

I-STEM Software Request - Guide Approval Form

User Details

- Name of Researcher: Muskan Singh
- User Type: ☐ Ph.D. Scholar ☐ Postdoctoral Researcher ☒ Bachelor's ☐ Masters
- Institution Name : Veer Surendra Sai University of Technology, Odisha
- Institutional Contact No: 8480441756
- Research Topic: Advance Semiconductor Packaging

Software Request Details

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

COMSOL Multiphysics supports my research in advanced semiconductor packaging by enabling multiphysics analysis of high-density power-module architectures. It helps investigate package-level thermal behaviour, heat dissipation, thermal gradients, thermomechanical stress, and deformation under different operating conditions. It also enables evaluation of advanced cooling approaches, including liquid and microfluidic cooling, through coupled heat-transfer and fluid-flow simulations. Parametric studies can be used to assess the influence of package geometry, materials, and cooling conditions, supporting the development of thermally efficient and reliable semiconductor packages.

Guide/Supervisor Approval

I, Dr. ADITYA KUMAR HOTA

- 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: 03.09.2026

Official Stamp/Seal:

Assistant Professor
Electronics & Telecommunication Engineering
VSSUT, Burla