I-STEM Software Request - Guide Approval Form

User Details

- **Name of Researcher**: Shreyam Maity
- **User Type**: [✓] Ph.D. Scholar [ ] Postdoctoral Researcher [ ] Bachelor's [ ] Masters
- **Institution Name:** Indian Institute of Science, Bangalore
- **Institutional Contact No**: +91 8022932276
- **Research Topic**: Quantum photonics, photonic integrated circuits

Software Request Details

- **Software Name**: COMSOL Multiphysics
- **Justification for Software Request**: My goal to generate entangled photon pairs leveraging nonlinear optical phenomenon in different nanoscale structures. I will explore novel metasurfaces and waveguide designs with materials having strong second and third-order optical nonlinearities. COMSOL Multiphysics will help me simulate different characteristics of the devices such as transmission, reflection, frequency conversion efficiency, etc. Such parameters will be used to optimize the metasurface and waveguide designs.

Guide/Supervisor Approval

I, Varun Raghunathan (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: 17/12/2025

Official Stamp/Seal:

Varun Raghunathan
Associate Professor
Electrical Communication Engineering
Indian Institute of Science
Bangalore 560012, India

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