

FORTY-SEVENTH ANNUAL CONVOCATION

June 2, 2017

Recipients of

Doctor of Science (*Honoris Causa*)
and
Doctor of Literature (*Honoris Causa*)



ENLIGHTENMENT TO PERFECTION

Accredited by NAAC with 'A' Grade

UNIVERSITY OF NORTH BENGAL

Rajarammohunpur, P.O. NBU, Dist. Darjeeling
West Bengal, Pin 734013

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**Raja Rammohunpur
P.O. North Bengal University
Dist. Darjeeling, WB
Pin - 734 013**



Dr. Sekhar Basu
Recipient of Doctor of Science (*Honoris Causa*)

Shri Sekhar Basu, a renowned nuclear scientist, is currently Chairman, Atomic Energy Commission and Secretary to the Government of India, Department of Atomic Energy (DAE). Prior to the present posting, he was holding the post of Director, Bhabha Atomic Research Centre (BARC). Earlier he worked as the Project Director of Nuclear Submarine Programme and later as the Chief Executive of the Nuclear Recycle Board in the same institute. Shri Basu is an engineer of exceptional ability who has played a lead role in multiple areas of nuclear science and engineering and is a major contributor in establishing India as a leader in nuclear field.

Shri Basu, born on 20th September 1952, did his schooling from Ballygunge Government School, Kolkata and graduated in



Mechanical Engineering from VJTI, University of Mumbai in 1974. After completion of one year of BARC Training School programme in nuclear science and engineering, he joined the Reactor Engineering Division of BARC in 1975. He took up the responsibility of the development of nuclear submarine propulsion plant and built the land based prototype at Kalpakkam from scratch. He continues to guide the Indian nuclear propulsion programme for the sea going versions. Since 2000, he was also responsible for the design, development, construction and operation of nuclear recycle plants at Tarapur and Kalpakkam, involving reprocessing and nuclear waste management. These plants are performing to international standards.

Shri Basu made special effort for major expansion of the societal programmes of DAE in the field of nuclear agriculture, food preservation and nuclear medicine. While pursuing the basic research in the field of nuclear science and engineering, he is working towards the expansion of enrichment and strategic programmes. Initial development activities for 1 GeV Superconducting Accelerators for the Accelerator Driven Subcritical System has been initiated.

As Chairman, Atomic Energy Commission he has initiated new approach in power and uranium sector expansion. Construction of large number of reactors of Indian and foreign design is being initiated. For self-sufficiency in Uranium, new exploration strategy is being implemented and new mines are being opened. A rare earth park is being planned in Odisha. He is pursuing the construction of Laser Interferometer Gravitational-



Wave Observatory (LIGO) and India Neutrino Observatory (INO).

He has several publications to his credit in national and international journals. Shri Basu has been conferred Indian Nuclear Society Award 2002, DAE Awards in 2006 and 2007. He is also a Fellow of the Indian National Academy of Engineers (INAE) and Indian Society for Non Destructive Testing (ISNT). Shri Basu has been awarded Honoris Causa Doctorate degrees by 7 universities. He was awarded Padma Shri by the Government of India in 2014.



Professor Amitava Raychaudhuri
Recipient of Doctor of Science (*Honoris Causa*)

**Formerly Sir Tarak Nath Palit Professor of Physics,
University of Calcutta,
92 Acharya Prafulla Chandra Road,
Kolkata 700 009, INDIA
Email: palitprof@gmail.com,
amitavaraychaudhuri@yahoo.com
Phone: +91 33 23525631 (Office),
+91 33 24737519 (Residence)
+91 9831243624**

**Former Director, Harish-Chandra Research Institute,
(Department of Atomic Energy), Allahabad, INDIA**



PERSONAL

DATE OF BIRTH: March 17, 1952

NATIONALITY: Indian

MARITAL STATUS: Married

EDUCATION

University of Calcutta, B.Sc.(Hons) in Physics, First Class 1970

University of Delhi, M.Sc. in Physics, First Class 1973

University of Maryland, Ph.D. in Physics, 1977

PH. D. THESIS: 'On the application of the N-Quantum approximation method to bound state problems'.

Thesis Supervisor: Professor O. W. Greenberg, University of Maryland.

