Centre also provides computer maintenance support to various academic and non-academic Departments of this University.

USIC is running with its regular activities for repairing, maintenance, fabrication, assembling etc. of the scientific instruments to cater services to research scholars, students, teachers, officers of different departments and centers. The centre is also entrusted with the responsibility of repairing different instruments before disposal. The Centre broadly runs as per UGC guidelines.

The centre has the following facilities:

- Mechanical Workshop
- Electrical and Electronics
- Computer and peripherals
- Major Scientific Equipment
- Liquid Nitrogen Production Plant

### Details of the Officers:

Name	Designation	Email
Shri Gautam Sarkar	Technical Officer III and Head	gs72@nbu.ac.in
Shri Soumyadeep Laha	Technical Officer I	techofficer1@nbu.ac.in
Dr. Prajnamita Dasgupta	Scientific Officer (Released from USIC to join Chemistry on 21.03.102)	scientificofficer@nbu.ac.in
Dr. Lakshmi Dutta	Technical Officer II (joined on 07.03.2022)	lakshmi@nbu.ac.in

### Details of Support Staff:

Name	Designation	Remarks
Mr. Ambarish Chettri	Senior Mechanic	Retired on 31.01.2022
Mr. Harish Mishra	Record Keeper	Retired on 31.06.2021
Mr. Bikky Mallick	Junior Peon	
Mr. Rajib Das	Office Assistant (Contractual)	
Mr. Amit Kumar yadav	Offset Machine Man	Joined on 09.03.2022

### Services Extended in 2021 - 22:

- A. A summary of service works undertaken and completed successfully (Repair, Fabrication, Design, Installation, Up-gradation etc.),

Sl. No.	Month & Year	Repairing Jobs	
		C.P.U & Laptop	Electronics & Electrical
1	Apr, 21	02	00
2	May, 21	02	01
3	June, 21	03	00
4	July, 21	13	19
5	Aug, 21	20	36
6	Sept, 21	13	16
7	Oct, 21	16	13
8	Nov, 21	18	12
9	Dec, 21	19	27
10	Jan, 22	01	05
11	Feb, 22	06	19
12	Mar, 22	00	00
<b>Total</b>		<b>113</b>	<b>143</b>
<b>Total no. of Jobs = 256</b>			

### B. Major Equipment Facility:

Over the past few decades there has been an increase in interest for interdisciplinary, education and research. At present, it has become an integral part of higher education and research in Science & Technology. Multidisciplinary research activities can blend diverse areas of knowledge, skills and experience to generate innovative solutions to many challenging problems. Multidisciplinary projects can and should be the springboard for fundamental disciplinary advances too. While getting funds for such major equipment by a single department or by an individual researcher is unlikely, subsequent installation. Services and maintenance are even more challenging tasks in the present scenario. To keep pace with the state-of-the-art interdisciplinary education and research activities in Science and Technology, it is imperative for the University to be equipped with a number of major equipment. University Science Instrumentation Center (USIC) presently provide central facilities with sophisticated instruments like Liquid Nitrogen Plant and Scanning Electron Microscope.

#### i) Liquid Nitrogen Plant:

A centralized Liquid Nitrogen Plant (Liquid Nitrogen Plant of Striling Cryogenics, DH Industries BV, Netherlands) was installed at USIC in 2116. Liquid Nitrogen is constantly required to run NMR machine (Bruker 300MHz) installed at the Chemistry Department of our university as well as different users associated with the research work in different research laboratories of the university. Currently USIC is in a position to supply the adequate Liquid Nitrogen required and fulfill the needs of various departments.

Amount of Liquid Nitrogen supplied:

Sl. No.	Month and Year	Amount of Liquid Nitrogen (in liter) supplied to the different departments
1	Apr, 21	Chemistry :200,Botany :40, Biotechnology :08,
2	May, 21	Chemistry: 200
3	June, 21	Lockdown
4	July, 21	Chemistry: 800 , Botany :20 , Biotechnology :08
5	Aug, 21	Chemistry: 200
6	Sept, 21	Chemistry: 400, Biotechnology :18 , Botany :45 , Tea Sc:44
7	Oct, 21	Biotechnology :17 , Botany :12
8	Nov, 21	Chemistry: 100 , Botany :15, Biotechnology :17
9	Dec, 21	Chemistry: 400 , Botany :29, Biotechnology :16 ,Tea Sc:26
10	Jan, 22	Chemistry: 600 ,Biotechnology:08 ,Bioinformatics: 10
11	Feb, 22	Chemistry: 200 , Botany: 29
12	Mar, 22	Chemistry: 500Biotechnology:15 ,Bioinformatics: 10,Botany:17
<b>Total=</b>		<b>Chemistry: 3600 l, Others: 375 l Total = 3975 litre</b>

**ii) Scanning Electron Microscope:**

The Scanning Electron Microscope (SEM) is now an indispensable tool in scientific research. Jeol SEM (JSM IT100) was purchased and installed in December 2117 with the financial assistance from RUSA. Currently USIC is successfully providing the facility of analyzing and imaging of sample through SEM to various departments in the University, affiliated colleges, other Universities and colleges and also to the industrial community of this region.

Scanning Electron Microscopy (SEM) experiment done:

Sl. No.	Month and Year	No. of SEM experiments done
1.	Apr, 21	45
2.	May, 21	Lock Down
3.	June, 21	Lock Down
4.	July, 21	37
5.	Aug, 21	24
6.	Sept, 21	30
7.	Oct, 21	4
8.	Nov, 21	12
9.	Dec, 21	26
10.	Jan, 22	25

Sl. No.	Month and Year	No. of SEM experiments done
11.	Feb, 22	35
12.	Mar, 22	27
<b>Total =</b>		<b>265</b>

**Details of Seminar/Conferences /Webinar Attended:**

Name	Name of the Seminars / Conference	Venue & Date
Soumyadeep Laha	Short term course on Training on Skill Development and Changing Financial Management System	UGC-HRDC, NBU August 26, 2021 – September 02, 2021
	Online workshop on Advances in Electron Beam Lithography : Fundamentals to Applications	Organized jointly by IACS, Kolkata in collaboration with Carl Zeiss Microscopy November 30, 2021
	International Seminar on Astrophysics and Cosmology organized by IUCAA Centre for Astronomy Research and Development (ICARD)	Physics Department, North Bengal University - March 3, 2022
	Exploring the Cosmos 22: An International Conference on Relativistic Universe	High Energy and Cosmic Ray Research Centre University of North Bengal, held during the period March 15-16, 2022
Lakshmi Dutta	Exploring the Cosmos 22: An International Conference on Relativistic Universe	High Energy and Cosmic Ray Research Centre University of North Bengal, held during the period March 15-16, 2022

**Publications:**

Name of the Teacher/Officer	Name of the Book/ Book Chapter / Journal/ Volume	Date of Publication
Soumyadeep Laha	Fabrication and Characterization of Reduced Graphene Oxide/Polyaniline/Poly(Caprolactone) Electrospun Nanofiber, Arabian Journal for Science and Engineering-Springer, <a href="https://doi.org/10.1007/s13369-021-05901-3">https://doi.org/10.1007/s13369-021-05901-3</a> ISSN 1319-8025	25 <sup>th</sup> June 2021
Soumyadeep Laha	Synthesis and Characterization of rGO/GaP Nanocomposites Synthesized via Chemical Method Coupled with Investigation of Their Supercapacitive Behavior, Arabian Journal for Science and Engineering, <a href="https://doi.org/10.1007/s13369-021-06539-x">https://doi.org/10.1007/s13369-021-06539-x</a> , ISSN 1319-8025	17 <sup>th</sup> January , 2022
Soumyadeep Laha	Optical properties, electrochemical analysis and corrosion resistance studies of polyaniline/reduced graphene	Feb 2022

<b>Name of the Teacher/Officer</b>	<b>Name of the Book/ Book Chapter / Journal/ Volume</b>	<b>Date of Publication</b>
	Oxide/ZrO <sub>2</sub> for supercapacitor application Journal of Physics and Chemistry of Solids , Volume161 , Elsevier, <a href="https://doi.org/10.1016/j.jpcs.2021.110478">https://doi.org/10.1016/j.jpcs.2021.110478</a> , ISSN: 00223697	

## WATCH & WARD DEPARTMENT

### About the Department:

University of North Bengal has an active Watch and Ward Department which is providing Safety and Security arrangements round the clock covering a vast land area throughout the campus including 6 Girls Hostels, 6 Boys Hostels, large number of Professors residences, Guest House, Departments, Buildings and a Museum with valuable and rare items.

This Department keep a good number of fleet to meet all the vehicular needs to the university students, research scholar, staff and faculty members, specially connecting with airport, railway station, nearby city and even if Jalpaiguri Campus also.

The Watch & Ward department keeps 24 hours' eyes open on the places and incidents that take place within the campus through CCTV Network System.

### Duties of the Department:

- To protect lives and to safeguard property
- To create a safe and secure environment for the entire University community
- To prevent crime, control criminal behaviour, maintain order, and reduce fear of crime
- To accomplish all security objectives legally and constitutionally, guided by North Bengal University Statute, Act, Ordinance and Rules
- To create partnerships with university and community groups, service agencies, institutions, and other criminal justice agencies
- To identify and solve problems
- To listen to community concerns
- To establish and support crime prevention programs
- To respond to calls for service
- To investigate crimes and prevention of crime
- To apprehend those who commit crimes
- Protection of life and property of the university and its residents
- Providing service to members of the university while at the same time preserving an environment conducive to the pursuit of educational goals and personal growth

### Vehicle Facilities:

Type	No.	User / Purpose
Bus	3	Service is available to the students

<b>Type</b>	<b>No.</b>	<b>User / Purpose</b>
Ambulance	2	Available for 24-hours, for all categories of the employees and students
Car	4	For office use

## **CHAPTER – VIII**

# **FACILITIES FOR STUDENTS**





## ANTI-RAGGING COMMITTEE

The Hon'ble Supreme Court of India has defined that "ragging is any disorderly conduct whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness to any student, indulging in rowdy or undisciplined activities which cause or likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in a fresher or a junior student and which has the effect of causing or generating a sense of shame or embarrassment so as to adversely affect the psyche of a fresher or a junior student" and the apex court has held that conducting ragging is a criminal offence. According to the directions of the Supreme Court if any instance of ragging is brought to the notice of the administration or the faculty, it is legally binding on the institute to report the matter to the Local Police.

