



## DEPARTMENT OF CIVIL ENGINEERING

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

ROORKEE - 247 667 (UTTARAKHAND) INDIA

# E-Newsletter

## Jul-Dec 2025



### FROM THE HoD's DESK



*Dear All,*

*As we begin the New Year 2026, I extend my warm wishes to all our readers. I am happy to present Volume 9, Issue 2 (July–December 2025) of our departmental newsletter. This issue shares the academic activities, research work, and achievements of our department during the last six months. It reflects the sincere efforts and dedication of our faculty members, students, and staff. I hope that this newsletter serves as a meaningful record of our collective progress and inspires us to continue striving for excellence in teaching, research, and service in the year ahead.*

Thanks

Narendra Kumar Samadhiya  
Professor & Head

## ACHIEVEMENTS IN BRIEF

- A total of 28 students were awarded their Ph.D. degrees.
- 11 numbers of Research Projects were sanctioned at a total cost of ₹1,080.71 Lacs.
- 349 numbers of Consultancy Projects from various government agencies and private organizations were carried out at a total cost of ₹2988.94 Lacs.

## AWARDS AND RECOGNITIONS (FACULTY)



### Prof. C. S. P. Ojha

- Appointed as Guest Editor, Special Collection on Machine Learning (ML) and Artificial Intelligence (AI) Research and Applications in Hydraulic Engineering, ASCE Journal of Hydraulic Engineering, 2025-27.
- Appointed as Convenor, Civil Engineering Sectional Committee, INAE.
- Received the Jal Vigyan Puraskar (Best paper in ISH Journal), Indian Society for Hydraulics, 2025.
- Guest Editor, ML/AI Applications in Water Treatment Systems and Technologies, ASCE Journal of Environmental Engineering, 2025-27.
- Member, ML/AI Applications in Water Engineering, ASCE, 2025.
- Member, ASCE Special publication on Best practices in River Bank Filtration, 2025.
- Guest Editor, ASCE Journal of Irrigation and Drainage Engineering, 2025-26.
- Member, IRC B-1.1 for draft guidelines on Hydraulics of Bridges, 2025.

### Prof. Satish Chandra

- Attended the seminar on Standardization of Bituminous Binder for Highway Infrastructure Development organized by BIS and CSIR-CRRI on November 24, 2025, at CRRI, New Delhi.
- Nominated as the nodal point of contact for coordinating the road safety audit project in different IITs and NITs by the Ministry of Road Transport and Highways, Government of India, New Delhi. The institutes presently identified for project implementation are IIT Roorkee, IIT Madras, IIT Delhi and IIT Kanpur.



### Prof. N. K. Samadhiya

- Conferred with Honorary Fellowship (HF) for outstanding contribution to Geotechnical Engineering by the Indian Geotechnical Society New Delhi, during IGC 2025 at NIT Jalandhar, Dec 18, 2025.
- Attended the One day workshop on Geotechnical and Structural Engineering in Practice held on 5th July 2025 at Vadodara, Gujarat
- Attended the International conference on Ground improvement, Landfills, and Sustainability at IISc Bangalore. 18-19 July, 2025
- Delivered a keynote lecture at the 1st GEOTECH ASIA 2025 GeoVadis: The future of Geotechnical Engineering at GOA October 7-10, 2025.
- Delivered a keynote lecture entitled "Synergistic Use of Geotechnical and Geospatial Technologies for Modelling and Monitoring of Himalayan Debris Slope Instabilities" at the IGC 2025: Geotechnical Practices for Innovations and Sustainability, December 18-20, 2025 at NIT Jalandhar.

**Prof. Mahendra Singh**

- Awarded Life Time Achievement Award in Rock Mechanics and Honorary Fellowship at the 10<sup>th</sup> Indian Rock Conference INDOROCK 2025 held on November 5 - 7, 2025 in New Delhi.