D.Sc. (*honoris causa*): University of Gour Banga, West Bengal (2017).

AWARDS

National Merit Certificate and Prize, Govt. of India, 1967.

National Science Talent Search Scholarship, Govt. of India, 1967.

Best incoming graduate students' prize, Univ. of Maryland, 1974.

Indian National Science Academy Young Scientist Award, 1982.

National Associate (1982-87), University Grants Commission, India.

Associate Member (1984-90), International Centre for Theoretical Physics, Trieste, Italy.

Career Award (1985-88), University Grants Commission, India.

Indo-U.S. (Senior Fulbright) Fellowship (1988-89), University



Grants Commission, India and Council for International Exchange of Scholars, Washington D.C., U.S.A.

Theoretical Physics Seminar Circuit Speaker 1990-91, 1995-96, 1997-99, and 2004-05.

Senior Associate (1991-97), (1998-05) The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy.

CEC 'Marie Curie' Senior Post-doctoral Fellowship (February - July, 1994), Commission of European Communities, Brussels, Belgium and the Department of Science and Technology, India.

Shanti Swarup Bhatnagar Award (1997).

Fellow, Indian National Science Academy (2002).

Fellow, National Academy of Sciences, India (2004).

International Alumnus of the Year (2005), University of Maryland Alumni Association.

Meghnad Saha Memorial Gold Medal (2005), The Asiatic Society, Kolkata.

Fellow, Indian Academy of Sciences (2006).

Homi Bhabha Lecturership (2006), Institute of Physics, UK and Indian Physics Association.

J.C. Bose Fellowship, Department of Science and Technology, Government of India (2010-)

Siksha Ratna 'Outstanding University Teacher Award'(2016), Government of West Bengal.

MEMBER

Indian Physics Association, Indian Physical Society, Sigma Xi, Phi Kappa Phi.



RESEARCH GRANTS

Indian Space Research Organisation (1983-86).

University Grants Commission (1985-88).

Indian National Science Academy (1985-88).

Department of Atomic Energy (1989-92).

Department of Science and Technology (1989-93, 1993-96, 1997-01, 2002-2005, 2016-19).

Council of Scientific and Industrial Research (1993-96, 1997-00, 2000-03).

Eastern Centre for Research in Astrophysics (1997-00).

J.C. Bose Fellowship Grant, Department of Science and Technology (2010-).

MENTORING

Thirteen physicists have completed their Ph.D.s. under my supervision:

- 1) Prof. Utpal Sarkar (Formerly Director, Physical Research Laboratory, Ahmedabad)
- 2) Prof. Biswarup Mukhopadhyaya (Professor, Harish-Chandra Research Institute, Allahabad)
- 3) Dr. Aditi Ray-Mukhopadhyaya (Senior Teacher, Boy's High School, Allahabad)
- 4) Prof. Gautam Bhattacharyya (Professor, Saha Institute of Nuclear Physics, Kolkata)
- 5) Prof. Sreerup Raychaudhuri (Professor, Tata Institute of Fundamental Research, Mumbai)
- 6) Dr. Srubabati Goswami (Professor, Physical Research Laboratory, Ahmedabad)



- 7) Dr. Anindya Datta (Associate Professor, University of Calcutta)
- 8) Dr. Subhendu Rakshit (Associate Professor IIT Indore)
- 9) Dr. Arunansu Sil (Assistant Professor, IIT Guwahati)
- 10) Dr. Swarup Kumar Majee (Assistant Professor, Visva-Bharati, Santiniketan)
- 11) Sanjib Kumar Agarwalla (Reader, Institute of Physics, Bhubaneswar)
- 12) Joydeep Chakraborty (Assistant Professor, IIT Kanpur)
- 13) Ujjal Kumar Dey (National Post-doctoral Fellow, Indian Institute of Technology, Kharagpur)

Currently two students (Ms. Soumita Pramanick, SRF and Mr. Triparno Bandyopadhyay, SRF) are being supervised towards their Ph.D.s

The following scientists have been mentored at the post-doctoral level: Dr. Krishnanath Bandyopadhyaya, Dr. Debasish Majumdar, Dr. Rathin Adhikari, and Dr. Abhijit Samanta.

