



Centre for Career Development,
Indian Institute of Technology Guwahati

Placement Brochure-2024



Centre for the Environment

About The Institute



Indian Institute of Technology, Guwahati

Established in 1994, as an 'Institute of National Importance', IIT Guwahati has grown into being a preferred destination for people passionate about learning and innovation. IIT Guwahati has been ranked among the Top 100 Young Universities in the world by the Times Higher Education, one of the two Universities from BRICS nations. IIT Guwahati has several factors contributing to how in a short span of time it has established itself as one of the best institutes of its kind in the country. The programmes and courses that are offered at IIT Guwahati are perpetually evolving to adapt to the ever changing global requirements and along with the diversity of the fields of study, this has helped the institute become one of the nation's nerve centres for research and development, and technical education. The faculty ensure that the students of the campus are ready to face the challenges of the professional world by providing them with a sound conceptual understanding of their respective disciplines. The institute also offers a plethora of opportunities to students for their holistic development, through the excellent facilities that it has for sports and general extracurricular activities.

About The Centre For The Environment

✓Vision

To be an interdisciplinary academic research centre continuously striving for excellence in providing scientific and technological solutions to significantly advance different sections of society towards effective natural resources management adopting sustainable environmental practices for economic wellbeing. The centre aims to be a world class centre for excellence on environmental sciences and technologies for solving global and local environmental challenges.

✓Mission

- ☐ **Multi-disciplinary research** for addressing vital issues relating to the environment
- ☐ **Train motivated and highly capable manpower** for mitigating emerging environmental problems.
- ☐ Active role in promoting **public awareness** about pollution free environment.
- ☐ Technical support to different line departments, organizations and industry in their environment related studies and activities.
- ☐ **Organizing regular activities** of state of art knowledge sharing.

Since inception in May 2004, Centre for the Environment has excelled in terms of academic initiatives and cutting-edge research labs and infrastructure, which is highlighted in our recent research outputs. Apart from research activities, the students from the centre are motivated to participate in a variety of sporting, artistic, and socially-relevant events, such as the celebration of World Environment Day, and other events related to the conservation and preservation of the ecosystem.

The students have the opportunity to succeed in the competitive professional world thanks to the availability of state-of-the-art facilities, active institute-industry MoUs, national and international exchange programs, and industrial/research training programs. Our researchers have been placed in prestigious national and international research/academic institutions and global corporations and their achievements have made us really proud! The center is dedicated to providing an excellent environment to nurture the academic and professional experience of students, outreach to the scientific community and society, and advancements in Environmental Science and Engineering.

According to the latest edition of the world's most-consulted university ranking, Indian Institute of Technology Guwahati has been named as one of the world's top universities for the study of 14 subjects where Environmental Sciences is one of the integral disciplines to be featured in the list. I am delighted to inform that recently, in Citations per Paper, QS' measure of research quality, IIT Guwahati performed best in Environmental Sciences, in which it scored 88.6, which is an extremely proud achievement for all of us. The Environmental Studies discipline has also been featured among the 301-450 global ranking scale, which the fifth-best discipline at the institutional level.

The associated faculty members have committed themselves to convey cutting-edge knowledge, practical expertise, and a profound grasp of the various concepts that have played an active role in shaping the centre towards achieving these accolades. With Best Regards!



Prof. Utpal Bora

**From the Head
of the
Centre**

Academic Curriculum

Courses offered: PhD

PhD-started in July 2005

Current students = 75
Passed out students = 52

Institute post doctoral fellow= 01

Conference/ training programme/QIP = 65

Published paper
/ Conference paper ~ 400

Journals ~300
Book chapter = 30 approx

Patent= 05

Key Research Areas

In order to meet its vision and mission, the following research thrust is ongoing in the centre

- **Wastewater treatment:** Removal of various inorganic and organic pollutants viz. heavy metals, dyes, phenolic compounds etc. from industrial effluents. Both, biological and chemical approaches being studied to achieve the maximum outcome.
- **Biochemical:** Production of industrially important enzymes from novel bacterial strain and use in sewage sludge digestion, slaughter house waste digestion and burnt-on protein residue removal from solid surface.
- **Green Chemistry and Environmental Biotechnology:** Synthesis, structure analysis and reactivity through newer reagents and methodologies. Environmental Genomics and Proteomics.
- **Theoretical simulation and modeling:** Simulation of pollutant dispersion at traffic intersection by quantification of the total amount of pollutant emitted at the site from the vehicles (source) by using traffic and emission model. With the help of computational fluid dynamics, dispersion of pollutant studies are extensively being carried out to predict the concentration of pollutant by varying all of the three major factors (the geometry nearby buildings, size of the vehicle, geometry of the road and intersection, traffic fleet speed, emission rate etc.) affecting it. Application of Quantum Chemical Calculations along with Molecular Dynamics Simulations to study the extraction or separation of newer pollutants from liquid or gaseous phases.
- **Geo-Environmental:** Sediment Dynamics in Fluvial Systems, Risk Assessment and Management, Environmental Geo-informatics
- **Environmental Management and Economics**



