

Tezpur University

Certificate

This is to certify that the thesis entitled **"Dielectric relaxation and electrical transport studies of polypyrrole nanostructures and swift heavy ion irradiation effects"**, submitted to the School of Sciences, Tezpur University in partial fulfillment of the requirements for the award of the Doctor of Philosophy in Physics, is a record of original research work carried out by Mr. Jayanta Hazarika under my supervision and guidance.

All help received by him from various sources have been duly acknowledged.

No part of the thesis has been submitted elsewhere for award of any other degree.

Signature of Supervisor: Designation: Professor School: Sciences Department: Physics Date: Place: Tezpur-784028, Assam, India (Prof. A. Kumar)

Declaration

I hereby declare that the thesis entitled "Dielectric relaxation and electrical transport studies of polypyrrole nanostructures and swift heavy ion irradiation effects", submitted to the School of Sciences, Tezpur University in partial fulfillment of the requirements for the award of the Doctor of Philosophy in Physics, is a record of original research work carried out by me. Any text, figures, theories, results or designs that are not of my own devising are appropriately referenced in order to give due credit to the original author(s). All the sources of assistance have been assigned due acknowledgement. I also declare that neither this work as a whole nor a part of it has been submitted to any other university or institute for any degree, diploma, associateship, fellowship or any other similar title or recognition.

Date:

Place: Tezpur

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Without the support of some wonderful and beautiful people, My life would have been incomplete This thesis is dedicated to Bonomali Hazarika (Deuta), Minoti Hazarika (Ma), beloved uncle "Saru Da" and above all to Dr. Subrata Hazarika (Sir), the person who shape my life.

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