In compliance with the order, the University of North Bengal has constituted Ant-Ragging Committee and Anti-Ragging Squad to eradicate any chances of ragging in the campus. The Anti-Ragging Committee is the Supervisory and Advisory Committee on matters of planning action for building and preserving a culture of ragging free environment in the University campus. The Anti Ragging Squad works under the supervision of Anti Ragging Committee and engaged in surveillance of the places like hostels, buses, canteens, classrooms and other places of student congregation. They also sensitize the students at large in the University about menace of ragging and related punishment provisions.

The Composition of the Anti-Ragging Committee is –

### 1. Chairman

- Hon'ble Vice-Chancellor, University of North Bengal

### 2. Member – Convener

- Dr. S. Sanyal, Inspector of Colleges & Member-Secretary, Board of Residence and Discipline, NBU

### 3. Members:

#### A. Teaching Faculty:

- Prof. Saswati Biswas, Department of Sociology, NBU
- Dr. Arnab Sen, Department of Botany, NBU
- Professor Bikash Ch. Paul, Department of Physics, NBU
- Prof. Gangotri Chakraborty, Department of Law, NBU
- Dr. Anirban Mishra, Department of Chemistry, NBU
- Prof. Manoranjan Singha, Department of Mathematics, NBU
- Prof. Debika Saha, Department of Philosophy, NBU
- Dr. Indira Lepcha, Department of Geography & Applied Geography, NBU
- Dr. Shilpi Ghosh, Department of Biotechnology, NBU
- Prof. Manjula Bera, Department of Bengali, NBU
- Dr. Ramesh Dural, Department of Political Science, NBU

- Prof. K.K. Bagchi, Department of Economics, NBU
- Sri Varun Roy, Department of History, NBU
- Prof. Samirendra Nath Dhar, Department of Commerce, NBU
- Prof. Ranjan Ghosh, Department of English, NBU
- Prof. Manisha Jha, Department of Hindi, NBU

**B. Officer and Non-Teaching Staff:**

- Estate Officer, NBU
- Officer-in-Charge, Watch & Ward Department, NBU
- Secretary, FC for P.G. Studies in Science, NBU
- Secretary, Under Graduate Council, NBU
- Assistant Registrar, NBU Jalpaiguri Campus
- Secretary, NBUEA
- Secretary, SBTSS, NBU Unit.
- Secretary, NBUPEO
- Secretary, NBUASKA

**C. Civil and Police Administration:**

- Additional District Magistrate, Darjeeling, Siliguri
- Assistant Commissioner of Police (West), Siliguri
- Officer-In-Charge, Matigara Police Station

**D. Local Media:**

- Sri Subhankar Chakraborty, Uttar Banga Sambad.

**E. Non-Governmental Organization:**

- Sri Animesh Bose, HNAF

**F. Parents' Representatives:**

- To be nominated

**G. Students' Representatives Both Seniors and Fresher:**

- Sri Sourav Roy, Deptt of Mathematics, NBU
- Sri Himangshu Barman, Deptt of Bengali, NBU
- Sri Baichung Tamang, Deptt of Food Technology, NBU

## **HOSTEL**

In order to provide an abode of ideal ambience through happy housing, nutritious nourishment, and caring counselling to prepare the youth to carve out their careers, the University of North Bengal provides Hostel facilities to the bona-fide students of full time courses who meets required eligibility criteria. As hostel seats are limited, preference are given to the students whose residents are more than 45 km away from the University. Presently there are ten numbers of hostels including two hostels for the research scholars. Each hostel has in-house catering facility to provide healthy and hygienic foods to the hostel boarders. Special facilities in the Hostel are also available for the Physically Handicapped students.

The present number of hostels, for both male and female students, and their capacity are given below –

### **Boys' Hostel**

<b>Sl. No.</b>	<b>Name of the Hostel</b>	<b>Seats/Room</b>	<b>Capacity</b>
1	Ramkrishna Hall of Residence (R.K. Hall)	2	278
2	Vivekananda Hall of Residence (V.K. Hall)	2	316
3	Vidyasagar Hall of Residence	2	60
4	Law Hostel for Boys'	2	26
5	Research Scholars' Hostel (R.S. Hostel for Men)	1	65

### **Girls' Hostel**

<b>Sl. No.</b>	<b>Name of the Hostel</b>	<b>Seats/Room</b>	<b>Capacity</b>
1	Rani Bhawani Hostel	2	156
2	Sarojini & Purneswari Hostel	2	200
3	Nivedita Hostel	2	124
4	Law Hostel for Girls	2	16
5	Research Scholars' Hostel (R.S. Hostel for Women)	1	43

Apart from fooding and lodging, the hostels are also equipped with sports equipment and entertainment facilities for the leisure of the boarders. The University also extends facilities to ensure safety of the students. Few of such arrangements are –

- Furnished and spacious dining room

- Sports equipment like volley balls, footballs, cricket bats and balls, wickets, carom, gym equipment, etc.
- Volley ball ground inside the hostel campus
- Fire extinguisher facilities
- Water purifier and cooler
- Hi speed WIFI
- Water heater
- LPG connection and Chimney in the kitchen
- Newspaper (English, Bengali, Hindi, Nepali)
- Colour television
- Photocopier
- Round the clock Security Services for the hostels

A Hostel Monitoring Committee comprising of Senior Professors, Officers, Superintendent of Hostels and Students' representatives look after the affairs of the hostels. Anti-Ragging squad of the University keeps surveillance on the Hostel to ensure healthy stay of the boarders.

The composition of the Hostel Monitoring Committee is as follows –

Prof S.C. Roy, Department of Botany, NBU, Chairman

Dr. S.K. Rakshit, Joint Registrar, NBU - Coordinator & Member

Dr. Subrata Sanyal, Inspector of Colleges, NBU - Member

All Superintendent of Boys and Girls Hostel including RS Hostel

Sri Ayan Mohanty, Research Scholar representative

Ms Bidaisha Pandit, M.Sc 2<sup>nd</sup> Sem, Mathematics, PG Female representative

Sri Supriya Das, BLIS, 2<sup>nd</sup> Sem, PG Male representative

## SCHOLARSHIPS AND FELLOWSHIPS

In order to empower the academic and career goals of the students by removing the financial barrier, the University of North Bengal encourages and facilitates the eligible students to get various State and Central scholarships and fellowships. The present scholarships and fellowships available for the students of the University are given below –

### **Fellowship for Researchers:**

- UGC – NET – Junior Research Fellowship
- CSIR – NET – Junior Research Fellowship
- Maulana Azad National Fellowship for Minority Students
- National Fellowship for Other Backward Classes
- National Fellowship for Scheduled Caste
- National Fellowship for Scheduled Tribes
- West Bengal State Fellowship
- Swami Vivekananda Merit-Cum-Means Scholarship Scheme
- University Fellowship

### **Fellowship for PG Students:**

- Post Graduate Merit Scholarship Scheme for University Rank Holders
- Indira Gandhi Scholarship for Single Girl
- Swami Vivekananda Merit-Cum-Means Scholarship Scheme
- Kanyashree Prakalpa (Kannyashree-III)
- Oasis Scholarship

To facilitates the students and research fellows, the Office of the Registrar and the Office of the Development Officer look after the scholarships and fellowships respectively.

## **SC-ST CELL**

The SC/ST Cell at the University of North Bengal specifically concentrated on the welfare of the Scheduled Caste (SC) and Scheduled Tribe (ST) students and staff. The main purpose of the Cell is to monitor the guidelines issued by the MHRD, UGC and by the Government of West Bengal from time to time. The Cell ensures the effective implementation of the reservation policies in the university admissions to students in various courses of studies, accommodation in the hostels, appointments to the teaching and non-teaching posts, allotment of quarters in the university and maintenance of roster register in the University. The SC-ST Cell also ensures the scholarships, stipends etc. for welfare of reserved categories.

The SC/ST students and employees can approach the Coordinator of the Cell for redressal of any of their grievance(s) regarding academic, administrative or social problems. The Coordinator often meets the concerned students and staff, to understand their problem and takes necessary action and/or renders them necessary advice/help to resolve the matter.