**Prof. Praveen Kumar**

- Received Life Time Teaching Achieve Award -2025 of IIT Roorkee on 5<sup>th</sup> September, 2025.
- Appointed as Chairman of National Advisory Committee of PMGSY by NRIDA, 2025 onwards.
- Delivered a Key Note paper "Utilization of Waste Plastic for the Construction of Flexible Pavements : Studies at IIT Roorkee, during 11<sup>th</sup> International Conference on Transportation Systems Engineering and Management (CTSEM-2025) organised jointly by MNAIT Bhopal and CRRI at Bhopal on July 4-5, 2025
- Attended IRC Session held at Bhubaneshwar, Orissa on Nov 8-10, 2025 and chaired the Session -13, where Road Research Work Done in India was presented. He also presented the work (done by Soumyadeep Deb, Prof Praveen Kumar and Prof Nikhil Saboo) on Wet Method for Use of Waste Plastic in Bituminous Layer in another session regarding PMGSY Roads.
- Attended 8<sup>th</sup> Conference of Transportation Research Group of India (CTRG-2025) on Dec 17-20, 2025 held at IIT Guwahati to moderate a Panel Discussion on Sustainable Pavements & Climate-Resilient Road Infrastructure and present 4 research papers along with his students.

**Prof. K. S. Hari Prasad**

- Felicitated by Head Prof. N. K. Samadhiya on behalf of the department in recognition of their Twenty-five years of distinguished service as dedicated teacher, outstanding researcher, and role models for the generation next.

**Prof. R. D. Garg**

- Received 'President Appreciation Medal for contribution to JISRS 2025', a Springer Journal.
- Attended 84th annual seminar of Indian Road Congress at Bhubaneswar, on 7-10 November 2025.
- Attended one-day National Workshop 'Geospatial Mission: An Enabler of Viksit Bharat' on 17th December 2025 at New Delhi, organised by Survey of India.

**Prof. V. A. Sawant**

- Received the Reviewer of the Year 2024 (Editorial Board Member)- First Prize Award for his significant contributions to scholarly peer review to Indian Geotechnical Journal, and Delivered a keynote lecture on "Liquefaction Mitigation Methods: A Comparative Study" on December 19, 2025 during IGC 2025 at NIT Jalandhar, Dec 18-20, 2025.

**Prof. Indrajit Ghosh**

- Appointed as International Committee Member, Traffic Control Devices and Work Zone Management (ACF12), Transportation Research Board (TRB), National Academies, Washington D.C., USA, 2025-2028.

- Regular Member, G-7 Committee: Intelligent Transportation System, Indian Roads Congress (IRC), 2025-2027.
- Regular Member, H-7 Committee: Road Safety and Design, Indian Roads Congress (IRC), 2025-2027.
- Invited Speaker at the 8th Conference of Transportation Research Group (CTRG) of India held during December 17-20, 2025.



### Prof. Amit Agarwal

- Received the Best Paper Award for the paper Singh, Vikram and Amit Agarwal (2025). "Seasonal variability in on-road particulate matter: developing prediction models using mobile monitoring". In: 8<sup>th</sup> Conference of Transportation Research Group of India (CTRG), Guwahati, India held during December 17-20, 2025.

### Prof. Akanksha Tyagi

- Attended 9th International Symposium for Geotechnical Safety and Risk 25th – 28th August 2025 at Norway.
- Visited Norwegian Geotechnical Institute and Laboratory Facilities, Norway on 29 August 2025.
- Prof.Tyagi along with Prof Ramu Baadiga, IIT Indore successfully organised a Mini Workshop on "Sustainability Practices for Smart Geotechnics" on 09 October 2025, the day 3 of the 1st Geotech Asia International Conference, held in Goa, India, under the aegis of Technical Committee TC 307 of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE).
- Co-Chaired a Plenary Session at 1st Geotech Asia International Conference, held in Goa, India, 7-10 October 2025.



