

Sunny Methani

IDD B. Tech. (Chemical Engineering) and M. Tech.

(Hydrocarbon Engineering)

UG(V Year I Semester)

Registration No: IDD/CHH/10210026/2015

Email: sunnymethani@gmail.com



Indian Institute of Technology Roorkee

Educational Qualifications	Year	Board/Institution	CGPA* / %
IDD 4th Year	2014	Indian Institute of Technology, Roorkee	8.264
Twelfth	2010	Tilak Public School (C.B.S.E.), Jaipur	84.4
Tenth	2008	Vivekananda Kendriya Vidyalaya (C.B.S.E.), Hurda, Bhilwara	88.2

*on a scale of 10

INTERNSHIP INFORMATION

Halliburton Oilfield Services

Causes of Increase in Stand Pipe Pressure while Drilling (20 May, 2013-5 July, 2013)

- Calculated the stand pipe pressure through simulations and compared to the actual gauge reading of hydraulic stand pipe pressure (SPP) for drilled wells X, Y, Z.
- Found out the difference between actual and simulated pressure to be 800-900 psi in Well Y and Z for drilled 8-1/2 hole section.
- Evaluated the reasons which lead to this Pressure Shoot-up Value.
- Developed a keen understanding of Hydraulics and about various tools used in Drilling.

Universiti Teknologi PETRONAS, Malaysia

Yield Stress Characterization and Numerical Simulation of Statically Cooled Waxy Crude Oil (20 May, 2012-25 July, 2012)

- Studied the problem of start-up in pipeline transportation of gelled waxy crude oil after shutdown.
- Proposed a model which assumes that gelled oil is to be displaced by pumping in another fluid under constant pressure and that the incoming fluid displays Bingham plastic behaviour.
- Estimated the results of flow rate and pressure distribution with time and the amount of time to clear the gelled oil in a pipeline.

PROJECTS

Chemical Engineering Department, IIT Roorkee

Mixed convection from a pair of side-by-side circular cylinders (May 2014-present)

- Studying the effect when two cylinders are in close proximity of interaction at different gap ratio.
- Analysing the Grid Dependency and the effect of changing Re on drag coefficients and lift coefficients.
- Calculating the local and average Nusselt No. for accessing the mixed convective heat transfer.
- Examining the flow and thermal patterns by way of streamline and isotherm contours.

Students' Initiative for Integrated Rural Development, IIT Roorkee

Project- National Competitiveness in Knowledge Economy (2011-13)

- Conceptualized and led a 30 student team for collecting 35 unused cycles in IITR hostels for distribution among poor students of village Charba.
- Organized and Led three camps on agricultural awareness by collaborating SIIRD with Krishi Vigyan Kendra, Sahaspur, IFFCO Dehradun. Organized Health Camp as a part of Health Initiative.
- Setup a Library in the village Charba by collecting nearly 500 spare books.

SKILLS AND ACHIEVEMENTS

Computer Languages

C++

Software Packages

Gambit, Fluent, Micro Station, MATLAB, Polymath, Microsoft Office.

Academic Achievements	Secured AIR 2643 (Top 1 percentile) in IIT-JEE Examination 2010. Secured AIR 102 in NEST 2010.
Additional Courses Taken	Fluid Dynamics, Thermodynamics, Oil and Gas Transport, Reservoir Engineering, Natural Gas Engineering, Petroleum Refining, Engineering Seismology and Seismotectonics.
Languages Known	English (SRW) , Hindi (SRW)

EXTRA CURRICULARS

Cognizance (The Annual Technical Festival of IIT Roorkee) (2012-2014)

Convenor (2014), Co-Convenor (2013), Joint Organizing Secretary (2012)

- Part of a 5 member Departmental Core Team in Cognizance.
- Led a team of 25 students to manage multiple events such as Ideaz, Spotlight, Spectrum and Prototype held at the department.
- Managed with Companies like IOCL, Kalpena Industries Ltd for sponsorship and association.

Amazing Champions of Energy, Cairn (2013)

- Member of the team placed in the top 5 entries of Cairn India- ACE through preliminary screening.
- Presented a case analysis and ideas on Oil Subsidies to the Cairn India team.

International Conference on Rural Development & Planning-India's Rural Economy in Transition, Punjab (2012)

Presented SIIRD's project work on synergizing efforts of Academic Institutions, Government and Industry for rural development to the participants of more than 15 national and international college.

Placement Representative (August, 2014-Present)

Currently working as a placement representative in Department of Chemical Engineering.

Member of Himalayan Explorers' Club (HEC) (2010-14)

- Completed a Mountaineering trek to Nagtibba (Uttarakhand) and Confidence Assault Training.
- Successfully accomplished 28 km river rafting in Rishikesh and 32 km cycle racing competition.

Executive Member, Indian Institute Of Chemical Engineers (IICChE) (2011-12)

- Organized various interactive sessions on issues such as 'What went wrong', 'World 2050', etc.
- Managed Chem-E-Car centre stage event in Cognizance 2012.

Class Representative, Chemical Engineers Student Society (ChESS) (2011-12 and 2013-14)

- Acted as a facilitator between students and faculty.
- Organized various activities like fresher party, guest lectures, students' affairs, farewell party, club day, inter year sports matches, etc.

Member of Rural Transformation (RT) cell in National Social Service (NSS) (2010-11)

Actively participated in the events such as Blood Donation camp, Cloth Collection and taught under privileged childrens.

3rd Prize, ASME, IIT Roorkee (2010)

Won 3rd Prize in the Event Chevalet organized by the ASME IIT Roorkee Student's Section.

PERSONAL DETAILS

Father's Name: Lokumal Methani

Date of Birth: March 9, 1992

Gender: Male

Contact No: 07669613772

Category: General

Permanent Address: Prakash General Store,
Laxmi Market, Sadar Bazar, Gulabpura, Dist
(Bhilwara) - 311021

Current Address: F-156, Ravindra Bhawan, IIT
Roorkee-247667

REFERENCES

Dr. AMIT KUMAR DHIMAN

Associate Professor, Department of Chemical Engineering
Indian Institute of Technology Roorkee
amitdfch@gmail.com
+91-1332-285890

Dr. SHISHIR SINHA

Professor, Department of Chemical Engineering
Indian Institute of Technology Roorkee
shishir@iitr.ernet.in
+91-1332-285648