Prof. S. C. Roy, Department of Botany, NBU

Prof. K.K. Bagchi, Department of Economics, NBU

Prof. Bhaskar Biswas, Department of Chemistry, NBU

## **STRESS MANAGEMENT CELL**

The Stress Management Cell of the University of North Bengal has been constituted as per the guidelines of the Ministry of Human Resource Development and University Grants Commission to take care of the students' mental health and address their tension and anxiety related to studies, career and health. The members of the Stress Management Cell attend calls from the students and others who are in need of mental support. The Composition of the Cell is as under: -

- Professor Palas R Sengupta, Professor (HRM and OB Area) and Head, Department of Commerce - Chairman
- Shri Sanmoy Mallick, Department of Management
- Dr. L.K. Padhi, Head, Department of Philosophy
- Ms. Swagata Ghosh, Department of Philosophy
- Ms. Khusboo Lepcha, Department of Microbiology
- Dr. Palash Mandal, Department of Botany
- Dr. Dipanwita Saha, Department of Bio Technology
- Dr. S. K. Rakshit, Dy. Registrar
- Mr. Surajit Das, Secretary, Sports Board      Convener
- Dr. Bibekananda Ghosh, Asst. Secretary, Sports Board-Convener



## **STUDENTS' GRIEVANCE REDRESSAL CELL**

In order to maintain the highest level of academic bonding with the students and to uphold their levels of wisdom, the University of North Bengal has always been in the quest of inculcating and nurturing an environment, where they can freely interact with the officers, staff-members and teachers of the University in any matter related to their academic or non-academic pursuits. Over the years, such a practice has become a part of the student management system and the University became keen to know if any student suffers from any form of discontent or dissatisfaction in any academic or non-academic matter and is able to express his concern to the University authority to redress it.

As a part of this gesture and in compliance with the University Grants Commission (Redress of Grievances of Students) Regulations – 2019, the University of North Bengal formed North Bengal University Students' Grievance Redressal Cell to initiate a student-friendly Grievance Redressal Mechanism through both the online and offline modes, where students are free to express or submit their concern with an ease.

The composition of the Students' Grievance Redressal Cell is –

Professor S.C. Roy, Head, Department of Botany, NBU      Chairman

Dr. S. Sanyal, Inspector of Colleges, NBU & Secretary, Board of Residence & Discipline, NBU

Dr. Rajat Dey, Department of Physics, NBU

Prof. Ranjita Chakraborty, Department of Political Science, NBU

Prof. Sanchari Roy Mukherjee, Head Department of Economics, NBU

Dr. Zinia Mitra, Director, Centre for Women's Studies, NBU

Dr. Soumen Bhattacharjee, Department of Zoology, NBU

Dr. S. K. Rakshit, Deputy Registrar, NBU      Convener

Smt. Shankari Chakraborty, Assistant Controller of Examinations, NBU

## TRAINING AND PLACEMENT CELL

The main endeavor of the Training and Placement Cell of University of North Bengal is to get students placed in reputed multinationals, government organizations, NGO's and the private sector. All students registered with NBU are provided with placement assistance, counselling for employment and guidance for self/social entrepreneurship. The Training and Placement Cell also assures logistic support to the visiting companies at every stage of the placement process by making University infrastructure available to them. The University acts as an interface between the industry and the students, and primarily enable the students to select from their career options.

The Training and Placement Cell also arranges lectures and workshops on various topics like resume buildings, skill development and prospect in various industries. The composition of the Training and Placement Cell is –

Prof. Pranab Ghosh, Professor, Department of Chemistry	Advisor
Dr. Prajnamita Dasgupta, Scientific Officer, USIC	Convener
Sri Sumit Ray, Assistant Professor, Department of English	Co-Convener
Sri Anirban Biswas, System Manager, CIRM	Member
Dr. Sajal Das, Associate Professor, Department of Chemistry	Member
Sri Sanmoy Mallick, Assistant Professor, Department of Management	Member
Dr. Mukta Majumder, Asst. Professor, Dept. of Computer Sc. and App.	Member
Dr. Sujit Biswas, Associate Professor, Department of Law	Member
Dr. Chandra Ghosh, Associate Professor, Department Tea Science	Member

## MISCELLANEOUS FACILITIES

Apart from the facilities discussed before, some more miscellaneous facilities are also provided to the students for quality education, campus safety as well as to cope up with the technological advancements being undergoing across the globe. Few of such facilities are -

### a. **Modern Classrooms:**

In order to ensure quality and effective education, the University of North Bengal had been established 33 numbers of Smart Classroom under RUSA scheme in various academic Departments. The University has also set up virtual classroom in 25 Departments to enhance online learning environment which allows for live interaction between the faculty and the students as they are participating in learning activities. In other words, the virtual classroom is a shared online space where the students and the teacher work together simultaneously.

### b. **Computer Facility:**

The Computer Laboratories in the various Departments are well equipped connected with digital library. Latest system and application softwares are available in the laboratories. Through E-connectivity facility students can access latest books of journals of their interest for their academic benefits with the help of e-platforms.

### c. **Internet Facility:**

CIRM provides 1 Gbps leased line (1:1) from BSNL under National Mission for Education through Information & Communication Technologies (NMEICT) project of MHRD. NBU has another 300 Mbps of Internet bandwidth from Vodafone ISPs and integrated to give seamless access from both the ISPs. NBU has a hardware firewall (SOPHOSE) that both protects the NBU network from outside hackers, and in addition can balance the load and also works for filtering unnecessary traffic, streamlining traffic by specifying priorities, and blocking unwanted sites.

A phase-wise installation of Wi-Fi system is in progress to the strategically identified locations of the campus. The plan is to make the internet accessible to located at any corner of the campus. As of now, the Wi-Fi facility is available at all hostels, library, guest houses, administrative buildings and some of academic Department and Centre. All stakeholders including Students, Scholars, Faculties, Officers and Non-teaching staffs avail the facility using their individual authentication token.

### d. **CCTV Surveillance:**

In order to ensure safety and security without affecting the privacy of individuals, a sophisticated and intelligent IP Based CCTV Surveillance system has been installed at every geographical corner of the University campus including at the entrance and exit point of sites and buildings. The system is based on Client-Server architecture. A total No

of 200+ cameras are in operation 24x7 and live feeds are being monitored from a central control facility under the supervision of University Watch and Ward Department.

**e. Canteen:**

There is canteen facility in the University where the students and staff of the university can buy food at an affordable rate. A variety of snacks including meals during lunch hours is available for students and staff. The canteen is operated by outside agency which functions during the working hours of the University. The seating capacity of the canteen is 30. University provides furniture, refrigerator, gas, purified water & electric supply to the agency.

**f. Sports and Gymnasium:**

The University believes in all round growth of the students and as a consequence the students participate in different sports and games activities of the University. A sports complex named 'Khela Ghar' is dedicated for the use of students with multi-gym, badminton courts and table tennis boards. There are two big playgrounds available for the students for outdoor sports. The Sports Board of the University provides coaching facilities to the athletes and also organizes various sports events throughout the year.

**g. Auditorium:**

A state of the art modern auditorium of the University, named 'Rabindra Bhanu Manch', is available for cultural activities by the University stakeholders including students. The seating capacity of the auditorium is approximately 500. For even bigger cultural gatherings, the University has another auditorium named 'Vidyasagar Manch' having seating capacity of 1000 approximately.

**h. Bank and Post Office:**

A branch of the State Bank of India named NBU Branch is situated within the University campus near Gate 2A on rent, which facilitates financial transaction by the University stakeholders. There is an ATM kiosk beside the branch having facility for withdrawal, deposit and pass-book printing. Another ATM is available in the Administrative Building.

A Post Office is also located within University campus\_near Gate 2A. Numbers of post boxes are placed by the post office within the campus to facilitate postal activities.



**CHAPTER – IX**  
**SERVICES AND AMENITIES**



## BASIC FACILITIES FOR WOMEN

### About the Facility:

Basic Facilities for Women, UGC Merged Scheme was commenced on the 14<sup>th</sup> January, 2009. Under this scheme two common rooms; one for Girl Students and another for Lady Teachers of this University; are allocated by the University in the Second Floor of the Humanities Building for the purpose of refreshment and recreation. The common rooms have the following facilities –

Item	Numbers
Sick bed	2
First-Aid Box with necessary medicines & items	2
Carom Boards	2
Chess	2 sets
Chinese- Checker	2 sets
Tennis Racket with Net	2 sets
Colored Televisions with table	2
Computers with tables	2
Refrigerators	2
Aqua-guard for drinking water	1
Mirrors	1
Steel Armed Chairs	40
Steel Framed Tables	10

Every working day girl students of various Departments use the Common room for refreshment and recreation. They play Carom, Chess, Chinese -Checker, Tennis etc.

One Lady Attendant engaged on contract takes care of the girl students, sick girls and also items as mentioned above.

Sometimes the Centre for Women Studies and the Department of Bengali use this room as a venue for organizing Seminar, Certificate Courses, etc.



## CENTRE FOR DAIFFERNTLY ABLED PERSONS

### About the Centre:

The Centre for Differently Abled Persons (CDAP), University of North Bengal is the only centre of its kind in the entire North Bengal region. The Centre focuses on the redressing issues of discrimination and exclusion of differently abled persons primarily students and employees of the University of North Bengal. The Centre by its activities promotes inclusion among diversities without any discrimination. In short, it is an effective platform for their career advancement as well as successfully harmonizing among themselves. This Centre is a prime example of harmony and brotherhood based on the principle of mutual respect.

The activities are monitored through personal contact programs to redress various problems and suggest ways of improvement. The motto of the Centre is to support them by providing required facilities such as computer, braille, mental support, hearing machine, awareness programmes, seminars, workshops, etc.

The goal of the Centre is capacity building among the differently abled students attending the Centre, make them skill oriented so that they can acquire abilities to read, write, hearing and so on. In short, they can express their views with dignity.

### Contact Details:

Name and Designation	Email
Dr. Samar Kumar Biswas Professor, and Coordinator, CDAP	samarkumarbiswas@nbu.ac.in

## **DAY CARE CENTRE**

Day Care Centre, North Bengal University was established in the month of June, 2008, with UGC- grant under merged scheme. The centre is now a fully equipped facility for the children of the teachers and employees of the University. Several teachers and employees have availed the facility during the last thirteen years.

Presently, the centre is undergoing renovation works, and as soon the Centre is ready after renovation work, it will be opened for the service to the children.

