

# Declaration

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*I hereby declare that the research work embodied in this thesis has been carried out in the Department of Chemistry, Indian Institute of Technology, Kharagpur, India, under the supervision of Professor Jayanta K. Ray and in the Department of Chemistry, University of North Bengal, Raja Rammohanpur, Darjeeling, India, under the supervision of Dr. Ashis K. Nanda.*

*In keeping with the general practice of reporting scientific observations, due acknowledgement has been made wherever the work is based on the findings of other investigators. The author is responsible for purely unintentional oversights and errors, which could be traced herein.*

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