### Prof. Kaustav Chatterjee

- Received Excellent Regional Contributions Award 2025 from International Association for Computer Methods and Advances in Geomechanics (IACMAG), USA for significant contributions in research, academic activities and professional service.
- Received NASI-Membership 2025 in Engineering Sciences and Technology, Physical Sciences, given by The National Academy of Sciences (NASI), India.



### Prof. Alok Bhardwaj

- Delivered a lecture on 'Web Scraping' in training program on 'Applications of Artificial Intelligence and Machine Learning in Trade Data" for ISS/IES officers of Directorate of Commercial Intelligence and Statistics (DGCIS) on October 27, 2025, organized by CEC, IIT Roorkee.
- Coordinated Campus Immersion Event for 9<sup>th</sup> Batch of the Post Graduate Certificate Program in data science & Machine Learning held during November 3-7, 2025.
- Supported the Organization of Mapathon 2025 by IEEE GRSS Student Branch Chapter IIT Roorkee as Faculty Advisor on November 19, 2025.

### Prof. R. Vinnarasi

- Delivered an Invited Talk on SPARC Workshop titled "Building Basin Resilience: Bridging Science and Policy for Water Security." at IIT Delhi on November 15, 2025.
- Delivered an Invited talk on the workshop "Recent Computational Advances in Water Resources Modelling and Management (RCA-WRMM-2025)" NIT Silchar November 19, 2025.



- Delivered an Invited Talk on the topic "Navigating Urban Climate Challenges: Sustainable Solutions for Resilient Cities", AICTE-ATAL FDP at SITRC, Nashik, December 11, 2025.
- Delivered an Invited Talk on the topic "Hydrological Extremes in a Nonstationary World" at GFZ Helmholtz Centre for Geosciences, Telegrafenberg, Potsdam, Germany, December 11, 2025.
- Visited North Carolina State University to strengthen the collaboration on December 15, 2025.
- Participated as Convenor & Session Chair- Compound, Concurrent, and Cascading Hazards in a Changing Climate: Understanding and Predictability for Enhanced Resilience and presented research papers at American Geophysical Union (AGU) 2025 at New Orleans, USA.
- Presented research papers at the International Association of Hydrological Sciences (IAHS) 2025 at IIT Roorkee
- Presented research papers at 22nd Annual Meeting of the Asia Oceania Geosciences Society (AOGS) 2025.

### Prof. Siddhartha Khare

- Received prestigious Sankalp Bharat Award 2025 - AI for Impact Category on 12 December 2025. Awarded at the Sankalp Bharat Summit 2025, organized by the Aavishkaar Group, in Lucknow. Selected as the top awardee among 19 startups across India after rigorous jury evaluation. Recognized for AI-driven geospatial solutions for agriculture and climate resilience.
- Invited as a Visiting Professor at the Universite du Quebec a Chicoutimi (UQAC), QC, Canada during June 02 - July 14, 2025.
- Invited as a panellist and speaker to present Bhoomicam startup products at the ThinkAg "Harvesting Tomorrow" Summit 2025, held in Goa on September 3-4, 2025. This event brought together diverse group of stakeholders: innovators, investors, industry leaders, farmer collectives, financial institutions, multilateral and development organizations, and policymakers.
- Bhoomicam, a geospatial-AI start-up led by him, received two prestigious awards from the Hon'ble Governor of Uttarakhand, Lieutenant General Gurmit Singh (Retd.), at Raj Bhawan, Dehradun on November 26, 2025. Recognized among the Top 5 Startups in Uttarakhand and the Top 5 Academic Innovations across 20 leading institutions under the Uttarakhand AI Mission 2025, and was awarded a ₹1 lakh prize—marking a proud milestone in their journey.
- Bhoomicam, was selected among 10 innovative startups at IDEATHON 2.0 - 100 Startups 100 Days and received a ₹2 Lakhs grant at the India AI Impact Pre-Summit held on December 16, 2025, at IIT Ropar.
- Bhoomicam, has been selected to participate in an invite-only India-Japan Space & Geospatial Roundtable held during the GeoSmart 2025 International Conference (02-04 December 2025) at Bharat Mandapam, New Delhi. The closed-door roundtable was organized by IN-SPACe, METI (Japan), JAXA, and GeoSmart India, and brought together selected Indian startups and Japanese space and geospatial companies to explore collaboration opportunities.



