

I-STEM Software Request - Guide Approval Form

User Details

- **Name of Researcher:** Nikita Kumari
- **User Type:** ☒ Ph.D. Scholar ☐ Postdoctoral Researcher ☐ Bachelor's ☐ Masters
- **Institution Name :** Birla Institute of Technology, Mesra
- **Institutional Contact No:** 0651-2711200 (Ext.:4392)
- **Research Topic:** Wire Arc Additive manufacturing

Software Request Details

- **Software Name:** COMSOL Multiphysics
- **Justification for Software Request:** COMSOL Multiphysics is required to simulate the thermal and mechanical aspects of Wire Arc Additive Manufacturing (WAAM). It will help me analyze heat and mass transfer, temperature distribution, cooling rates, and residual stresses during deposition. These simulations are crucial to optimize process parameters, control distortion, and enhance product quality, which directly supports my research goals.

Guide/Supervisor Approval

I, Dr. Bappa Acherjee (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: _____

Date: 12/08/26

Official Stamp/Seal: _____

Deptt. of Production & Industrial Engg.
B.I.T Mesra, Ranchi

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