## INTERNAL COMPLAINTS COMMITTEE

The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 is a legislative Act that seeks to protect women from sexual harassment at their place of work. Taking this into account, the North Bengal University has set up the Complaint Committee for Prevention of Sexual Harassment with the objective to uphold women's right to protection against sexual harassment and for the prevention and redressal of sexual harassment; to promote a social, physical and psychological environment that will raise awareness about and deter acts of sexual harassment of women; to organize gender sensitization programmes; and, to deal with cases of discrimination and sexual harassment against women, in a time-bound manner. The Cell was earlier known as Sexual Harassment Cell which was later renamed as Internal Complaints Committee in 2016 following the UGC Notifications.

The University is committed to ensuring women's safety, gender sensitiveness and substantive gender equality, safe campus and workplace. The University is also committed to zero tolerance in the matter of sexual harassment. The Committee is composed of a Presiding Officer along with two Teacher Members, two Non-Teaching Members and two Students' Representatives. Apart from the members there is a Convener and Joint Convener.

The present composition of the ICC is –

Presiding Officer	Prof. Sushma Rohatgi, Department of Political Science, NBU
Two Faculty Members	1. Prof. Shilpi Ghosh, Department of Bio-technology, NBU 2. Dr. Zinia Mitra, Department of English, NBU
Non-Teaching Employees	1. Smt. Sharmistha Das, Deptt. of History, NBU 2. Smt. Priyanka Roy, Deptt. of Philosophy, NBU
Students (UG / PG / Research Scholar)	1. Smt. Sriradha Ganguli, Deptt. of Bio-technology, NBU 2. Smt. Shrestha Chakraborty, Deptt. of Philosophy, NBU
C.W.S representative as Non-Govt. Organization	Smt. Maitreyi Ghosh, Trickle Up. NBO, Kolkata
Convener	The Secretary, FC for P.G. Studies in Science, NBU
Jt. Convener	The Secretary, Under Graduate Council, NBU

## NATIONAL SERVICE SCHEME

### About NSS, NBU:

The National Service Scheme (NSS) was introduced at the University of North Bengal since 1982 as a complement to the academic programmes of the University. Since then, it has become a part and parcel of the academic system. The major objective ever since has been to involve the students in the society of which they are an integral part. The entire programme of the NSS revolves around the students wherein the NSS volunteers put the students in a single thread in order to implement the NSS objectives. The NSS is a challenging medium for functioning amongst the downtrodden section of the society as this University represents those affiliated colleges which are in majority located in rural areas where most of the population belongs to Scheduled Caste, Scheduled Tribe and many other minority communities. To reach this vulnerable section of population and to work for them, the NSS can be a major weapon to curb their destitution.

All programmes of the NSS are controlled and coordinated from the office of the Programme Coordinator of NSS at the North Bengal University. The programmes undertaken and decided at the meeting of the State Level Advisory Committee are implemented through the NSS Units at the affiliated colleges under the University and also at the University level. All programmes of NSS are coordinated by the Programme Coordinator of NSS, NBU. Planning, implementation, monitoring, supervision, evaluation and providing necessary advice are done from the office of the Programme Coordinator at the university.

The NSS units in affiliated colleges under North Bengal University are the basic units which function under Programme Officers on the basis of periodical instructions issued from the office of the Programme Coordinator. All new programmes to be undertaken by the units are intimated by the Regional Centre of NSS, Govt. of India and the State Liaison Officer, Govt. of West Bengal, which are transmitted for the units for compliance.

### NSS Units

Presently university has 93 NSS Units distributed in university campus and various colleges from hills of Darjeeling, Kalimpong and plains of North Bengal. Around 9000 student volunteers of colleges and university are directly involve themselves to provide the community services. The main campus of NBU has 6 NSS units with around 600 volunteers and Jalpaiguri Campus with 1 unit having around 100 volunteers.

Prof. (Dr.) Monoranjan Chowdhury, Dept. of Botany, NBU is the present Programme Coordinator. The details of NSSU Units of NBU are given below -

Unit Name	Programme Officer	Students Volunteers From	Volunteer type
I	Dr. Sujit Kumar Biswas, Department of Law	Department of Law	Male and Female
II	Dr. Sudash Lama, Department of History	Department of History, Bengali, Economics, Philosophy and	Male and Female

<b>Unit Name</b>	<b>Programme Officer</b>	<b>Students Volunteers From</b>	<b>Volunteer type</b>
		Education	
III	Dr. R K Mandal, Department of Computer Science & Application	All the Science Departments	Male and Female
IV	Subhrojyoti Kundu, Department of Mass Communication	All the remaining Departments of Arts and Commerce	Male and Female
V	Dr. Nita Tamang, Department of Mathematics	Female Students from all the Departments	Female
VI	Dr. Prabir Panda, Centre of Innovative Studies	Centre for Innovative Studies	Male and Female
Jalpaiguri Campus	Rafikul Alam, Department of Sanskrit	All students of Jalpaiguri Campus	Male and Female

## **REMEDIAL COACHING SCHEME**

### **Introduction:**

Remedial Coaching Scheme for Scheduled Caste and Scheduled Tribe students has been introduced by the North Bengal University during the financial year 2005- 2006 on the basis of approval of the UGC for University's proposal to start the scheme under the 10<sup>th</sup> plan guidelines for special schemes in the Universities for Scheduled Caste and Scheduled Tribe students. The Executive Council of North Bengal University, after the UGC approval decided to proceed with the programme of coaching scheme in March, 2005, with a view to enhancing the capability of Schedule Caste and Schedule Tribe students who constitute almost one- third of the total students' strength of the University.

University of North Bengal has well equipped infrastructures to provide remedial coaching to the students belonging to marginalized social groups and is not able to cope up with regular class-room teaching and not so motivated. Under the remedial coaching scheme, the university provides counselling and coaching to students at free of cost to prepare the students for Entry to Services, UGC and CSIR NET/SET examinations. The centre also provides free training and coaching to spoken English and other soft skill to its students.

### **Infrastructural Facilities:**

The coaching scheme at present has the following facilities/equipment sanctioned by the UGC and/or provided by the University:

- One photo-copiers
- Two computers
- One laser printer
- One public-address system with amplifier
- One LCD Projector with Screen
- One laptop

In addition, the Coaching Scheme also is in possession of a small library to cater the needs of the students. The library contains books on general knowledge/studies well as on specialized areas.

### **Faculty Position:**

In accordance with the UGC guidelines the scheme does allow neither permanent faculty members nor permanent support staff. The staff pattern Comprises One Coordinator (part-time), one part-time Office Assistant and one part-time Office peon. However, teachers belonging to various Departments are involved in imparting instructions and training under the coaching scheme.



**CHAPTER – X**  
**FINANCIAL REPORT**  
(Unaudited)





**UNIVERSITY OF NORTH BENGAL**  
**RAJA RAMMOHANPUR, DARJEELING**  
**CONSOLIDATED BALANCE SHEET**  
**AS ON 31/03/2022**

LIABILITIES	Sched ule	Previous Year (₹)	Amount (₹)	Current Year (₹)	ASSETS	Sched ule	Amount (₹)	Previous Year (₹)	Amount (₹)	Current Year (₹)
<b>General (Main) Fund - NBU</b>					<b>Fixed Assets</b>	8		1,745,037,325.45		1,795,464,844.45
Capital		122,054,655.83		119,843,519.83						
Revenue		(175,267,037.42)		(216,023,305.92)						
General Reserve Fund - NBU		243,145,320.23		220,348,307.23	<b>Capital Work-in-Progress</b>	10		82,686,435.00		127,686,435.00
General (Main) Fund - NBUMC A/c					<b>Investment</b>	7		1,959,166,628.00		1,971,084,492.00
Revenue		101,566.93		101,566.93						
Capital		840,998.02		840,998.02						
<b>Capital Assets Fund</b>	9	1,745,037,325.45		1,795,464,844.45	<b>Loans &amp; Advances</b>	2		65,394,692.64		62,534,799.64
<b>Projects &amp; Schemes Fund</b>										
<b>UGC Projects Account</b>										
General		1,289,130.85		1,289,130.85						
Capital		(42,706,607.24)		(42,706,607.24)	Cash at Bank	6	334,694,802.89		306,666,007.46	
Project & Scheme	3	(3,583,632.63)		(1,198,185.63)	Treasury	6	397,530,262.09		445,382,039.09	
<b>Non-UGC Projects Account</b>										
General		717,842.00		914,377.00	SBI Collection A/c		559.50		559.50	
Projects & Schemes	3	26,297,167.20		24,716,157.20				732,225,624.48		752,048,606.05
<b>C.S.I.R. Account</b>										
General		677,430.00		785,970.00						
Research Project Fund	3	(121,473.61)		745,898.39						
Research Scholar Fund	3	(311,768.86)		(453,432.86)						
<b>UGC SAP Account</b>										
General		199,974.00		199,974.00						
<b>N.S.S. Account</b>										
General		5,533,076.00		2,670,041.00						
Projects & Schemes	3	49,681.00		35,681.00						
<b>NAIP Account</b>										
ICAR Project	3	(62,755.00)		(62,471.00)						
<b>UGC HRDC Account</b>										
Projects & Schemes	3	(7,750,530.50)		(10,201,785.50)						
<b>Earmarked Fund</b>										
<b>University Innovative Programme A/c</b>										
General		(467,333.29)		(181,913.29)						
Projects & Programmes	3	5,085,155.00		5,085,155.00						
<b>Development of Infra. Fac. Fund A/c</b>										
General		478,711,311.49		546,988,240.49						
Capital		1,357,752.00		1,357,752.00						
<b>Total C/F</b>		<b>2,400,827,247.45</b>		<b>2,450,519,911.95</b>	<b>Total C/F</b>			<b>4,584,510,705.57</b>		<b>4,708,819,177.14</b>

