

I-STEM Software Request - Guide Approval Form

User Details

- Name of Researcher: Parvathy Ravindranath
- User Type: ☒ Ph.D. Scholar ☐ Postdoctoral Researcher ☐ Bachelor's ☐ Masters
- Institution Name : Institute of Nanoscience and Technology
- Institutional Contact No: 0172 229 7000
- Research Topic: Hybrid Nanogenerators for Energy Harvesting

Software Request Details

- Software Name: COMSOL Multiphysics
- Justification for Software Request: COMSOL Multiphysics is used in this research to simulate the coupled piezoelectric, pyroelectric, and magnetoelectric effects in polymer-based and 2D material-based nanogenerators for energy harvesting applications. Its multiphysics environment enables accurate mechanical, thermal, electrical, and magnetic field interaction modeling, essential for evaluating device performance. The software also allows customization of material properties, geometry optimization, and analysis of dynamic and thermal responses, supporting the design of efficient and reliable energy harvesting systems.
- Guide/Supervisor Approval

I, Prof. Dipankar Mandal,

- 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: 16/04/2025

Official Stamp/Seal: [Space for Institutional Stamp]

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

प्रो. दीपांकर मंडल / Prof. Dipankar Mandal
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