Several M.Sc./B.Sc./B.Tech students of IITs and elsewhere have been mentored for their summer projects. Some of them are Jainendra K. Jain, IIT, Kanpur (Summer 1980), Suvadeep Basu, St. Edmund's College, Cambridge, UK (Summer 2002), Susmita Basak, IIT, Kanpur (Summer 2003), Soumya Kar, IIT, Madras (Summer 2006), Diptimoy Ghosh, University of Calcutta (Oct-Nov, 2006), Nilanjana Kumar, University of Calcutta (Dec. 2009- Jan 2010), Abhinandan Ghosh, NIT, Jamshedpur (June-July 2010), Rashi Verma, CBSE-DAE (June-July 2010), Rachit Murarka, IIT Kharagpur (June-July 2010), Sagnik Chakraborty IIT, Mumbai (June-July, 2012), Elham E. Khoda, IISER, Kolkata (June-July, 2012),



Sumit Ghosh, University of Calcutta (2014), Nabha Shah, IISER Pune(2016).

Academy supported Summer Teacher Fellow: Dr. Monisa Rajkhowa, Jorhat Institute of Science & Technology, Assam (May-June, 2012).

SERVICE TO SCIENCE, POPULARISATION, ETC.

Chairman, Jagadis Bose National Science Talent Search, Kolkata (2015-17).

Member, Governing Council, Saha Institute of Nuclear Physics, Kolkata (2003-06, 2007-10, 2010-13, 2013-16, 2016-).

Member, Governing Council, Inter-University Centre for Astronomy and Astrophysics, Pune (2004-06).

Member, Governing Board, Inter-University Centre for Astronomy and Astrophysics, Pune (2007-09).

Member, Executive Council, Institute of Mathematical Sciences, Chennai (since 2005).

Member, Governing Council, Institute of Physics, Bhubaneswar (2007-2010).

Member, Executive Council, Chennai Mathematical Institute, Chennai (2010-2012).

Visitor(President of India)'s nominee, Executive Council, Rajiv Gandhi University, Itanagar (2011-2014).

Chancellor's (Governor of West Bengal's) Nominee, Court, North Bengal University, Raja RamMohunpur, Dist. Darjeeling, West Bengal (2012-16).

Chairperson, SERB Young Scientist Expert Committee for Physical & Mathematical Sciences (2015-17).

Member, FIST Committee (Physics) of the Department of Science



and Technology (2007-2015)

Member, DAE-DST Task Force on GRID computation (2008-2011)

Member, National Committee of the IUPAP (2008-2011, 2012-2015).

Paridarshaka(President of India)'s nominee, Academic Council, Visva-Bharati, Santiniketan (2007-10).

Rector(Governor of Uttar Pradesh)'s nominee, Executive Council, Allahabad University, Allahabad, Uttar Pradesh (2008-11).

Member, Academic Council, Homi Bhabha National Institute (DAE), (2006-10).

Member, Physical Sciences Board of Studies, Homi Bhabha National Institute (DAE), (2006-09).

Member, Academic & Research Programme Advisory Committee, S.N. Bose National Centre for Basic Sciences, Kolkata (2012-)

Member, Board of Studies, Department of Physics, Visva-Bharati University, Santiniketan (2012-14).

Member, Court, Himachal Pradesh (Central) University, Dharamsala (2012-15).

Member, National Committee of the IUPAP (2008-11, 2012-15).

Chancellor's (Governor of West Bengal's) Nominee, Court, North Bengal University, Raja Ram Mohunpur, Dist. Darjeeling, West Bengal (2012-2016).

Member, Physical Sciences Board of Studies, Homi Bhabha National Institute (DAE), (2006-09)

Paridarshaka(President of India)'s nominee, Academic Council, Visva-Bharati, Santiniketan (2007-10)

Member, INO Scientific Management Board, (2013-)

Member, Academic & Research Programme Advisory Committee,



S.N.

Bose National Centre for Basic Sciences, Kolkata (2012-14).

Visitor (President of India)'s nominee, Mathematical and Physical Sciences Selection Committee, Manipur University, Imphal (2013-16)

Chancellor (Governor of West Bengal)'s nominee, Physics Selection Committee, Jadavpur University, Kolkata (2012-2014)

Visitor (President of India)'s nominee, Mathematical and Physical Sciences Selection Committee, Manipur University, Imphal (2013-16)

Chancellor (Governor of West Bengal)'s nominee, Physics Selection Committee, Jadavpur University, Kolkata (2012-2014)

Member, Board of Studies in Physics, Visva-Bharati University, Santiniketan (2012-14).

