

I-STEM Software Request - Guide Approval Form

User Details

- **Name of Researcher:** Mr Deepak R
- **User Type:** ☒ Ph.D. Scholar ☐ Postdoctoral Researcher ☐ Bachelor's ☐ Masters
- **Institution Name** : NMAM Institute of Technology, Nitte DU, Nitte, SH1, Karkala, Karnataka - 574110
- **Institutional Contact No:** 9482041445
- **Research Topic:** A study on Fiber Bragg Grating sensor for detection of chemicals.

Software Request Details

- **Software Name:** COMSOL MULTIPHYSICS (BASIC + ADVANCED MODULES), MATLAB (Mathworks)
- **Justification for Software Request:** These tools are essential to my student on-going research and teaching in fiber-optic sensing (especially Fiber Bragg Grating—FBG—chemical/gas sensors), photonics-based instrumentation. The work requires end-to-end multiphysics modeling (optical—thermal—mechanical—fluid—chemical coupling), rapid data analysis, and hardware-in-the-loop validation—capabilities uniquely and efficiently supported by COMSOL and MATLAB.
- **Guide/Supervisor Approval**

I, Dr. Prabha Niranjana (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: Prabha

Date: 26/8/25

Official Stamp/Seal: Department of Electronics & Comm.
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