

I-STEM Software Request - Guide Approval Form

User Details

- Name of Researcher: SNIGDHA PATRA
- User Type: ☒ Ph.D. Scholar ☐ Postdoctoral Researcher ☐ Bachelor's ☐ Masters
- Institution Name: NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
- Institutional Contact No: 03842-233179/242273/233797
- Research Topic: PIEZOELECTRIC NANOGENERATOR

Software Request Details

- Software Name: COMSOL MULTIPHYSICS
- Justification for Software Request: [COMSOL Multiphysics supports my research on piezoelectric nanogenerator by enabling accurate simulation of coupled electromechanical responses using the MEMS Module and Structural Mechanics Module. These modules allow me to model mechanical deformation, stress distribution, and the piezoelectric effect to analyze key parameters such as output voltage and the d_{33} coefficient. The software also supports custom material inputs and layered device geometry creation, making it suitable for simulating polymer-based nanogenerators. Its multiphysics coupling and parametric study tools help optimize device performance under varying design and loading conditions, aligning closely with my research goals.]

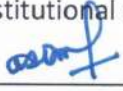
Guide/Supervisor Approval

I, Dr. ASIM ROY (Guide/Supervisor Name),

- Confirm that the above-mentioned researcher is affiliated with our institution
- Have reviewed the software request and its relevance to the researcher's academic work
- Approve the software request for research purposes

Approval Confirmation

- I approve the software request
- The software aligns with the researcher's research objectives
- The request meets the institutional research guidelines

Guide/Supervisor Signature: 

Date: 01-07-2025

Official Stamp/Seal: []

Important Notes

1. This form must be signed and scanned
2. The scanned copy must be uploaded with the software request
3. Electronic signatures are acceptable if from an official institutional email