

I-STEM Software Request - Guide Approval Form

User Details

- **Name of Researcher:** Jisha P
- **User Type:** ☐ Ph.D. Scholar ☒ Postdoctoral Researcher ☐ Bachelor's ☐ Masters
- **Institution Name** : BMS College of Engineering
- **Institutional Contact No:** +91-80-26622130
- **Research Topic:** Polymer nanocomposite based sensors

Software Request Details

- **Software Name:** COMSOL Multiphysics
- **Justification for Software Request:**

COMSOL Multiphysics is essential for the simulation and design of polymer nanocomposite-based sensors, enabling accurate modelling of coupled phenomena such as electrical conductivity, mechanical stress, and thermal behaviour. Its Multiphysics capabilities allow researchers to analyse the impact of nanomaterial dispersion, interfacial interactions, and composite geometry on sensor performance. This reduces reliance on costly experimental iterations, accelerating development and optimization. The software supports advanced simulation of sensor response under various environmental conditions, aiding in the design of sensitive, reliable, and low-cost sensors. Acquiring COMSOL will significantly enhance research quality and innovation in my nanocomposite-based sensor technologies for biomedical and environmental applications.

- **Guide/Supervisor Approval**

I, Dr. Suma M S (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:

Suma M.S

Date: 05-08-2025

Official Stamp/Seal: [Space for Institutional Stamp]

Dr. Suma M S
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