



Rupresha Deb

Roll Number : 196103027

PhD - Mechanical Engineering

Indian Institute of Technology Guwahati

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DOB: 28th August 1996

Education

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
PhD	Indian Institute of Technology, Guwahati	9 CGPA	2019-Present
B.Tech	National Institute of Technology, Silchar	8.53 CGPA	2014-2018
Senior Secondary	CBSE Board	95.2%	2014
Secondary	CBSE Board	10 CGPA	2012

Research Experience

- PhD Thesis (ongoing), IIT Guwahati** (2019-Present)
Project title: Magnetic field mediated droplet shape evolution and magnetowetting dynamics
- Undergraduate Thesis, NIT Silchar** (2017-2018)
Project title: Comparative study between different packed bed thermal energy storage systems using Phase Change Materials Encapsulation
- Summer Research Internship, TVS Motor Company** (May-July, 2017)
Project title: Rider thermal comfort study
- Summer Research Fellowship, IIT Guwahati** (May-June, 2016)
Project title: Numerical simulation of combustion chamber of Diesel engine and study the emission characteristics

Achievements

2020- Present	Prime Minister's Research Fellow (PMRF) , Recipient of the prestigious Prime Minister's Research Fellow honor via lateral entry channel in May 2020 for carrying out my doctoral research.
2014-2018	Central Sector Scheme of Scholarship (CSSS) , Recipient of the Central Sector Scheme of Scholarship throughout all the four years while pursuing Bachelor of Technology.
2014	Kendriya Vidyalaya Scholarship , Received KV Scholarship for being amongst the top 1 percentile candidates who appeared in CBSE Boards class XII examination in the year 2014.
2014	Science stream topper in 12th standard , Secured top rank with 95.2% marks and subject topper in Physics and English.
2012	Kendriya Vidyalaya Scholarship , Received certificate of merit for securing highest CGPA 10/10 in 10 th standard.

Participation

- Attended webinar on "Dynamic Mechanical Analysis".
- Attended workshop on "Scanning Electron Microscopy: Techniques and applications".
- An active member and the "Girls Representative" of Research Promotion Cell, NIT Silchar.
- 3rd position holder in "Robowars" conducted by NIT Silchar, Tecnoesis'14
- Secured 1st position in North East Sports Meet Chess Championship 2017, held at NIT Silchar.
- Secured position among top 10 players, twice in KVS National sports meet in Chess, under 17 and under 19 groups, held in New Delhi and Pune respectively.
- Secured Gold medal twice in KVS Regional sports meet in Chess under 17 and under 19.
- An active member of Chess club, NIT Silchar.
- Working as a member of CRT (Covid 19 Response Team) here in IITG since January 2021.
- Completed Bisharad Part-1 in classical singing from Prayag University.
- Solving different types of Rubiks cube.

Methods and Skills

- Instrument Operational Skills:** High Speed Visualization camera by Phantom, Contact angle Goniometer, Optical Microscope (Leica), Charge Coupled Device (CCD) camera, Spin coating unit, Ultrasonicator, Vibrating Sample Magnetometer (VSM), Gaussmeter, Rheometer, Tensiometer.
- Computational or CAD/CAM/CAE Software:** ANSYS, COMSOL MULTIPHYSICS, Surface Evolver, AUTOCAD.
- Quantitative:** ImageJ, Tecplot, OriginPro, LaTeX, Python (Plotting)
- Languages:** English, Hindi, Bangla, Assamese