Research Laboratories



Gas chromatograph



HPLC



FTIR



High-performance liquid chromatography



Atomic absorption spectroscopy



Total Organic Carbon Analyzers



Gradient PCR



Kjeldahl Nitrogen Analyser



UV-VIS Spectrometer

Sponsored Research Projects

SI No	Name of Project Investigator	Title of the project	Funding agency
1	Prof. Utpal Bora	Development of animal feed products from Eri Silkworm	DRDO
2	Prof. Subhendu Sekhar Bag	A Cost Effective Strategy and Prototype Development For Community Wastewater Treatment & Reuse In Farmers Field	Newgen IEDC, DST, Government of India
3	Prof. Utpal Bora	Technology development of vinegar production from indigenous fruits Leteku (Baccaurea motleyana), Kordoi (Averrhoa carambola), Poniyal (Flacourtia jangomas) of Assam	ASTEC
4	Dr. Lalit Mohan Pandey	Bio-surfactant mediated enhanced oil recovery for Assam oil reservoirs.	DBT
5	Prof. Tamal Banerjee	Sustainable, Biodegradable and Affordable Substitutes for Single use Plastic using Castor Oil and Stubble Aggregate	DST
6	Prof. M. K. Purkait	Development of Solar power driven water treatment plant	Govt of Assam
7	Prof. M. K. Purkait	Prototype development for catechins extraction and production of low cost antioxidant tablets and capsules	Indian National Academy of Engineering
8	Prof. M. K. Purkait	Development of catalysts and a prototype device for conversion of CO ₂ to fuels/chemicals	DST

*For the complete list of sponsored projects, visit the [website](#)

Previous Recruiters: PLACEMENTS OF STUDENTS

Name of Student	Position	Organization
Dr. Shampa Sen	Associate Professor	VIT, Chennai
Dr. Suresh Pandian	Assistant professor	ISM, Dhanbad
Dr. Bedabrata Saha	Post doctoral research	Germany
Dr. Naresh Sahoo	Assistant Professor	Institute of Technical Education & Research , Bhubaneswar
Dr. J. Anand Kumar	Assistant Professor	NIT, Raipur
Dr. Aditi Banerjee	Post doctoral research	
Dr. Biju Prava Sahariah	Environmental consultant	Eastern Envo Protect, Guwahati
Dr. Banasri Sarma	Consultant	Public Health Eng Deptt, Assam, India
Dr. Rajib Lochan Deka	Assistant Professor	Assam Agriculture University, Jorhat
Dr. Deepmoni Deka	Technical Officer Gr-I	IIT Guwahati
Dr. Jayashree Nath	Assistant professor	J.B. College, Jorhat
Sushant Singh	Offered Post- doctoral scientist position	Biology Centre ceske budejovice, Czech Republic
Dr. Surya Singh	Programme Officer	CPCB , New Delhi

PLACEMENTS OF STUDENTS

Name	Position	Organization
Dr. Nayanmoni Gogoi	Assistant Professor	Tezpur Central University
Dr. Samarpita Basu	Post-Doctoral Researcher	University of California, Irvine
Dr. Surya Singh	Scientist-B	ICMR-National Institute for Research in Environmental Health, Bhopal, Madhya Pradesh
Dr. Bhaskar Das	National Post-doctoral Fellow (DST-SERB)	IASST Guwahati
Dr. D Narendra Naik	Postdoctoral Research Associate	University of Illinois Urbana Champaign.
Dr. Atreyi Ghosh	Assistant professor	Asian Institute of Management, Guwahati
Dr. Tanushree Paul	Post-doctoral fellow	Kyungpook National University, South Korea
Dr. Sayanti Ghosh	Post-doctoral fellow	IIT Bombay(Env.Sc.& Eng)

PLACEMENTS OF STUDENTS

Name	Position	Organization
Dr. Praisya Terangpi	Guest faculty	NIT, Arunachal Pradesh
Dr. Papu Kr. Naik	Assistant Professor	Parul University
Dr. Himali Horo	Assistant Professor	Thapar University
Dr. Arnab Ghosh	Post-doctoral Fellow	Dong-A University, Busan, South Korea.
Dr. Debojit Bhattacharjee	Post-doctoral Fellow	Moffitt Cancer Centre, USA
Dr. Deepti		Ministry of Environment and Forest, GOI
Dr. Rajneesh Kumar	Research Associate	IIT Indore
Dr. Poulami Datta	Maire-Technimont Post-doctoral Fellow	NIT Surathkal

Contact us



**Head,
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Ph.D. Placement Coordinator

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