

I-STEM Software Request - Guide Approval Form

User Details

- Name of Researcher: Yogesh Kumar Verma
- User Type: ☐ Ph.D. Scholar ☒ Postdoctoral Researcher ☐ Bachelor's ☐ Masters
- Institution Name : IIT Delhi
- Institutional Contact No: 7838597940
- Research Topic: Designing hollow core fiber

Software Request Details

- Software Name: COMSOL (wave optics module)
- Justification for Software Request: [Provide detailed explanation of how the software supports your research objectives]

The Wave Optics Module in COMSOL is very helpful for designing hollow-core fibers because it allows for precise simulation of how electromagnetic waves move through complicated silica shapes. It will allow analysis of mode confinement, dispersion characteristics, and loss mechanisms in hollow-core fiber designs. Using frequency-domain and eigenmode analyses in wave optics module, the module will help in the optimization of structural parameters to achieve desired modal behavior. Therefore, this will accelerate the development of innovative fibers for applications in telecommunications, and high-power laser delivery.

Guide/Supervisor Approval

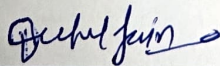
I, Prof. Deepak Jain (Guide/Supervisor Name),

- 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: 12/03/226

Official Stamp/Seal: [Space for Institutional Stamp]

Important Notes

प्रो. दीपक जैन / Prof. Deepak Jain
सह. प्रोफेसर / Associate Professor
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