



Table of Contents

- About us
- Why hire us!!
- Faculty
- From the desk
- Computational courses
- Energy conservation, climate change mitigation and policy courses
- Lab facilities
- Course projects
- Thesis projects
- Programming languages and software
- Lecture series
- Our past recruiters
- Contact details

About Us

The Department of Climate Change is a premier centre for education and research in India, committed to tackling the most pressing issues of our era. We offer advanced programs, including M.Tech and PhD degrees, designed to develop leaders in the field.

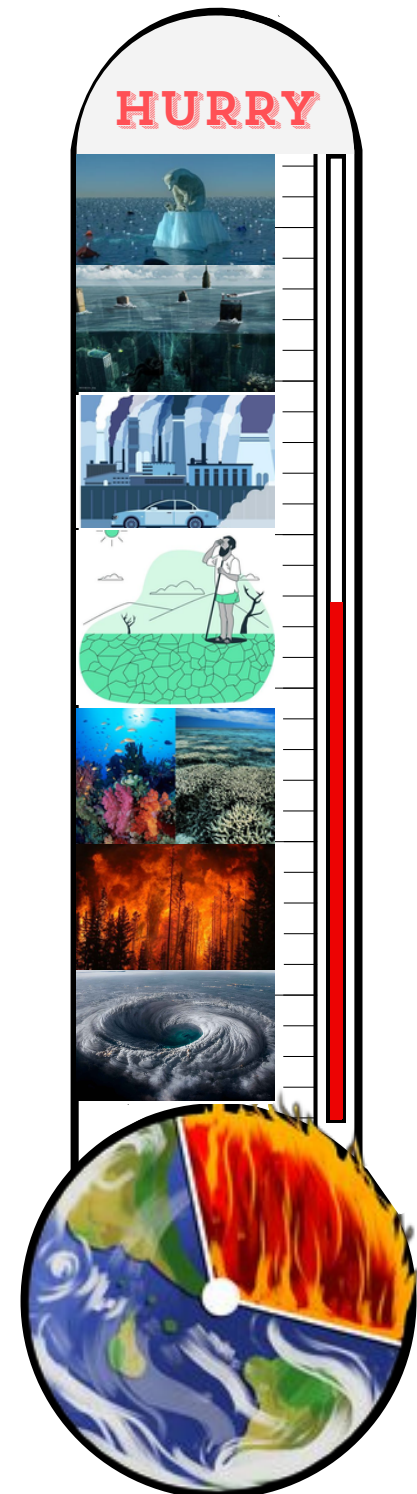
Our mission is to drive cutting-edge, interdisciplinary research while producing a highly skilled workforce poised to thrive in both government and industrial sectors. Our graduates are proficient in advanced modeling, data analysis, and machine learning techniques, with specialized expertise in weather, climate, and pollution.



Why hire us!!

Our graduates bring an exceptional blend of advanced skills and in-depth knowledge of climate and related topics. Through a rigorous curriculum, they achieve a comprehensive understanding, ensuring a holistic grasp of critical fields like AI/ML, Remote Sensing, GIS, Life Cycle assessment, ESG and many more. They excel in interdisciplinary research through hands-on experience while working on real-world projects.

Their thesis topics align with cutting-edge research areas, bringing them to the forefront of the field. This combination of practical experience, advanced research abilities, and focus on the latest advancements makes them highly capable of contributing effectively to your organization.