### Prof. Bihu Suchetna

- Attended the XIIth scientific assembly of the International Association of Hydrological Sciences (IAHS) from Oct 5-10, 2025 at IIT Roorkee. 2nd year MTech Environmental Engineering student Mr Rajat Sharma presented a poster titled "Identifying and overcoming limitations of open-source surface water quality datasets of India" based on his research under the supervision of Prof Bihu Suchetana.
- Delivered a lecture on "Application of Remote Sensing & GIS in Water Quality Assessment" at a 5-day Training Course titled "Water Quality and its Management" organized by National Institute of Hydrology (NIH), Roorkee, held during September 8-12, 2025.





### Prof. Anjaneya Dixit

- Featured in the top five faculty (UG Young Faculty) 2025 and nominated for the Excellence in Teaching Award. This was his 2<sup>nd</sup> consecutive feature and nomination in this category.
- Attended Meeting for the National Scientific Committee, at the 17th International Congress on the Chemistry of Cement 2027, Indian Institute of Technology Hyderabad, July 7-9, 2025.
- Invited Delegate, International Conference on Sustainable and Low-Carbon Construction for Global Development, EPFL, Switzerland, September 2025.
- Invited Delegate, Indian Concrete Institute (ICI)-3R conference on Repair, Rehabilitation and Retrofitting, New Delhi, September 19-20, 2025.
- Attended Collaborative Meeting, National Institute of Technology Raipur, November 07, 2025
- Invited Speaker, UNIDO Study Visit, Institute of Cement and Concrete, Meru University of Science and Technology, Kenya, November 11, 2025
- Nominated as one of the Editors by the National Scientific Committee of the 17<sup>th</sup> International Congress on the Chemistry of Cement to be held in New Delhi on October 18-22, 2027.
- Participant, LC<sup>3</sup> Information Day, Indian Institute of Technology Delhi, December 15, 2025.

### Prof. Prakhar Misra

- Invited for workshop organized by National Geospatial Program, DST at NIAS, IISc Bengaluru on August 12, 2025.
- Invited as panelist by Think-Tank Council on Energy, Environment and Water (CEEW), on the topic 'Improving Crop Residue Burning Monitoring through Remote Sensing in India' on October 14, 2025.
- Delivered an invited talk at Evolving Defense Geospatial Engineering (EDGE) Seminar, CME Pune on the topic 'Seeing the Unseen: SAR Applications in a Changing World' during November 3-4, 2025.



### Prof. Hemant Kumar

- Visited HTW Dresden, Germany for academic collaboration and attending 6th International Summer School on Managed Aquifer Recharge - MARISS as part of the DAAD SPARC GIANT titled "Integration of managed aquifer recharge and water-food nexus in higher education".
- Prof. Hemant Kumar and Mr. Divyam garg (PhD scholar)'s research titled "Development of a Smart Irrigation Scheduling System Using a Crop Growth Model for Wheat Cultivation in North-Western Indian Region" at American Geophysical Union (AGU) 2025 in New Orleans, USA.
- Prof. Hemant Kumar and Mr. Divyam garg (PhD scholar)'s research titled "Assessing potential of crop switching to check groundwater depletion in North-West India" at The XIIth Scientific Assembly of the International Association of Hydrological Sciences (IAHS 2025) in Roorkee, India.

## PATENTS /COPYRIGHTS



Prof. R. D. Garg and Dr. Mayank Sharma have been granted a patent entitled "**Optimal neighborhood selection for geometric parameters extraction for aerial and terrestrial LiDAR Data classification**" on July 31, 2025.