**Note: Unaudited**

LIABILITIES	Schedule	Previous Year (₹)	Amount (₹)	Current Year (₹)	ASSETS	Schedule	Amount (₹)	Previous Year (₹)	Amount (₹)	Current Year (₹)
Total BIF		2,400,827,247.45		2,450,519,911.95	Total BIF			4,584,510,705.57		4,708,819,177.14
Endowment Fund A/c		1,909,221.00		1,909,221.00						
Pension & Gratuity Fund A/c		1,080,811,005.62		1,118,601,939.62						
E.P.F Account		415,876,027.09		465,643,858.09						
SBD Fund Account		41,373,644.54		47,329,215.54						
Self Financed Courses Fund										
Misc. Self Financed Courses A/c		3,671,375.00		3,739,558.00						
IT- Self Financed Courses A/c		76,221,073.99		90,938,180.99						
Prof N.H.C.For M.S. Courses A/c		6,940,801.00		7,136,491.00						
D.D.E. Account		344,362,794.74		366,272,674.74						
Other Fund										
CIIT DBT Account		79,485.93		80,566.00						
NBU Jalpaiguri Campus A/c										
General Capital		(996,362.87)		(951,597.87)						
RUSA Fund Account		28,568,480.00		28,568,480.00						
General Capital		10,985,906.00		7,886.00						
		68,825,845.00		19,521,700.00						
Current Liabilities & Provision	4	104,716,905.08		109,163,856.08						
Loan (Liability)	5	337,256.00		337,256.00						
		4,584,510,705.57		4,708,819,177.14				4,584,510,705.57		4,708,819,177.14

Sd/-  
(B. Basak)  
Sr. Assistant

Sd/-  
(S. Das)  
Dy Finance Officer

Sd/-  
(Dr. S. N. Saha)  
Jt. Finance Officer  
& Finance Officer (Offg.)

**Note:** Unaudited



**UNIVERSITY OF NORTH BENGAL**  
**RAJA RAMMOHANPUR, DARJEELING**  
**CONSOLIDATED RECEIPTS & PAYMENT ACCOUNT**  
**For the year ended 31.3.2022**

Receipts	Schedule	Amount (₹)	Previous Year (₹)	Amount (₹)	Current Year (₹)	Payments	Schedule	Amount (₹)	Previous Year (₹)	Amount (₹)	Current Year (₹)
To Opening Balance:											
Cash at Bank	6	532,978,587.12		334,694,802.89		By Revenue Payments	1		1,294,349,072.54		1,296,682,714.50
Treasury	6	322,374,099.09		397,530,262.09		By Capital Payments	1		83,267,298.00		206,862,297.00
SBI Collection A/c		559.50	855,353,245.71	559.50	732,225,624.48	By Loans & Advances	2		58,650,048.00		53,525,376.00
To Revenue Receipts	1		1,285,733,258.45		1,431,600,633.07	By Payments on Projects	3		31,313,139.14		23,126,276.00
To Capital Receipts	1		107,563,408.00		97,313,206.00	By Investment	7		1,290,648,324.00		1,574,718,200.00
To Recovery of Advances	2		83,323,772.00		56,385,269.00	By Current Liabilities	4		221,832,871.00		226,357,714.00
To Receipts on Projects	3		14,660,586.00		22,191,450.00	By Loan (Liability)	5				-
To Investments	7		1,036,741,258.00		1,562,800,336.00	By Capital Work-in-Progress	10				-
To Current Liabilities	4		215,051,347.00		230,804,665.00						
To Loan (Liability)	5		58,203.00			By Closing Balance					
						Cash at Bank	6	204,694,802.89			306,666,007.46
						Treasury	6	307,530,262.09			445,382,039.09
						SBI Collection A/c		559.50			559.50
									732,225,624.48		752,048,606.05
			<b>3,598,485,078.16</b>		<b>4,133,321,183.55</b>				<b>3,598,485,078.16</b>		<b>4,133,321,183.55</b>

Sd./  
(D. Basak)  
Sr. Assistant

Sd./  
(S. Das)  
Dy Finance Officer

Sd./  
(Dr. S. N. Saha)  
Jr. Finance Officer  
& Finance Officer (Offg.)

**Note: Unaudited**

**CHAPTER – XI**  
**APPOINTMENTS &**  
**RETIREMENTS**



## New Appointments:

### A. Teachers

Name	Designation	Department	Date of Joining
Dr. Sripada Haldar	Professor	Physics	01.02.2021
Dr. Prakriti Adhikary	Assistant Professor	Physics	01.02.2021
Dr. Gangotree Ghosh	Associate Professor	Commerce	05.02.2021
Dr. Sidhartha Sankar Laha	Associate Professor	DLLE	10.02.2021
Dr. Jayanta Nanda	Assistant Professor	Chemistry	10.02.2021
Md Ajj	Assistant Professor	Computer Sc. & App.	12.02.2021
Dr. Sujay Kr. Biswas	Assistant Professor	Mathematics	12.02.2021
Dr. Bapi Ray Sarkar	Associate Professor	Pharmaceutical Technology	19.02.2021
Dr. Kiran Pradhan	Associate Professor	Chemistry	24.02.2021
Dr. John J. George	Associate Professor	Bioinformatics	01.03.2021
Dr. Kinkar Biswas	Associate Professor	Chemistry	05.03.2021
Dr. Samten Tamang.	Assistant Professor	Mathematics	16.04.2021
Dr. Md Selim Arif Sher Shah	Associate Professor	Chemistry	12.04.2021
Dr. Mili Ghosh	Assistant Professor	Computer Sc. & App.	02.07.2021
Dr. Barun Roy	Assistant Professor	Mass Communication	07.04.2022

### B. Officers

Name	Designation	Department	Date of joining
Dr. Arunava Bhadra	Sr. Scientific Research Officer	HECRC	07.03.2022
Dr. Lakshmi Dutta	Technical Officer II	USIC	07.03.2022
Dr. Rupak Bhattacharjee	Secretary	Faculty Council for PG Studies in ACL	10.03.2022
Sri. Palash Paul	Development Officer	Office of the Development Officer	16.03.2022

## Retirement:

Name	Designation	Department
Dr. Subir Sarkar	Professor	Geography & Applied Geography
Dr. Sushma Rohatgi	Professor	Geography & Applied Geography
Dr. Gangotri Chakraborty	Professor	Law
Dr. Mohan Prasad Dahal	Professor	Nepali
Dr. Debika Saha	Professor	Philosophy
Dr. Duytis Chakrabarti	Associate Professor	Political Science
Dr. Sudip Kumar Bhattacharya	Associate Professor	Geography & Applied Geography



<b>Name</b>	<b>Designation</b>	<b>Department</b>
Sri. Kamala Kanta Ghosh	Estate Officer	Estate Officer
Smt. Doly Dey	Record Supplier	Economics
Sri Ramesh Singha	Mess Helper	P.G. Hostel
Sri Harish Ch. Mishra	Record Keeper	USIC
Asish Majumder	Mess Helper	P.G. Hostel
Shyam Bahadur Dorjee	Mess Helper	P.G. Hostel
Satya Ranjan Das	Record Keeper	Microbiology
Ambarish Chhetri	Sr. Mechanic Gr. II	USIC
Sujan Kr. Das	Tech Asstt. Gr.II	Health Centre
Sushil Kr. Roy	Sr. Superintendent	Register's Br.
Bindu Subba	Head Durwan	W/W
Samarendra Nath Ghoah	JACT	Finance Br.
Jamuni Sharma	Record Supplier	Nepali
Gyan Narayan Pardhan	Sorter	Library
Samir Kr. Roy	Tech. Asst. Gr.II	Law
Sukanta Roy	Lab. Assistant	Botany
Narayan Ch. Barman	JACT	Examination Br.
Chandra Das	Hostel Cook	P.G. Hostel

**CHAPTER – XII**  
**AFFILIATED COLLEGES**



## AFFILIATED COLLEGES

### Details of Affiliated Colleges:

**No. of Affiliated Colleges**                      **50**

**No. of Teachers in the Affiliated Colleges**                      1930

	<i>Name of the College</i>	<i>Teachers Strength</i>
	University B.T. Evening College	43
	Ananda Chandra College	126
<b>Constituent Colleges with present Teachers Strength</b>	Darjeeling Govt. College	112
	St. Joseph's College	85
	Siliguri College	99
	Kurseong College	50
<b>University College with present Teachers Strength</b>	University BT & Evening College	43
<b>No. of Non-government colleges</b>		45
<b>B. P. Ed Colleges</b>	Model B. P. Ed. College	
<b>Law Colleges</b>	Jalpaiguri Law College	
	Indian Institute of Legal Studies	
<b>Total Honours Subjects run in the Affiliated Colleges</b>	Bachelor of Arts	: 15
	Bachelor of Science	: 10
	Bachelor of Commerce	: 01
<b>Enrollment in Affiliated Colleges</b>	UG: 101765	