Prof. Asif Qureshi



Prof. Sathya Peri



Dr. Sayak Banerjee



Prof. Kishalay Mitra



Dr. Shruti Upadhyaya



Dr. Maheswaran



Prof. Debraj Bhattacharyya



Dr. Satish Regonda



Dr. Ambika S



Dr. Niranjana S Ghaisas



Dr. Deepu J. babu



Dr. Pritha Chatterjee



Dr. Hari Priya



Dr. Shiva Ji



Prof. Suhash Ranjan DEY



Dr. Somnath Maji



Prof. Sai Santhosh Kumar Raavi



Dr. Kaushik Nayak



Dr. Aalok Khandekar



Dr. M. P. Ganesh

From the desk



Prof. Asif Qureshi
Head of Department

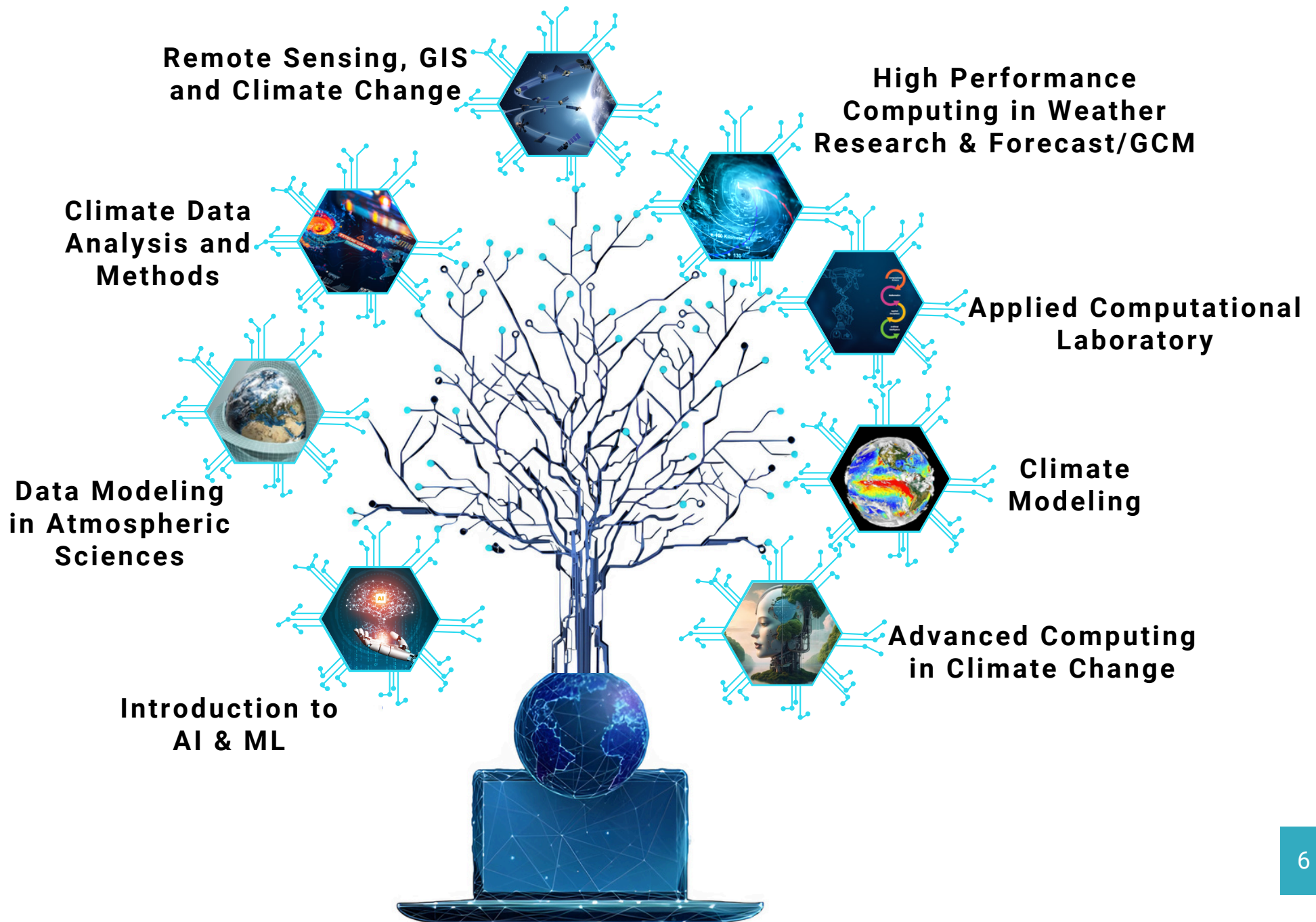
Our graduates harbor multidisciplinary portfolios that are highly beneficial when it comes to solving the environmental and climate challenges of our times. Through various courses, term projects and thesis projects, they are trained in climate sciences and climate solutions, and are capable of employing mathematical, experimental and theoretical tools to help you solve challenging situations and ensure smooth organizational operations.

