



INDIAN INSTITUTE OF TECHNOLOGY PATNA

Department of Chemistry

**PLACEMENT BROCHURE
2022-2023**

TABLE OF CONTENTS



Vision



About us



Recent notable achievements



Why hire us?



Courses offered



Laboratory facilities



On going research works





VISION :

To create, disseminate and translate knowledge in science and allied disciplines through cutting edge research activities that will best serve the society.



ABOUT US

- *The Department of Chemistry in IIT Patna has been established since the setting up of the Institute in 2008. It is one of the premier departments of the institution.*
- *A vibrant multidisciplinary research program in the Department of Chemistry at IIT Patna is supported by energetic faculty members and state-of-the-art research facilities.*
- *Contributes to the research and industry problems related to societal importance.*
- *With a strong foundation in the conventional areas and quest for emerging areas of Chemistry, faculty and students are engaged in a range of dynamic research programs that include Supra molecular , Organic synthesis, Catalysis, high resolution and Bio-Spectroscopy, Polymer and Biochemistry.*





Recent notable achievements



Dr. Md. Lokman H Choudhury's article "Recent applications of thiourea-based organocatalysts in asymmetric multicomponent reactions (AMCRs)" was published in RSC journal *Org. Biomol. Chem.* 2020, 18 (29), 5513-5532 has been cited in "**Scientific Background on the Nobel Prize in Chemistry 2021**"



Ms. Archita Maiti (Ph.D./Chemistry) the PCCP Best Poster Presentation Prize at the Theoretical Chemistry Symposium (TCS 2021) . This prestigious prize is awarded by Physical Chemistry Chemical Physics (PCCP), a reputed Journal of RSC.

Apart from these *our research scholars have successfully secured positions up to post doc in The university of Akron, Ohio, USA, Laboratoire Interactions, Dynamiques et Lasers CEA Saclay, 91191 Gif-SUR-Yvette France, Chalmers university, Sweden, etc...*



Courses offered

- Computer in chemistry
- Chemical kinetics
- Concepts in organic chemistry
- Organometallic and bioinorganic Chemistry of transition metal
- Polymer chemistry
- Quantum chemistry

- Physical chemistry lab
- Inorganic chemistry lab
- Organic chemistry lab
- Chemical process modelling and simulation
- Supramolecular chemistry
- Biochemistry

- Thermodynamics for chemist
- Modern methods of Analysis
- Principle of molecular Spectroscopy
- Chemistry of transition metals
- Reagents and tools in organic chemistry

- Chemistry of s and p block element
- Nanotechnology in medical science
- Art in Organic synthesis
- Principle of organic Chemistry
- Symmetry and group theory for chemists

Laboratory facilities

The Department of Chemistry has excellent facilities including a wide range of sophisticated instruments offering technical support to the research activities.

- *UV & Visible Spectrophotometer from Shimadzu*
- *FTIR from Shimadzu*
- *Spectrofluorometer from Horiba Jobin Yuon*
- *Digital Polarimeter from Jasco*
- *Particle size and zeta potential analyzer from Beckman Coulter*
- *Viscometer from Brookfield*
- *Microwave synthesizer from Anritsu*
- *Glove box from Jacomex*
- *Rotary evaporator from Buchi*

- *Microwave reactor from Metrohm*
- *Millipore water purification system*
- *Hot air Oven from Sonara*
- *SDT (simultaneous DTA-TGA) from TA*
- *Dynamic Mechanical Analysis (DMA) from TA*
- *FTIR with spotlight 200 microscope from Perkin Elmer*
- *Atomic Force Microscope*
- *XRD Machine*
- *NMR Spectrometer*



On going research works :

-
- DNA supramolecular self assembly for construction of functional nanostructures
- Study of Clustered DNA-Damage Repair Mechanism in Nucleosome Core Particles
- Diversity oriented synthesis of privileged heterocycles & highly functionalized carbocycles by multicomponent reactions (MCRs)
- Fabrication of Highly Fluorescent Quantum Dots for Biomedical Applications
- Functionalization of the Carbohydrates: Designing New Strategies for the Synthesis of Natural and Modified Sugars via Metal Catalysis.
- Imidates: A New Class of N-H Directing Group for C(sp²)-H Activation and Tools for Synthesis of Highly Functionalized Heterocycles.
- Mechanism of Hydroxide Ion Transfer through Anion Exchange Membrane in Anion Exchange Membrane Fuel Cell: Investigation using Molecular Dynamics Simulation.