SC : 37%

**Percentage of SC/ST/OBC Students**    ST : 08%

OBC : 12%

**Name of Colleges Affiliated to the University of North Bengal and Teachers Strength:**

Sl. No.	Name of the College	No. of Teachers
1.	Ananda Chandra College	126
2.	Ananda Chandra College of Commerce	26
3.	P.D. Women's College	62
4.	Birpara College	45
5.	Jalapiguri Law College	15
6.	Falakata College	38
7.	Alipurduar College	45
8.	Parimal Mitra Smiriti Mahavidyalaya	44
9.	Sukanta Mahavidyalaya	71
10.	Vivekananda College	14
11.	Saheed Kshudiram College	38
12.	Nani Bhattacharjee Smarak Mahavidyalaya	25
13.	Maynaguri College	52
14.	North Bengal St. Xavier's College	54
15.	Alipurduar Mahila Mahavidyalaya	23
16.	Model B.P.Ed. College	12
17.	Rajganj College	26
18.	Samuktala Sidhu Kanhu College	16
19.	Darjeeling Govt. College	112
20.	Kalimpong College	63
21.	Bijanbari Degree College	07
22.	Kurseong College	50
23.	St. Joseph's College	83
24.	Cluny Women's College	35
25.	Southfield College	38
26.	Siliguri College	99
27.	Siliguri College of Commerce	14
28.	Salesian College	116
29.	Siliguri Mahila Mahavidyalaya	33
30.	Sonada Degree College	20
31.	Kalipada Ghosh Terai Mahavidyalaya	54
32.	Surya Sen Mahavidyalaya	63
33.	Mirik Degree College	21

34.	Ghoom Jorebunglow Degree College	30
35.	Gyanjyoti College	25
36.	Nakshalbari College	29
37.	Munshi Premchand Mahavidyalaya	23
38.	Acharya Prafulla Chandra Roy Govt. College	43
39.	Indian Institute of Legal Studies	10
40.	University B.T. & Evening College	43
41.	Islampur College	59
42.	Chopra kamala Paul Smriti Mahavidyalaya	12
43.	Dhupguri Girls' College	13
44.	Lilabati Mahavidyalaya	19
45.	Banarhat Kartik Oraon Hindi Government College	13
46.	Government General Degree College, Gorubathan	13
47.	Govt. General Degree College, Pedong	10
48.	Pijush Kanti Mukherjee Mahavidyalaya	10
49.	Ghoshpukur College	27
50.	Birsa Munda College	11
<b>T O T A L</b>		<b>1930</b>

**Name of the Affiliated Non-Government Colleges:**

<b>Sl. No.</b>	<b>Name of the College</b>
1.	Ananda Chandra College
2.	Ananda Chandra College of Commerce
3.	P.D. Women's College
4.	Birpara College
5.	Jalapiguri Law College
6.	Falakata College
7.	Alipurduar College
8.	Parimal Mitra Smiriti Mahaviydalaya
9.	Sukanta Mahavidyalaya
10.	Vivekananda College
11.	Saheed Kshudiram College
12.	Nani Bhattacharjee Smarak Mahavidyalaya
13.	Maynaguri College
14.	North Bengal St. Xavier's College
15.	Alipurduar Mahila Mahavidyalaya
16.	Model B.P.Ed. College
17.	Rajganj College
18.	Samuktala Sidhu Kanhu College

19.	Kalimpong College
20.	Bijanbari Degree College
21.	Kurseong College
22.	St. Joseph's College
23.	Cluny Women's College
24.	Southfield College
25.	Siliguri College
26.	Siliguri College of Commerce
27.	Salesian College
28.	Siliguri Mahila Mahavidyalaya
29.	Sonada Degree College
30.	Kalipada Ghosh Terai Mahavidyalaya
31.	Surya Sen Mahavidyalaya
32.	Mirik Degree College
33.	Ghoom Jorebunglow Degree College
34.	Gyanjyoti College
35.	Nakshalbari College
36.	Munshi Premchand Mahavidyalaya
37.	Indian Institute of Legal Studies
38.	University B.T. & Evening College
39.	Islampur College
40.	Chopra kamala Paul Smriti Mahavidyalaya
41.	Dhupguri Girls' College
42.	Lilabati Mahavidyalaya
43.	Pijush Kanti Mukherjee Mahavidyalaya
44.	Ghoshpukur College
45.	Birsa Munda College

**CHAPTER – XIII**  
**PH. D. AWARDS**





Details of the Research Scholars who have been awarded PhD Degree by the University in 2021 – 2022

S. No.	Name of the scholar	Name of the Guide/s	Department	Title of the thesis
01	Biswajit Mondal	Dr. Sajal Das & Dr. Mrinalkanti Kundu (Co-supervisor)	Chemistry	Novel Pd-Catalyzed Carbon-Carbon and Carbon- Heteroatom Cross Coupling Reactions towards the Synthesis of Diverse Functional Molecules
02	Baishakhi Sarkar	Prof. A.P. Das & Prof. S. Bera	Botany	Studies on pollen morphology of arboreal spermatophytes from terai and dooars of West Bengal, India
03	Indrani Kundu (2016)	Prof. G. Chakraborty	Law	Paradigm shifts in jurisprudential thoughts in Indian legal system: a study of A. K. Gopalan to Maneka Gandhi's case and beyond
04	Koushik Sarkar	Prof. M. Singha	Mathematics	Topology of Different Metric Spaces and Fixed Point Theories
05	Haimanti Barman	Prof. M. Bera	Bengali	জ্যোতিরিন্দ্র নন্দীর ছোটগল্প : জীবন-জিজ্ঞাসার বহুমাত্রিক রূপ অন্বেষণ
06	Samrat Ghosh	Prof. A. Mukhopadhyay & Dr. A. Bhadra (Co-sup.)	Physics	Influences of Dark Sector on Local Gravitational Phenomena
07	Saroj Lama	Prof. M. Jha	Hindi	Omprakash Valmiki Ke Sahitya Mein Dalit Chetna
08	Aparna Chatterjee (Sen)	Prof. S. Biswas	Sociology	Theravadi Buddhists of Siliguri: A Study of Socio-Cultural Distinctiveness and Exchange
09	Sylvia Raha	Prof. S. Roy	Sociology	The Corporate Entry into the Jewellery Business and its Socio-Economic Impact on the Life of the Traditional Swarnakars and Jewellery Traders in Siliguri
10	Rupayan Mukherjee (2016)	Dr. Ranjan Ghosh	English	Idling With (in) History: Flanerie and Alternative Historiography in Selected Novels of Orhan Pamuk
11	Aparna Ghosh	Dr. Suman Chatterjee	Physics	Fabrication And Characterization Of Solid-State Gas Sensors
12	Shahjahan Ali Sheikh	Dr. K. Datta	Economics	Displacement and Livelihood Changes in Erosion affected Char Areas in Assam: A Socio Economic study of Dhubri District
13	Biswajit Das	Prof. S. Rohatgi	Geography & Applied Geography	Educational And Economic Empowerment Of Rural Scheduled Caste Women Of Koch Bihar District Of West Bengal

S. No.	Name of the scholar	Name of the Guide/s	Department	Title of the thesis
14	Gyanendra Subba	Prof. G.S. Nepal	Nepali	Darjeeling Pulbazar Khandama Paine Lokvartako Vishlesanatmak Adhyayan
15	Abhijit Datta	Dr. Sudash Lama	History	Industry, Trade And Commerce In Early Medieval Bengal : A Historical Investigation
16	Alipnur Ahamed (2016)	Dr. Ashis Roy	Bengali	সৈয়দ মুস্তাফা সিরাজের উপন্যাস : বিষয় - ভাবনা ও আঙ্গিক অন্বেষণ
17	Sankar Biswas	Dr. S.K. Bhattacharya	Geography & Applied Geography	A Study On The Problems Of Urbanization In Cooch Behar Town, West Bengal, India
18	Anushuya Pal	Prof. A.K. Jana	Political Science	Development Policies in the Social Sector and the State Party Led Coalition Governments: A Study of two States of Odisha and Bihar (2000 – 2010)
19	Eagam Khaling	Dr. Anirban Mukherjee	Philosophy	Kant's Philosophy Of Physics
20	Arpan Roy Pramanik	Prof. N.C. Roy	Bengali	শ্যামল গঙ্গোপাধ্যায়ের উপন্যাস : বিষয়বৈচিত্র্য, জীবনদৃষ্টি ও শিল্পরীতি
21	Kalipada Barman (2016)	Prof. N.C. Roy	Bengali	সাধন চট্টোপাধ্যায়ের উপন্যাস (১৯৭০ - ২০১৬) : বিষয়-ভাবনা ও আঙ্গিকগত অভিনবত্ব
22	Priyanka Rai (2016)	Dr. Dhiraj Saha	Zoology	Study of resistance and underlying mechanisms against common insecticides in Culex quinquefasciatus Say, from different districts of northern part of west Bengal, India
23	Hridoydip Ranjan Dasgupta (2016)	Prof. P. Ghosh	Chemistry	Studies On Novel Methodologies For The Synthesis Of Precursor Of Bioactive Compounds
24	Ananya Das	Prof. Biswajit Sinha	Chemistry	Novel Transition Metal Complexes of Some $\beta$ -cyclodextrin based Polydentate Ligands : Synthesis and Physico-Chemical Characterization
25	Esmita Chhetri	Prof. M.N. Roy & Dr. Bhaskar Chakraborty (Co-supervisor)	Chemistry	Synthesis, Characterization and inclusion Complexation of some Isoxazolidine and Isoxazoline Derivatives for Advanced Applications explored by Physicochemical Approach
26	Tufan Roy	Prof. U. Mandal	Bengali	আত্মকথায় উনিশ শতকের সংস্কৃতি ও নারী : নারীর আত্মকথা (নির্বাচিত) কেন্দ্রিক সমীক্ষা