Member, Academic Council, St. Xavier's (Autonomous) College, Kolkata (2013-14).

Member, Bhatnagar Physics Award Advisory Committee (2003-05), (2016-).

Evaluated projects submitted to funding agencies like the Department of Science and Technology, Board of Research in Nuclear Sciences (DAE), Council of Scientific and Industrial Research, etc.

Distinguished Adjunct Professor, Harish-Chandra Research Institute, Allahabad (2003-06).

Distinguished Adjunct Professor, Centre for Astroparticle Physics, Saha Institute of Nuclear Physics, Kolkata (2008).

Vice-President, National Academy of Sciences, India (2009-10).

Have delivered innumerable lectures in 'Refresher courses' for College



Physics Teachers and 'Orientation programmes' for College Teachers.

Organised and lectured at a 'Science Awareness Programme' under the auspices of the Jagadis Bose National Science Talent Search for high school students in Guwahati, Assam.

One of the principal organisers of a Science Outreach programme on the Large Hadron Collider at CERN for college students and class XI and XII school students (Science City Main Auditorium, November 2010).

Delivered many lectures for students under the DST INSPIRE Science Camps and many other outreach programmes.

Refereed research papers for several journals including Journal of High Energy Physics, Nuclear Physics B, Physics Letters B, Pramana, and others.

Reviewed books for several journals.

On the Editorial Boards of the Indian Journal of Physics and the Indian Journal of Theoretical Physics.

PH.D. THESIS/VIVA-VOCE EXAMINERSHIPS

TIFR (Bombay University), Mumbai; University of Calcutta, Kolkata; Delhi University, Delhi; IIT Bombay; Jadavpur University, Kolkata; University of Rajasthan, Jaipur; NEHU, Shillong; Madras University, Chennai; PRL (Mohanlal Sukhadia University), Ahmedabad.

EXTERNAL EVALUATOR FOR PROMOTIONS/ APPOINTMENTS

BARC, Mumbai; Burdwan University; Delhi University, Delhi; Gour Banga University, Malda; HRI, Allahabad; IACS, Kolkata; IISc, Bangalore; IIT Bombay; IIT Kanpur; IIT Kharagpur;



IMSc, Chennai; Indian Statistical Institute, Kolkata; IOP, Bhubaneswar; Jadavpur U, Kolkata; Manipur (Central) University; Netaji Subhas Open University, Kolkata; NISER, Bhubaneswar; North Bengal U, Siliguri; PRL, Ahmedabad; SINP, Kolkata; S.N. Bose National Centre for Basic Sciences, Kolkata; TIFR, Mumbai; Visva-Bharati, Santiniketan; West Bengal University of Technology, Kolkata.

POSITIONS HELD

Graduate Teaching and Research Assistant, University of Maryland, U.S.A., 1973-77.

Research Associate, Department of Theoretical Physics, University of Oxford, U.K., 1977-79.

Visiting Fellow, Tata Institute of Fundamental Research, Bombay 1979-80.

Lecturer (1980-86), Reader (1987-96), Sir Tarak Nath Palit Professor (1996-present), Department of Physics, University of Calcutta.

Director, Harish-Chandra Research Institute, Allahabad, (2005 - 2011). (On leave from the University of Calcutta).

Visiting Professor, Department of Physics, Oklahoma State University, Stillwater, OK 74078, U.S.A. Jan - June, 1998 (On leave from the University of Calcutta).

CEC 'Marie Curie' Senior Post-doctoral Fellowship, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, Cambridge, U.K., 1994. (On leave from the University of Calcutta).

Indo-U.S. (Senior Fulbright) Fellow, Theoretical Physics Group, Lawrence Berkeley Laboratory, Berkeley, California, U.S.A., 1988-89. (On leave from the University of Calcutta.)