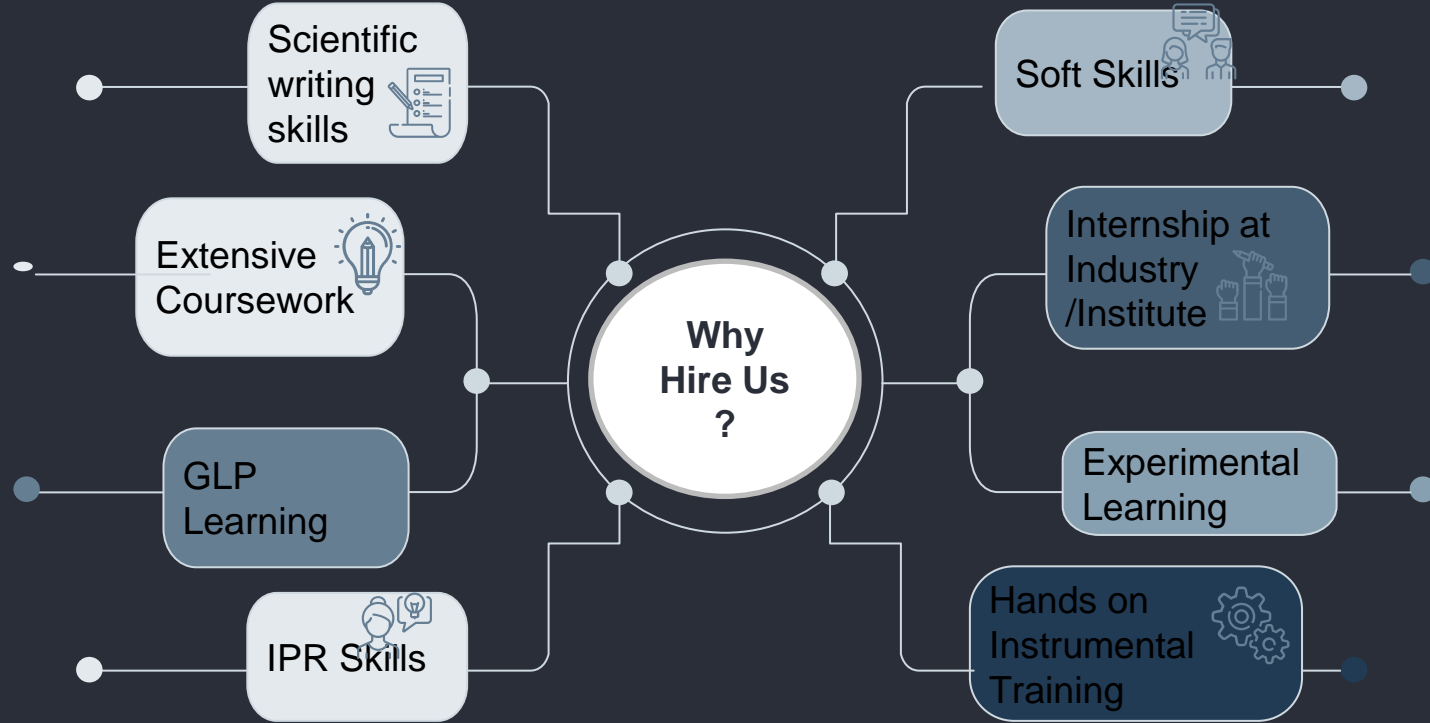
And many more.....

.....



.....

Why Hire Us?



Contact us:

Mr. Kripa Shankar Singh
Training and Placement Officer
Email : tpc@iitp.ac.in
Phone : +91-8102917501

Training and Placement Cell:
Email:
Phone: +91-6123028083

Deepanshu
Assistant Head Co-Ordinator
Email : deepanshu_2112ch07@iitp.ac.in
Phone: +91-8826540822