S. No.	Name of the scholar	Name of the Guide/s	Department	Title of the thesis
27	Subarna Sen	Prof. M. Bera	Bengali	বৈষ্ণব পদাবলীর তত্ত্ব ও দর্শন প্রভাবিত বাংলা কথাসাহিত্য (নির্বাচিত-বঙ্কিমচন্দ্র-রবীন্দ্রনাথ-শরৎচন্দ্র ও তারাশঙ্কর): একটি অন্বেষণ
28	Smita Sarkar	Prof. M. Bera	Bengali	সুচিত্রা ভট্টাচার্যের উপন্যাসে নরনারীর জীবন জটিলতার স্বরূপ : একটি অন্বেষণ
29	Dibakar Roy (2016)	Prof. P. Ghosh	Chemistry	Modification Of Vegetable Oils As A Potential Base Oil And A Multifunctional Lube Oil Additive
30	Sujan Kumar Paul (2016)	Prof. P. Ghosh	Chemistry	Synthesis And Application Of Chemical Additives In The Field Of Lubricant Formulation
31	Goutam Sarkar	Prof. D.K. Mandal	Geography & Appl. Geog.	Changes In Agricultural Land Use Scenario In Uttar Dinajpur District, West Bengal
32	Jayanta Roy (2016)	Dr. Dilip Ch. Pramanik	Mathematics	Some Investigations On The Value Distribution Theory Of Entire And Meromorphic Functions
33	Ruchita Chakraborty (2016)	Prof. G. Chakraborty	Law	An Assessment Of The Legal Regime Relating To Jute Industry In India : A Study With Special Reference To West Bengal
34	Uttara Dey Bhowmick	Prof. S. Bhattacharjee	Zoology	Isolation and Characterization of Environmental Aeromonads from North Bengal region with a special emphasis on their Drug Resistance and Virulence Genes
35	Deepika Chettri	Prof. K. Datta	Centre for Himalayan Studies	The Socio-economic Condition and Political Status of the Tibetan Refugees in Indian and Nepal: A Comparative Study
36	Manoranjan Mandal	Prof. D.K. Mandal	Geography & Applied Geography	Status Of Irrigation And Its Impact On Agriculture In Jalpaiguri District
37	Sumon Chatterjee	Prof. S.R. Mukherjee	Economics	Small Borrowers' Need And The Credit Market: A Study Of Formal And Informal Market Borrowing In The District Of Darjeeling, West Bengal
38	Bhupen Tamang	Dr. Pushkar Parajuli	Nepali	Nepali Yuddha – Upanyasharuko Visayaparak Adhyayan
39	Smt. Soumya Mitra	Prof. M. Choudhury	Geography (under Centre for Himalayan Studies)	Socio-Economic Status And Adaptation Of Migrant Labourers From The Plains To Sikkim's Informal Sector : Studies On Singtam And Rangpo Towns
40	Arunika	Dr. Palash	Botany	Pharmacognostic evaluation and

S. No.	Name of the scholar	Name of the Guide/s	Department	Title of the thesis
	Subba	Mandal		in vitro antioxidant potential of some ethnomedicines used by traditional practitioners of West Sikkim
41	Subhashis Paul	Prof. S. Bhattacharjee & Prof. T.K. Chaudhuri	Zoology	Exploration of Anti-inflammatory and Anti-arthritis Properties of Aloe vera (L.) Burm.f. from the Sub-Himalayan West Bengal, India
42	Pompi Sarkar	Prof. D.K. Mandal	Geography & Applied Geography	Bank Erosion And Associated Problems In Upper Mahananda Basin In Darjeeling District, West Bengal
43	Mummun Basak	Prof. M. Bera	Bengali	উনিশ শতকের বাংলা সাহিত্যে মহাভারতের নবনির্মিত : একটি অন্বেষণ
44	Md. Nabiul Islam	Prof. B.K. Sarkar	History	The Nashya Sheikh Community Of North Bengal In The Twentieth Century : A Study Of The Socio-Economic And Political Transformations
45	Vivek Kumar Ranjan	Prof. R. Chakraborty	Biotechnology	Search for molecular diversity of metallo- $\beta$ -lactamase genes in eubacterial isolates of Karala and Mahananda rivers of West Bengal
46	Darshan Chandra Barman	Dr. S. Bhattacharya	Geography & Applied Geography	The Study Of Abandoned Channels And Their Socio-Economic Importance Of The Sankosh River Basin In India
47	Prodipta Sarbadhikary	Prof. A. Misra	Chemistry	Magnetic and Transport Properties of Spin Polarized Molecular Systems : A Theoretical Perspective
48	Kaushik Acharjee	Prof. B. Sinha & Dr. P. Deb (Co-supervisor)	Chemistry	Efficacy of Transition Metal Complexes of Some Polydentate Ligand Systems As Potential Plant Nutrient Supplements: A Morphological and Biochemical Study
49	Amlan Lahiri	Prof. S. Biswas	Sociology	Matua Mahasangha in West Bengal : A Sociological Study of Religious Organisation
50	Anup Deka	Prof. K.L. Das	Philosophy	Understanding Religious Language As A form of Life : A Philosophical Quest After later Wittgenstein
51	Badal Roy	Dr. Sudash Lama	History	Traditional Games, Sports And Amusements In Twentieth Century North Bengal : A

S. No.	Name of the scholar	Name of the Guide/s	Department	Title of the thesis
				Historical Perspective
52	Tanushree Sutradhar	Prof. A. Misra	Chemistry	Theoretical Investigation On Optoelectronic Properties Of Nanoclusters And Conjugates
53	Jaygopal Mondal	Prof. Biswajit Sinha & Prof. M.N. Roy (co-sup.)	Chemistry	Solvation Consequences Of Different Aqueous Media On Some Biologically Active Compounds : A Physico-Chemical Study
54	Dipayan Das	Dr. Palash Mandal	Botany	Application Of Nano Silver And Silver Ions In Preservation Of Mulberry Leaves And Their Utilization In Silkworm Rearing System
55	Sukdev Majumder	Prof. M.N. Roy & Dr. Nitish Roy (Co-supervisor)	Chemistry	Exploration Of Solvation Consequences Of Some Ionic Liquids And Biologically Potent Molecules Prevailing In Different Liquid Environments