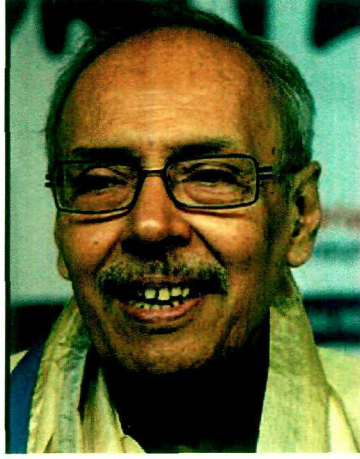
Scientific Associate, Theory Division, C.E.R.N., Geneva, Switzerland, 1983-84. (On leave from the University of Calcutta.)

Short (One to three month) visits to A.S.I.C.T.P.(Trieste), C.E.R.N.(Geneva), Univ. of Rome, Univ. of Padova, etc.

PUBLICATIONS

More than 110 well-cited published papers (Total citations: 2213 on 06/03/16) in leading international journals, many papers in conference publications, and five edited books.

Publications can be found in the website below: <http://inspirehep.net/search?ln=en&p=a+raychaudhuri%2Camitava&of=hb>



Shri Sirshendu Mukhopadhyay
Recipient of Doctor of Literature (*Honoris Causa*)

শীর্ষেন্দু মুখোপাধ্যায়ের জন্ম ২ নভেম্বর, ১৯৩৫, ময়মনসিংহে। শৈশব কেটেছে নানা জায়গায়। পিতা রেলের চাকুরে। সেই সূত্রে এক যাযাবর জীবন। দ্বিতীয় বিশ্বযুদ্ধের সময় কলকাতায়। এরপর বিহার, উত্তরবাংলা, পূর্ববাংলা, আসাম। পঞ্চাশের দশকের গোড়ায় কুচবিহার। মিশনারি স্কুল ও বোর্ডিং-এর জীবন। ভিকটোরিয়া কলেজ থেকে আই এ। কলকাতার কলেজ থেকে বি. এ। স্নাতকোত্তর পড়াশুনা কলকাতা বিশ্ববিদ্যালয়ে। স্কুল-শিক্ষকতা দিয়ে কর্মজীবনের শুরু। এখন বৃত্তি - সাংবাদিকতা। 'দেশ' পত্রিকার সঙ্গে যুক্ত।

ছাত্রজীবনের ম্যাগাজিনের গন্ডি পেরিয়ে প্রথম গল্প - 'দেশ' পত্রিকায়। প্রথম উপন্যাস 'ঘুনপোকা' 'দেশ' শারদীয় সংখ্যায় প্রকাশিত। প্রথম কিশোর উপন্যাস - 'মনোজন্দের অদ্ভুত বাড়ি'। কিশোর সাহিত্যে শ্রেষ্ঠত্বের স্বীকৃতিরূপে ১৯৮৫ সালে পেয়েছেন বিদ্যাসাগর পুরস্কার। এর আগে পেয়েছেন আনন্দ পুরস্কার। পরেও আরেকবার, 'দূরবীন' - এর জন্য।

'মানবজমিন' উপন্যাসে পেয়েছেন ১৯৮৯ সালের সাহিত্য অকাদেমি পুরস্কার।

শ্রী শ্রী ঠাকুর অনুকূলচন্দ্রের মন্ত্রশিষ্য এবং সহপ্রতিষািত্তিক।



Shri Pradip Kumar Banerjee
Recipient of Doctor of Literature (*Honoris Causa*)

Sri Pradip Kumar Banerjee, popularly known as “PK,” is one of the most famous footballer from India. An ace right-winger, PK, was applauded for his tremendous speed, stamina, power and persistence, both on and off the field. Born in Maynaguri in 1936, he truly is the son of the soil of North Bengal. However, his life has traversed a meteoric trajectory that began in a middle-class Bengali home in North Bengal, but took him to the zenith of renown in being proclaimed as the “Player of the Millenium for India,” in the year 2000, by none other than the apex body for international football, FIFA. This was but one of the many accolades won by Sri. P.K. Banerjee. He was the first sportsman and footballer to receive the Arjuna Award from the Government of India in 1961. In 1990, he was decorated with the Padmashree Award by the



President of India. He is the only Indian footballer to have received the Olympic Fair-play Award in Paris in 1988. He is also the only Indian footballer to receive the FIFA Centennial Order of Merit Award in 2004. Apart from these, he has been decorated by the Honourable Chief Minister of West Bengal, Smt. Mamata Banerjee, with the Bangaratna Award.