Industries should be concerned about climate change for several compelling reasons to understand and mitigate its impact from various angles such as Financial and Economic Impacts, Operational Resilience, Legal and Liability Risks, and of course, the Environmental Impacts, and adapt accordingly. The Climate Change department produces skilled graduates of highly interdisciplinary in nature with knowledge and skills in mitigation strategies, and adaptation and resilience planning. These graduates bring numerous advantages for organizations and communities aiming to address and adapt to climate change impacts. We welcome all the industries to hire these highly trained aspiring graduates.

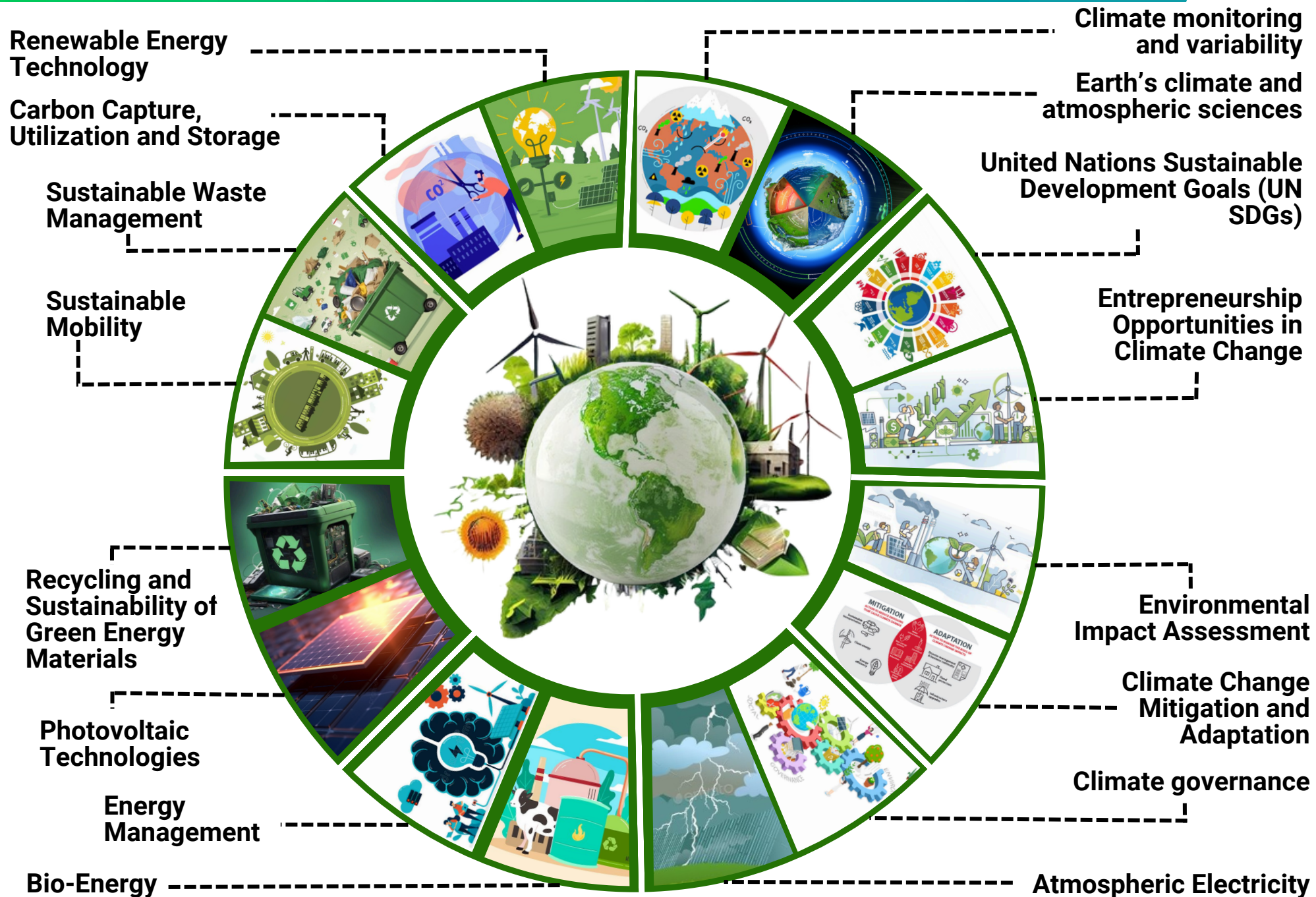


Prof. Sathya Peri
Faculty Coordinator

Computational courses



Energy conservation, Climate change mitigation and Policy courses





Climate Change Lab



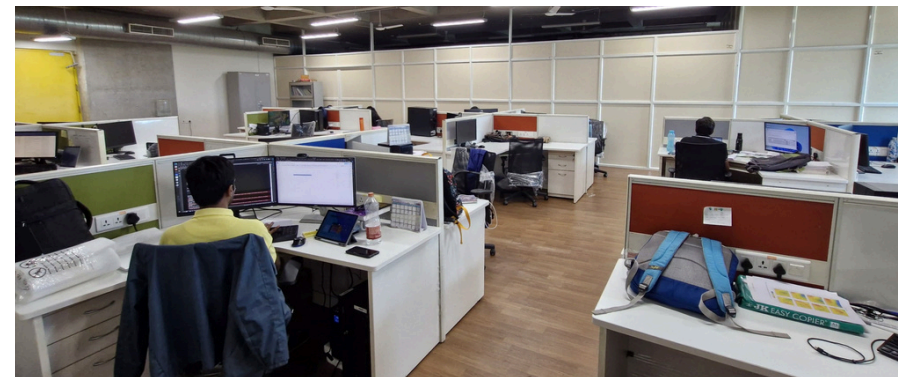
Global Optimization & Knowledge Unearthing Lab



Combustion Diagnostics Lab



Water Quality Analysis Lab



Hydraulics and Water Resources Engineering Lab

Course projects

- **Discharge forecasting for Ram Ganga basin using LSTM machine learning model**

- **Solar Power Prediction of AMS and XAI (Interpretable Machine Learning)**

- **Flood Susceptibility Prediction with Explainable AI: Insights from PDP Plots and Feature Importance**

- **Tropospheric ozone prediction using various geographical and atmospheric parameters using Random forest regressor and XAI**

