

I-STEM Software Request - Guide Approval Form

User Details

- **Name of Researcher:** Hanson Clinton D Souza
- **User Type:** ☒ Ph.D. Scholar ☐ Postdoctoral Researcher ☐ Bachelor's ☐ Masters
- **Institution Name** : SRM Institute of Science and Technology, Kattankulathur
- **Institutional Contact No:** 044-27417140
- **Research Topic:** Green hydrogen production

Software Request Details

- **Software Name:** COMSOL Multiphysics
- **Justification for Software Request:** The software will be used to simulate electrochemical reactions, current distribution, mass transport, fluid flow, heat transfer, and multiphysics interactions in hydrogen production systems. It will support preliminary simulation studies to evaluate research concepts and project proposals before experimental implementation. The software will enable the investigation and comparison of different electrolyser designs, operating conditions, catalyst configurations, and material properties, facilitating design optimization while reducing the time, cost, and resources associated with trial-and-error experimentation. Additionally, it will complement experimental research by validating results, providing insights into complex physical and electrochemical processes, and supporting the development of high-quality research publications.

Guide/Supervisor Approval

I, Dr. V. Ganesh,

- 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: V. Ganesh

Date: 30/6/2026

Official Stamp/Seal:

Dr. V. GANESH
Assistant Professor
Department of Physics and Nanotechnology
SRM Institute of Science and Technology
Kattankulathur, Chennai - 603 203.