

I-STEM Software Request - Guide Approval Form

User Details

- **Name of Researcher:** Mainak Das
- **User Type:** [☒] Ph.D. Scholar [☐] Postdoctoral Researcher [☐] Bachelor's [☐] Masters
- **Institution Name:** IISc Bengaluru
- **Institutional Contact No:** 6290599284
- **Research Topic:** Microfluidics

Software Request Details

- **Software Name:** Comsol Multiphysics version 6.0
- **Justification for Software Request:** COMSOL Multiphysics is a powerful simulation software well-suited for modeling complex multiphysics phenomena. For my PhD research on microfluidics and complex fluids, COMSOL offers essential tools to simulate coupled flow, mass transport, and non-Newtonian fluid behavior in micro-scale geometries. Its flexibility in handling user-defined physics and its built-in modules for fluid-structure interaction, chemical species transport, and rheological models make it ideal for accurately capturing the intricate dynamics of microscale systems. Access to a COMSOL license will significantly enhance the modeling capabilities and complement ongoing experimental efforts.

Guide/Supervisor Approval

I, Subhadeep Mandal (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: Shubhadeep Mandal

Date: 06-08-2025

Dr. Shubhadeep Mandal
Assistant Professor
Department of Mechanical Engineering
Indian Institute of Science
Bengaluru - 560 012, INDIA

Official Stamp/Seal:

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