YASH MALVIYA

M.Tech. Computer Aided Process Plant Design
Chemical Engineering
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Area of Interest

Heat transfer, Petroleum engineering, Petrochemical, Process dynamics control, Fluid mechanics

Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
2019	M.Tech.	Indian Institute of Technology, Roorkee	*8.235*
2016	UG: Petro Chemical	University Institute of Technology RGPV Bhopal	*7.8*
2012	Twelfth	Gyan Ganga Academy, Ratanpur, Misrod Bhopal M.P. (CBSE)	*79.8 %*
2010	Tenth	Gyan Ganga Academy, Ratanpur, Misrod Bhopal M.P. (CBSE)	*8.8*

Internships

SATURATION AND REGENERATION TIME OF DRYER (LPG UNIT) | GAIL INDIA Ltd.

- Organization - GAIL India Ltd.
- Title - Gas Processing Unit.
- Synopsis - Production of Lean Gas, LPG, Propane, Pentane, and Naphtha from Natural Gas.

OIL EXTRACTION PROCESS | Adani Wilmar Fortune Ltd.

- Organization - Adani Wilmar Fortune Ltd
- Title – - Oil Extraction Process.
- Synopsis - Extraction of edible oil from soya seed by hexane process

Projects

Utilization of Heat Energy Generated by Chemical Reactions Using Heat Exchanger. | B.Tech Minor

- Utilization of Heat Energy Generated by Chemical Reactions Using Heat Exchanger.
- Neutralization Reaction of an acid and base is a highly exothermic reaction and the heat generated by the reaction can be used to increase the temperature of any fluid. In this project, a strong acid HCl and a strong base NaOH is reacted to form a neutral salt NaCl and heat of 57 KJ/mol. This heat is used to increase the temperature of room temperature water.

Optimized Production of Bio-diesel from Waste Vegetable Oil and Its Characteristics. | B.Tech Major

- Production of Bio-diesel from waste vegetable oil as an alternative energy source of the easily available raw materials, as well as provides an option for utilization of Bio-waste.
- Common processes for biodiesel production are cracking, pyrolysis, transesterification, hydrotreating and Fischer-Tropsch Method.
- Transesterification, due to lower cost and high reaction rate, is a feasible method for bio-diesel production from WVO (waste vegetable oil).

Application and characterization of Biosurfactant in Enhanced Oil Recovery. | M.Tech

- Application and characterization of biosurfactant in Enhanced Oil Recovery in the fixed bed of different size stones and sand simulating a petroleum reservoir. The efficiency of biosurfactant is compared with that of chemical surfactant in recovering oil trapped in the fixed bed.

Awards / Scholarships / Academic Achievements

- AIR Rank 120 in GATE 2020.
- Certificate of proficiency from Confederation of Indian Industry CII IPATE 2020.
- Secured 3rd position in Chem-e-timer competition at AZeotropy organized by Chemical Engineering Association, IIT Bombay.
- Participated in Poster Presentation on Topic Industrial Safety and Hazard at the Student Outreach Program, CHEMTECH World Expo 2015.
- Attended the Panel discussion on "Leadership and Innovation" at the Student Outreach Program, CHEMTECH World Expo 2015.
- Attended the Icon Lectures at the Student Outreach Program, CHEMTECH World Expo 2015.
- Attended an International seminar on Vedic, spiritual ethics and Indian values effect on Technical Education at UEC Ujjain 29-30 March 2016.
- Participated in 2011 International Assessment for Indian Schools by The University of New South Wales Sydney Australia for Science and English.
- Class topper and 109 state rank in "International Olympiad of science" 2009

Skills

Software Packages	1. AutoDesk AutoCAD 2D & 3D (Certificate No. 1RZQJWFXC8). 2. AutoDesk AutoCAD P&ID (Piping and Instrumentation Diagram) (Certificate No 1BTDYSZBT4). 3. AFT (Applied Flow Technology) FATHOM for fluid flow analysis and hydraulic Analysis (Line sizing, Pump Sizing, Pressure Drop Calculations). 4. Firsthand experience on 1. Aspen plus, 2. ANSYS Fluent, 3. Comsol Multiphysics

Languages Known English (SRW), Hindi (SRW)

Positions of Responsibility & Extra Curriculars

Sports

- Participated in State level inter engineering cricket tournament at SATI Vidisha.

College Ambassador

- Contributed in Azeotropy held at IIT Bombay by being College Ambassador.

References

Dr. Vimal Kumar
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Dr. Bikash Mohanty
Professor
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