



## TEZPUR UNIVERSITY

Department of Electronics and Communication Engineering

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### CERTIFICATE OF THE SUPERVISOR

This is to certify that the thesis entitled, “**Electrochemical modeling and validation of high- $\kappa$  dielectric and nanomaterial based enzyme field effect transistors (ENFETs) for biomolecule detection**” submitted to the School of **Engineering**, Tezpur University in partial fulfillment for the award of the degree of Doctor of Philosophy in **Electronics and Communication Engineering** is a record of research carried out by Mrs. **Purnima Kumari Sharma** under my supervision and guidance.

All helps received by her from various sources have been duly acknowledged.

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

Signature of

Supervisor:

Designation: **Professor**

School: **Engineering**

Department: **Electronics and Communication Engineering**

Co-Supervisor: **N/A**

Designation: **N/A**

Affiliation: **N/A**

*Dedicated to*

*My*

*Beloved Parents, Supervisor and Husband*