- **ClimateNet India: Expert-level Dataset for Atmospheric River and Tropical Cyclone Classification Using U-Net Image Segmentation**

- **Financial Fraud Detection using Graph Clustering and Cost sensitive logistic regression**

- **Technical Potential Analysis of Renewable Energy Generation in Telangana Region – Solar, Wind Energy**

- **To Understand the impacts of LULC changes on Land Surface Temperature over Pune Metropolitan Region(PMR) using Remote Sensing**



Precipitation type classification with INSAT 3D/3DR Satellite Observations using Explainable AI/ML (XAI/ML)

Exploring Graph Neural Network for Wind Farm Layout Optimization



AI-ML Based Optimization and Reduction of a NH₃-CH₄-diesel Mechanism

Understanding the Genesis of Extreme Precipitation Events



Short-term climate forecasts, their evaluation and use of AI/ML techniques for post-processing

Environmental Impact Evaluation of Membrane-Based Sewage Treatment System: Carbon Footprint and Life Cycle Assessment



Programming Languages and Software



Google Earth Engine



Lecture series



Banyan Nation

Circular Economy in
Plastics: Opportunities
in India



**INDWA
Technologies
Pvt. Ltd.**

Challenges in Waste
Water Treatment



Comprehensive Multi-
Hazard Risk Financing
Strategy for India



Water modeling in
the global water
Industry



**Macrocosmos
Creations Pvt. Ltd.**

The Vital Role of Sensor
Technology in Climate-
Smart Farming



GAIT Global

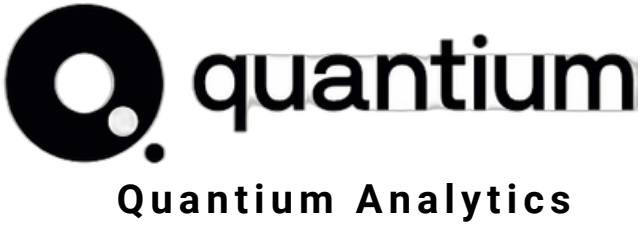
Harnessing Digital
MRV and Voluntary
Carbon Markets for
Nature-Based
Climate Solutions



