

I-STEM Software Request - Guide Approval Form

User Details

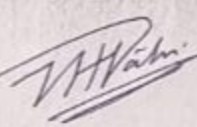
- Name of Researcher: Mayuri Sunil Ukidwe
- User Type: ☒ Ph.D. Scholar ☐ Postdoctoral Researcher ☐ Bachelor's ☐ Masters
- Institution Name: Institute of Chemical Technology, Mumbai
- Institutional Contact No: 022 3361 2222
- Research Topic: Modelling of food drying process and dryer design

Software Request Details

- Software Name: COMSOL Multiphysics Basic + Chemical Reaction Engineering Module + Structural Mechanics Module + Heat Transfer Module + Porous Media Flow Module + Liquid and Gas Properties Module + CAD Import Module
- Justification for Software Request: The COMSOL Multiphysics software and the requested modules help the simulate various components and mechanisms of drying processes. This allows us to model and track the temperature distribution, dehydration and textural changes in the food being dried. Modeling the drying process with COMSOL saves time, energy and resources that are needed to study the process experimentally. It also provides additional insights essential for the design of equipment (such as dryers) that are impossible to obtain otherwise.

Guide/Supervisor Approval

I, prof. Vishwanath H. Dalvi,



- 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: 27th March 2025



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