As India's leading football player, the young PK, represented the country continuously from 1954 to 1967, scoring 66 goals, an unparalleled record that even today makes him one of the top goal scorers. His securing a goal in the final match of the 1962 Asian Games, enabled India to become the Gold Medal winner. He represented India in 3 Asian (1958, 1962, 1966) and Olympic Games (1956, 1960, served as the Captain in the Roman Olympic Games, 1964 pre-Olympics) respectively. Sri. PK Banerjee does not just appear as a legendary footballer, but also as an iconic football coach, both at the premier club and the national levels, in the annals of Indian sporting history. His first stint at coaching was with premier East Bengal Club, Kolkata. He guided them to unprecedented achievements, winning the Calcutta League without losing a single match and conceding a single goal (1972). In 1976 he joined the rival premier club, Mohun Bagan Sporting Club, as their coach and again repeated these feats for Mohun Bagan. In 1977, Mohun Bagan for the first time in the history of a club team won the IFA Shield, Durand Cup and Rovers Cup, popularly known as the coveted Triple Crown. As a national coach and then as a Technical Director, PK led the Indian national football team to winning the bronze medal in the 1970 Asian Games and a number



of other international victories, such as, the SAF games (2005).

While most associate PK with coaching of star footballers, little realize that despite being the most celebrated and sought after coach of the country, he had graciously donated his personal time to coach young students of the St. Andrews School from Shillong, leading them to a victory in the Subrata Mukherjee Cup. This same spirit of generosity and selfless giving of his time, skills, and the rewards of his celebrity, is reflected in all of the many hundreds of philanthropic work that PK has dedicated himself to for the development of the nation's youth, the betterment of the community, and the progress of the country. It is no wonder then that while at the peak of his coaching success, PK divested himself of the easy lure of financial gains that he commanded as a Premier Club coach and instead chose to sacrifice his time with his family by accepting the position of the Director of Tata Football Academy (TFA), and relocated to the small industrial town of Jamshedpur for 6 years. He was committed to the TFA's mission of selecting, nurturing, and rearing a whole generation of dedicated and well-rounded football players who would be scientifically trained to carry forth the country's destiny in the arena of football. Under his leadership, the TFA won countless national and internal recognitions and tournaments and became a powerhouse in the Indian football circle.

An enormously versatile man, PK has also won tremendous critical respect as an excellent sports commentator, with a record of successful professional engagements as a sports programme anchor and critic with ESPN and Star Sports. His facility with multiple languages and his unprecedented ability to talk and motivate



sports people has led to the legend of his ability to inspire one and all through his mythopoeic “vocal tonic.” As the legend goes, he alone through his rip-roaring oration has successfully changed the course and destiny of many a difficult match by making his players believe that they could achieve the impossible. At the very least, what this indicates is that Sri. PK Banerjee is not only a man full of positive energy and blessed with the divine gift of articulation, but also that he is regarded by many as a force of nature. He is strong and unassailable in his commitment to and love for the people and the country.

On a more lighter note, PK is well known for his many other creative talents, such as, his love for Indian classical music and a talent for singing. However, deeply patriotic, motivating the next generation of the nation’s leaders remains and has been his lifelong mission. His dedication to his nation comes from his commitment to his immediate community, which in turn comes from being the eldest son of a family that he has been responsible for most of his natural life, after losing his father at a young age. He was the guardian to all his siblings and is most proud of his successful younger brother, Sri. Prasun Banerjee, who serves as a Member of Parliament. Sri. P.K. Banerjee’s prematurely lost his best friend and partner in life, Smt. Arati Banerjee, in the year 2003. Today, Sri. P.K. Banerjee and his wife’s commitment to society and country lives through their two daughters, Dr. Paula Banerjee and Dr. Purna Banerjee. Both of these young women are internationally known scholars who have returned home to India, at the behest of their father, and serve as Professors at two different leading universities



of the state. Today, despite being afflicted by a cerebral stroke and the subsequent paralysis, Sri. PK Banerjee's courage and can-do spirit is evidenced in his many public engagements where he spends most of his time motivating school children to become ethical and engaged citizens of the country.