**Grassroots Energy Technologies
India Pvt. Ltd.**

Bio-hydrogen Opportunities in India: An
initiative by Grassroots Energy

Past Recruiters






For detailed information and registration, kindly visit the Recruiters Portal of the Office of Career Services(OCS) IITH, Email: office.placement@iith.ac.in. The OCS Placement team will extend all the possible assistance to your organization to conduct the recruitment process.

Head of the Department

 Prof. Asif Qureshi
 +91 40 2301 6310
 head@cc.iith.ac.in






Department Faculty Coordinator

 Prof. Sathya Peri
 (040)2301 6359
 sathya_p@cse.iith.ac.in






Placement Coordinator

 Atheeswaran B
 +91 7373241182
 cc23mtech11009@iith.ac.in



Placement Coordinator

 Mahesh Deshmukhe
 +91 7045407016
 cc23mtech11003@iith.ac.in






Faculty in Charge IITH Placements

 Mr. Mayur vaidya
 +91 7879916780
 vaidyam@msme.iith.ac.in






IITH Placement Student Managers

student.placementmanager@iith.ac.in

 Aashish Mandavi
 +91 6268773808
 ms21btech11001@iith.ac.in



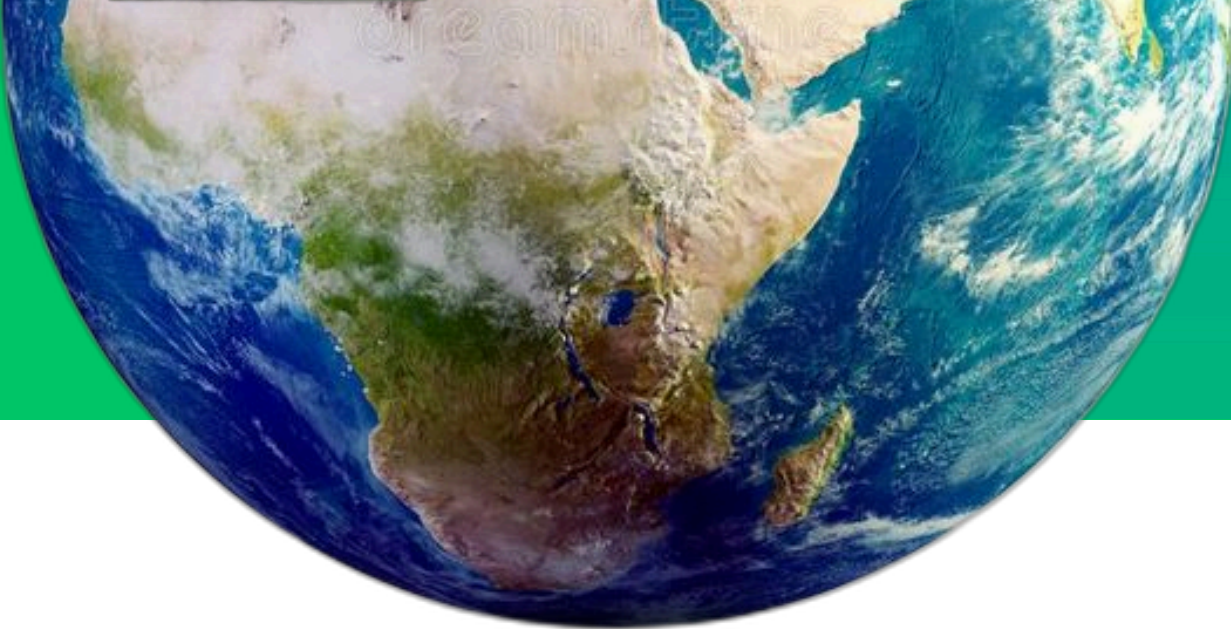
Contact us —————

 Mehul Mishra
 +91 9649975642
 em23mtech14006@iith.ac.in





భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad



Thank You