



UNIVERSITY OF NORTH BENGAL

DEPARTMENT OF CHEMISTRY

ENLIGHTENMENT TO PERFECTION

P.O. NORTH BENGAL UNIVERSITY, Raja Rammohunpur, Dist. Darjeeling, West Bengal, India, PIN - 734013.

Accredited by NAAC with 'A' Grade

PHONE : (0353) 2776 381, Fax: (0353) 2699 001

Ref. No.....

Dated.....201.....

CERTIFICATE

I certify that Mr. Bhaskar Ganguly has prepared the thesis entitled **Transition-metal catalyzed organic transformations and application towards the synthesis of heterocyclic compounds** for the award of Ph.D. degree of the University of North Bengal, under the guidance of Prof. Basudeb Basu (Co-Guide) and myself (Guide). He has carried out the work at the Department of Chemistry, University of North Bengal. No part of this thesis has formed the basis for the award of any degree or fellowship previously.

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Date: 02-11-2017



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