Students' Placement Office, IIT Kanpur

Project Verification Form

By appending your signatures to this form you acknowledge and agree that:

Title of the Project	Modelling and Simulation of Electrochemical Systems
Commencement Date	15th Jan 2021
Completion Date	30th April 2021
Project Supervisor	Prof. Raj Ganesh S. Pala
Organization/Institution where the Project was accomplished	Department of Chemical Engineering, IIT Kanpur

Project Description (You can use extra A4 sheets in case you run out of space however the extra sheets should also have the seal & signature of the Project Supervisor or the relevant authority)

- Analysed finite difference method to discretise coupled differential equation of mass transfer & chemical reactions
- Remodelled 2 systems (Cu electrowinning & fuel cell) using Butler-Volmer equation to get e– density at electrodes
- Considered activation, ohmic, & conc. polarisation to create the 2 systems
- Rectified **copper membrane electrode assembly** utilising simulations for CO_2 reduction using boundary conditions

- This form along with the certificate would serve as the official document between the project supervisor and Students Placement Office, IIT Kanpur regarding verification of the student's project work
- The student will provide additional information and documentation relevant to his/her project upon request by the Students' Placement Office
- The student has clearly defined his/her individual role in projects done in cooperation with other students, faculty, groups or company personnel.
- Incorrectly over-stating the reach, impact and/or quantitative/qualitative results of a project is unethical.
- In case of violation of any of the above rules, Students' Placement Office, IIT Kanpur reserves the right to take necessary action including de-registering the student from the placement season and reporting the misconduct to the Institute Authorities.

Submitted by:-	**Project Supervisor Details:-**
Name: Shubham Gupta	Name: Prof. Raj Ganesh S. Pala
Roll No: 180749	Designation: Professor, Department of Chemical Engineering
Signature: Gupta 26th Aug 2021	Signature: