KUSH PATEL

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Current Address: Room No. - A622,Boys Hostel 1,IIT Patna,Bihta,Bihar,India-801103 **Permanent Address:** Plot No. - 349/1,Sector-12 C,Gandhinagar,Gujarat,India-382012

OBJECTIVE:

Seeking a summer internship opportunity to gain exposure and contribute positively

EDUCATIONAL QUALIFICATION:

Indian Institute of Technology Patna, India

2013-present

Bachelor of Technology in Chemical Science and Technology (5th semester, UG Third year)

Cumulative Performance Index (CPI): 7.28/10.0 (after 4 Semesters)

Hillwoods School, Gandhinagar, Gujarat

2012-2013

Intermediate (class 12) - Central Board of Secondary Education (CBSE)

Aggregate: 85.8%

Shree Swaminarayan Public School, Gandhinagar, Gujarat

2010 - 2011

High School (class 10) - Central Board of Secondary Education (CBSE)

CGPA: 8.6/10

ACADEMIC PROJECTS:

TITLE: "Solution Thermodynamics of Binary Mixtures Containing Room Temperature Ionic Liquids (RTILs) and Molecular Solvents."

PROJECT GUIDE: Dr. Debabrata Seth, Assistant Professor, Department of Chemistry, IIT Patna

TECHNIAL EXPERTISE:

- Worked on instruments used in chemical industry like cyclone separator, ball mill, centrifugal pump, venture meter, Shell and tube heat exchanger, plate and frame filter press.
- Synthesis of organic compounds like aspirin, methyl orange, paracetamol and inorganic compounds like potash alum, fertilizer.
- Characterization of compounds by UV-Vis, IR and NMR Spectroscopy
- Measurement of contact angles of droplets in hydrophilic and hydrophobic surface as a part of coursework.
- Silver nanoparticles synthesis and characterization

COURSES UNDERTAKEN:

CORE: Chemical process calculations, Fluid mechanics, Process Control and instrumentation, Thermodynamics, Heat and mass transfer, Chemical kinetics and electro chemistry, Industrial chemistry, Biotechnology, Quantum chemistry, Polymer chemistry, Medicinal chemistry, Chemistry: Physical, Organic and Inorganic.

MATHEMATICS: Real analysis, Complex analysis, Linear algebra, Calculus, Ordinary and partial differential equations, Numerical methods.

OTHERS: Electrical Science, Physics, Engineering mechanics, Engineering drawing, Introduction to computing, Economics.

AREA OF INTEREST:

- Thermodynamics, Chemical Reaction Engineering, Heat and mass transfer, Fluid mechanics, Process control
- Biotechnology, Computational chemistry, Environmental science

COMPUTER PROFICIENCY:

PRODUCTIVITY SOFTWARES: Microsoft Office

OPERATING SOFTWARES: Microsoft Windows, Mac OS

PROGRAMMING LANGUAGE: C, C++ (Basics)

EXTRA CURRICULAR ACTIVITIES:

- Co-founder and active member of the threshold club (student chemical club)
- Team member of IIT Patna Cricket team
- Represented IIT Patna in Inter IIT Sports Meet 2014 at IIT Bombay
- Volunteered in anti addiction campaign