

# ABHIJEET SINGH

5<sup>TH</sup> SEMESTER

BACHELOR OF TECHNOLOGY

CHEMICAL SCIENCE AND TECHNOLOGY

INDIAN INSTITUTE OF TECHNOLOGY PATNA

Address Room no. B/220

Boys Hostel

Indian Institute of Technology Patna

Bihta-801103, Bihar, India

Mobile +917033685963

e-mail [singh.abhijeet047@gmail.com](mailto:singh.abhijeet047@gmail.com)

## OBJECTIVE

To be a part of your renowned research group and contribute to the best of my abilities.

## EDUCATIONAL QUALIFICATIONS

Examination	University/Board	Institute	Year	CPI/%
Graduation	Indian Institute Of Technology Patna	Indian Institute of Technology Patna	2017*	7.98
Intermediate	Indian School Certificate Examination	City Montessori School	2012	90.0
Matriculation	Indian Council For Secondary Education	City Montessori School	2010	92.6

\* expected date of graduation

## ACADEMIC/RESEARCH PROJECTS

### PREPARATION OF NOVEL CATALYST

[2015]

- Prepared a series of **novel catalyst for the ring opening** polymerisation of **Lactides and Glycolides** using **Indium, Gallium and Zinc complexes**.
- Synthesised numerous crystals of catalysts and analysed their effect.

### HUMAN POWERED VEHICLE CHALLENGE (ASME)

[2015]

- Led the **transmission team** of **4** people in the international competition organised by **American Society of Mechanical Engineers (ASME)** which saw the participation of **more than 48 teams across the globe**.
- Successfully **finished at 5<sup>th</sup> place** in the **design event**.
- Designed a complex system of **gear transmission** of two wheeler **fully recumbent bicycle**.

### HYDROLYSIS OF NITRILES

[2014]

- Prepared **Five Amide Compounds** by the hydrolysis of their corresponding nitriles using **iron (II) acetate as a catalyst**.
- Analysed the same hydrolysis using **iron (II) oxide** as a catalyst.
- Derivatised the **Thiopenes** with the amides to prepare a **polymerised product**.

### BIODEGRADABLE POLYMERS (THEORETICAL ANALYSIS)

[2014]

- Analysed Biodegradable polymers using **Ring opening Polymerisation of Lactide and Glycolide**.

## TECHNICAL SKILLS

- Basic organic and inorganic synthesis and characterization, protein estimation, nanoparticle synthesis
- Well versed with computer languages like **C, C++, JAVA, PHP, HTML, CSS, JAVASCRIPT, MYSQL** and **MATLAB, CHEM-BIO DRAW**.

## ACHIEVEMENTS

- Awarded **merit cum means scholarship for the year 2013-14** based on the performance in the undergraduate qualifying examination.
- Nation's top 0.1 percentile** in intermediate, matriculation as well as in the undergraduate qualifying examination.

## DECLARATION

I hereby declare that all the above information is true to the best of my knowledge