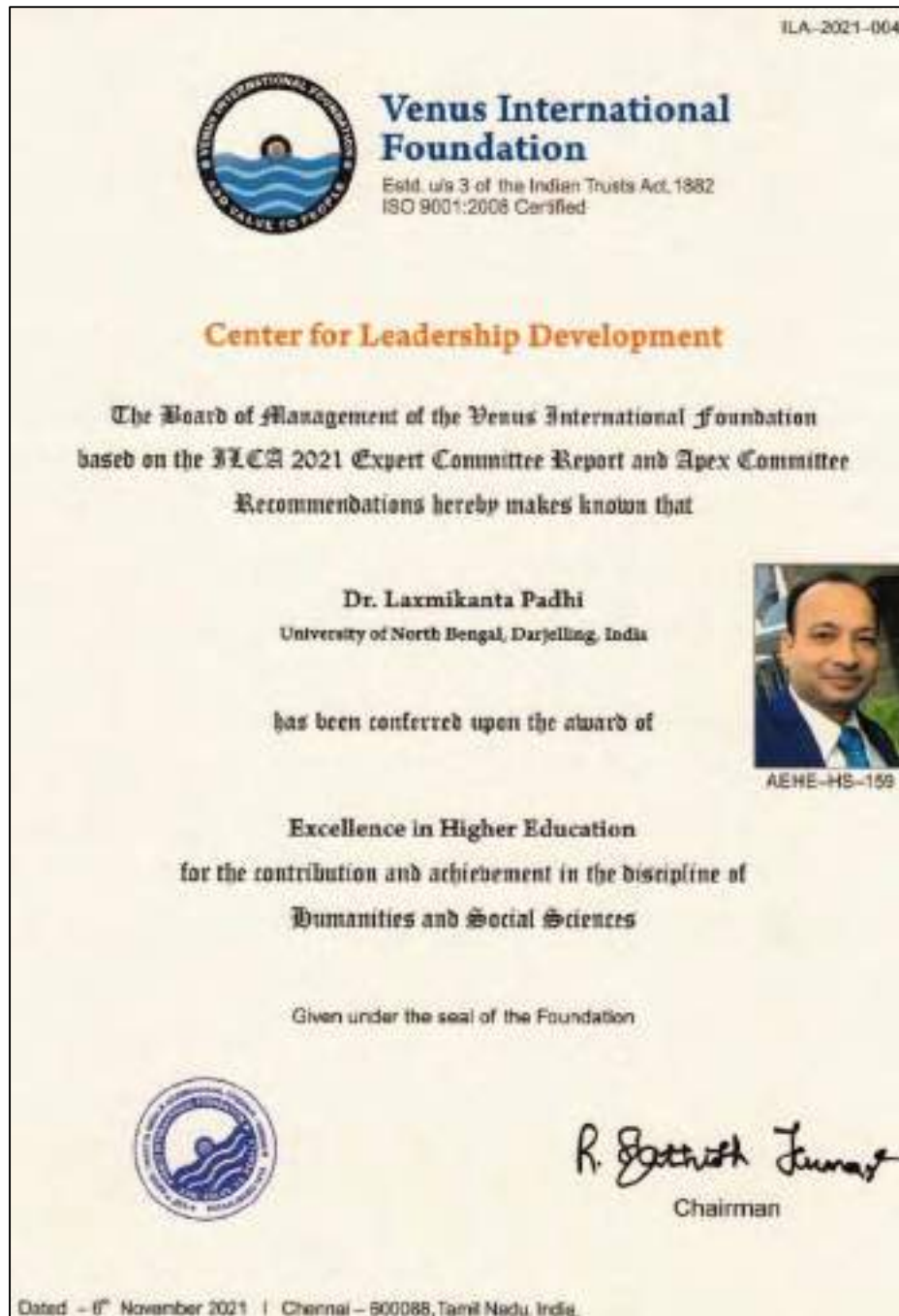


**CHAPTER – XIV**  
**AWARDS AND RECOGNITIONS**





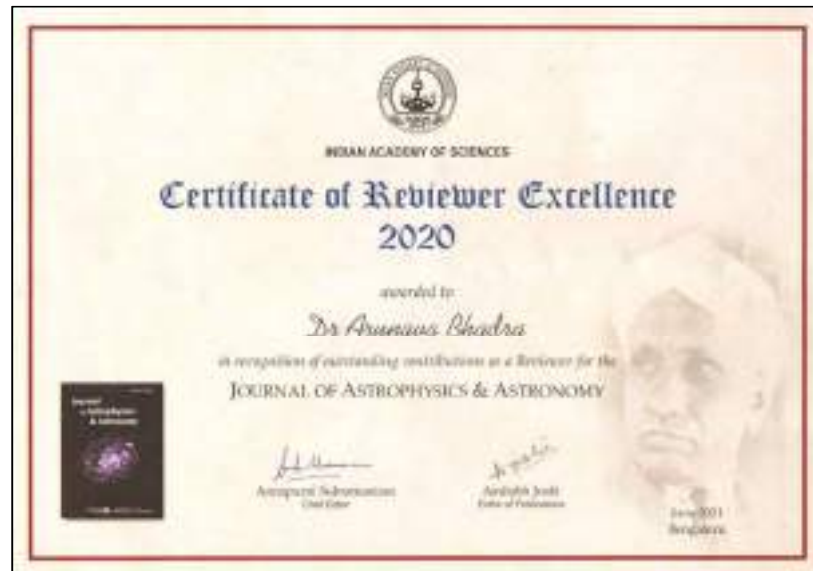
## AWARDS AND RECOGNITIONS



*Prof. Laxmikanta Padhi, Department of Philosophy has received Excellence in Higher Education Award from Venus International Foundation*



*Dr. Tamal Sarkar, Scientific Research Officer –II, High Energy and Cosmic Ray Research Centre been recognized as Senior Member of InSc International Publishers (IIP) in recognition of Professional Standing*



*Dr. Arunava Bhadra, Director, High Energy and Cosmic Ray Research Centre has received Review Excellence Award from the Journal of Astrophysics & Astronomy in recognition of his outstanding contribution*



*Prof. Monoranjan Chowdhury, Dept. of Botany has received InSc. Research Excellence Award 2021 for his research publication entitled "Pollen Morphology of Selected Indian Species from Subfamily Polygonoidae (Polygonaceae)"*



**International Scientist Awards**  
on  
**Engineering, Science and Medicine**  
28 & 29-Aug-2021 | Trivandrum, India



**Best Researcher Award**

Presented to  
**Dr. Rajesh K. Das**  
Assistant Professor,  
Department of Chemistry,  
University of North Bengal,  
Darjeeling, West Bengal, India.

*M. Dinesh*  
**Mr. M. Dinesh**  
Association Director  
VDGOOD Professional Association, India

*Dr. Rajesh Kr. Das, Dept. of Chemistry has received Best Researcher Award from VDGGood Professional Association, India*



*Dr. Tapan Barui, Department of Library and Information Science has received Certificate of Appreciation from the Kolkata Society for Asian Studies for his contribution as Guest Speaker*



*Dr. Siddhartha Biswas, Department of Mathematics has received Incredible Young Researcher of India from Record Owner*

Cert. No: 21313



**INTERNATIONAL  
MULTIDISCIPLINARY  
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## **NATIONAL BEST SCIENTIST AWARD 2021**

In recognition of the consistent superior performance in

**APPLIED MATHEMATICS**

and upon the endorsements of the IMRF Executive Council &  
the World Science Day & National Education Day 2021 Awards Committee

**THE INTERNATIONAL MULTIDISCIPLINARY RESEARCH FOUNDATION**

acknowledges the invaluable contribution of

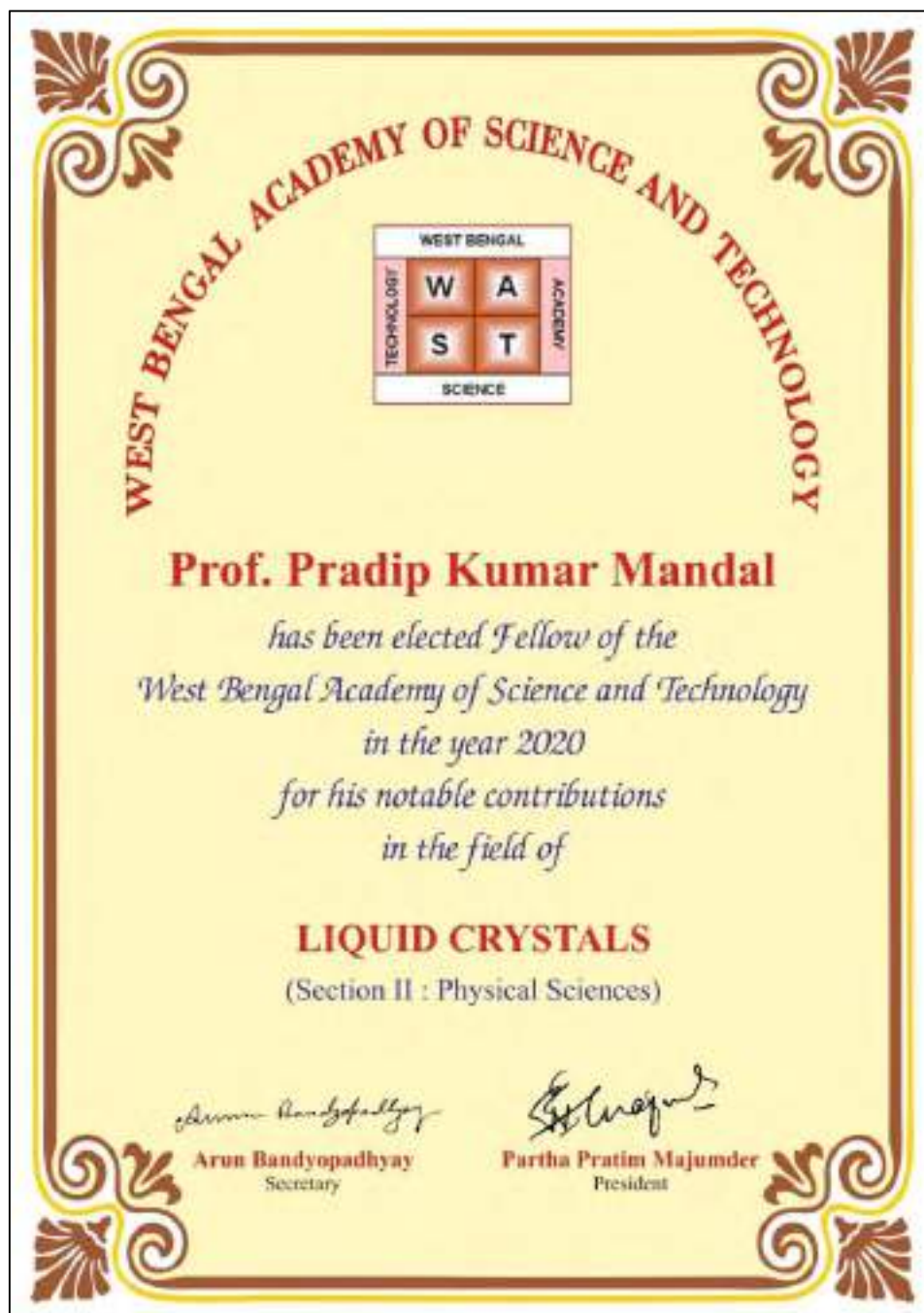
**DR. SIDDHARTHA BISWAS**

and is pleased to present this most coveted honour  
on the eve of World Science Day & National Education Day 2021  
hosted at HQ: IMRF Institute of Higher Education & Research  
Vijayawada, Andhra Pradesh, India.

Awarded on November 11<sup>th</sup>, 2021

**DR. RATNAKAR D BALA, PRESIDENT IMRF**

*Dr. Siddhartha Biswas, Department of Mathematics has received National Best Scientist Award 2021 from the International Multidisciplinary Research Foundation*



*Prof. Pradip Kr. Mandal, Department of Physics has been elected as Fellow of the West Bengal Academy of Science & Technology*





*Dr. Tutul Biswas, Department of Physics Top Cited Paper Award 2021 from Institute of Physics (IOP) Publishing*



## Prof. T.N. Ananthkrishnan Award

"FOR INSECT RESEARCH"

*Conferred upon*

*Dr Dhiraj Saha, Ph.D.*

Head, Zoology Department, University of North Bengal,  
SILIGURI, Distt.: Darjeeling (West Bengal), India

**An Extraordinary Medical Arthropodologist**

*for his*

***outstanding contribution to vector control through  
innovative bio-nanotechnological approaches***

*during*

the 14<sup>th</sup> International Conference of Medical Arthropodology on "MOVING  
TOWARD THE ELIMINATION OF MALARIA FROM INDIA: CHALLENGES AND  
OPPORTUNITIES" on November 27, 2021 (via Webinar)



(Prof. B. Reddya Naik)  
Secretary General, SOMA



(Dr Vijay Veer)  
President Elect, SOMA



(Prof. Dr B.K. Tyagi)  
President, SOMA

*Dr. Dhiraj Saha, Department of Zoology has received Prof. T N Ananthkrishnan Award for  
Insect Research from the Society of Medical Arthropodologists*



*Shri Palash Paul, Development Officer has received Lifetime Membership of the Institution of Engineers (India)*

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