

I-STEM Software Request - Guide Approval Form

User Details

- **Name of Researcher:** ALOK KUMAR
- **User Type:** Ph.D. Scholar
- **Institution Name:** Malaviya National Institute of Technology, Jaipur Rajasthan
- **Institutional Contact No:** 0141 252 9087
- **Research Topic:** Numerical modeling of PFAS transport in unsaturated soil using coupled flow and reactive transport processes.

Software Request Details

- **Software Name:** COMSOL Multiphysics
- **Justification for Software Request:** I require COMSOL Multiphysics to perform advanced numerical simulations for my research on contaminant transport in soil and groundwater systems. The study involves solving coupled partial differential equations such as Richards' equation for variably saturated flow and advection–dispersion equations for pollutant transport. COMSOL provides a flexible platform to integrate Multiphysics processes including fluid flow, solute transport, and interfacial interactions, which are essential for accurately modeling PFAS behavior in the vadose zone.

Guide/Supervisor Approval

I, Uttam Singh (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: 30/04/2026

Official Stamp/Seal:

Important Notes

1. This form must be signed and stamped
2. The scanned copy must be uploaded with the software request
3. Electronic signatures are acceptable if from an official institutional email

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