

SOURAV CHOUDHURY

Course: M.Tech., Mechanical Engineering, 2024

Email: 22MT0335@iitism.ac.in

Mobile: 8906821995

CGPA: 7.97



ACADEMIC DETAILS						
COURSE	SPECIALIZATION	INSTITUTE/COLLEGE	BOARD/UNIVERSITY	SCORE	YEAR	
UG	Mechanical	ARYABHATTA INSTITUTE OF ENGINEERING AND MANAGEMENT	MAKAUT	8.75 CGPA	2018	
CLASS XII	SCIENCE	FULBARI HIGH SCHOOL	West Bengal Council of Higher Secondary Education (WBCHSE)	364 MARKS	2014	
CLASS X		FULBARI HIGH SCHOOL	West Bengal Board of Secondary Education (WBBSE)	420 MARKS	2012	

Subjects / Electives

FEM In Thermal, CFD, Advance Heat Transfer

Technical Proficiency

Inventor, AutoCAD Mechanical, ANSYS ICEM CFD, ANSYS Fluent, MATLAB, Meshmixer, Python

SUMMER INTERNSHIP / WORK EXPERIENCE

Summer internship (MoM)-S9, Tata Steel Limited

May 2023 - Nov 2023

I was involved in a research called "Graphene Synthesis from Waste Oil." I worked with **tube furnaces at 800-900 degrees Celsius** and received exposure to **TEM, SEM, XRD, RAMAN spectroscopy**, **UV, and FT-IR scans**.

Junior research fellow, Central mechanical engineering and research institute

Aug 2019 - Jan 2021

Design and development of small utility compact tractor. Software I used Autodesk Inventor and Autocad software for 3D modeling and 2D drafting.

Graduate apprenticeship training, DVC (Damodar Valley Corporation)

Oct 2018 - Aug 2019

Coal bill processed

PROJECTS

Tumor Treating Field mediated Thermosensitive Liposome drug delivery in human brain tumor: A pilot numerical investigation - Thermal Engineering

Jan 2024 - Nov 2024

Ansys ICEM CFD was used to mesh the 3D head model that was extracted from the MRI, and Ansys Fluent 2022 was used for simulation.

Research area: Bio-fluid Mechanics and heat transfer, CFD

Synthesis of graphene from waste oil - Material science

Jun 2023 - Nov 2023

I used the one-step pyrolysis method to convert waste hydraulic oil into graphene and graphene oxide form. I had filed patent on that.

Design and development of small utility compact tractor - R&D (Design)

Aug 2019 - Jan 2021

I modeled a 3 dimension (3D) of a small tractor. I was performing 2D drafting of the tractor.

POSITION OF RESPONSIBILITY

DPGC STUDENT REPRESENTATIVE - IIT ISM DHANBAD

Oct 2022 - Present

Academic related work

EXTRA CURRICULAR ACTIVITIES

Volleyball play

COMPETITIONS

Mind Over Matter Nov, 2023

Synthesis of graphene fromwaste oil

CONFERENCES AND WORKSHOPS

International Conference on Biological Innovation, Technology, Engineering and Sciences (BITES-2024)

Organized by: NIT Roukela | Date: Dec 2024

Tumor Treating Field mediated Thermosensitive Liposome drug delivery in Human Brain Tumor: A Pilot Numerical Investigate .

ICTFSD 2024

Organized by: BIT MESRA | Date: Apr 2024

A alternative brain cancer treatment using tumor treating fields: A computational approach.

TEST SCORES					
TEST NAME	DATE OF EXAM	SCORE			
Gate	Feb 5, 2022	Score:437/1000			

PATENTS

A METHOD FOR PRODUCING GRAPHENE OR GRAPHENE DERIVATIVE FROM WASTE OIL

Filing date: Mar 8, 2024 | Issue date: Yet to be issued

Application number: 202431016960 | Patent Office: India

LANGUAGES KNOWN

Hindi, Bengali, English