

I-STEM Software Request - Guide Approval Form

User Details

- **Name of Researcher:** Geetanjli
- **User Type:** ☒ Ph.D. Scholar ☒ Postdoctoral Researcher ☐ Bachelor's ☐ Masters
- **Institution Name** : Indian Institute of Technology Jodhpur
- **Institutional Contact No:** + 91 291 280 1453
- **Research Topic:** Physics-Informed Neural Networks for Mode Analysis of Optical and Electromagnetic Waveguides

Software Request Details

- **Software Name:** COMSOL
- **Justification for Software Request:** [Provide detailed explanation of how the software supports your research objectives]: COMSOL is required for my research in electromagnetic and optical waveguide analysis. It will be used to compute eigenmodes, propagation constants, and field distributions for different waveguide geometries. The software will also help validate my PINN-based and finite-difference-based results through finite element simulations and provide benchmark solutions for comparison and analysis.

Guide/Supervisor Approval

I, Prof. Kirankumar R. Hiremath,

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

Approval Confirmation

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

Guide/Supervisor Signature: _____

Date: 07/04/26



डॉ. किरणकुमार रा. हिरेमठ

Dr. Kirankumar R. Hiremath

प्राध्यापक/Professor

गणित विभाग/Dept. of Mathematics

भारतीय प्रौद्योगिकी संस्थान जोधपुर

Indian Institute of Technology Jodhpur

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