A copyright has been awarded for the work titled "**Multi-Dimensional Glacier Velocity Extraction Using SAR Interferometry**" to Prof. Rahul Dev Garg and Mr. Shubham Bhattacharjee, PhD Scholar, Department of Civil Engineering, IIT Roorkee. The work has been registered under the Copyright Act,

1957 (Registration No. LD-20250178070, dated December 03, 2025), with ownership vested in IIT Roorkee. The study presents an advanced SAR interferometry-based framework for multidimensional glacier velocity estimation, contributing significantly to glacier dynamics and cryospheric hazard research.

**Prof. Amit Agarwal**, Mohd. Ikhlakh, and Saurabh Mishra have been granted Patent entitled "A System for Wireless Traffic Signal Control Based on Crowd-Sourced Data." Patent No. 574419.



**Shardendu Shukla**, Prof. Sourav Das, Prof. Sumeet Mishra, and **Prof. Rajib Chowdhury** have been granted for an invention entitled "A Portable System and Method for In-Situ Tensile Testing in High Pressure Gas Environment Including Hydrogen" on dated December 01, 2025. Patent No. 575029.

Mehul Bagaria Abhinav Gupta U Meenu Krishnan Kamal and **Prof. Rajib Chowdhury** have been granted for an invention entitled "An Insole-Based Foot Pressure Active-Monitoring System for Diabetic Foot Ulcer Prevention and A Method Thereof" on dated December 08, 2025. Patent No. 575415.

Muduli K, Panwar, A. and **Prof. Indrajit Ghosh** have been filed a patent on "A Real-Time Camera-Based System and Method for Pothole Detection, Mapping and Quantification", Indian Patent Application No. 202511089592 dated 19/09/2025, in the name of Divyasampark iHUB Roorkee for Devices Materials and Technology Foundation.



Muduli K. and **Prof. Indrajit Ghosh** (2025) System and Method for Managing Pedestrian and Vehicle Interaction at a Crosswalk. Indian Patent Application No. 202511068356, dated 17/07/2025, in the name of Indian Institute of Technology (IIT) Roorkee.

## AWARDS AND RECOGNITIONS (STUDENTS)

Ms. Jhanvi Udhani, Mr. Dhruv Bansal, Mr. Karan Bansal and Mr. Naman Kumar, (B. Tech. Civil Engg.) were awarded the HoD's Letter of Appreciation for achieving Highest Improvement In Semester Grade Point Average in the B. Tech (Civil Engineering) Programme from Autumn Semester (2024-25) to Spring Semester (2024-25) in the Spring Semester (2024-25).



Mr. Sushant Rahul, Research Scholar (Geotechnical Engineering), under the supervision of Prof. Akanksha Tyagi, received the Anusandhan National Research Foundation (ANRF) International Travel Support (ITS) grant and the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) International Travel Grant of USD 1,300 to attend the 9th International Symposium on Geotechnical Safety and Risk, held in Oslo, Norway, from 25th to 28th August 2025. He presented his research titled "Probabilistic Back Analysis of Failed Lateritic Soil Cutting Using Bayesian Approach" during the symposium.

Mr. Pratik Goel, Research Scholar (Geotechnical Engineering), under the supervision of Prof. Kaustav Chatterjee, was awarded the Commonwealth Split-Site Scholarship, Commonwealth Scholarship Commission (UK), 2025, to carry out a part of his Ph.D. research work at the University of Dundee, Scotland.



Mr. Mohd Faraz Khan, Research Scholar (Hydraulic Engineering) under the supervision of Prof. C. S. P. Ojha, was awarded 6000 CAD\$ under the prestigious Mathematics of Information Technology and Complex Systems (MITACS) Globalink Research Internship (GRA) Award for a 3-month "Modelling Microplastic Movement through Fluvial Soil Matrix" visit to York University, Canada.

- Awarded the Best Paper Prize at the 10th International Groundwater Conference (IGWC) during the technical session for the paper titled "Transport of Microplastic Particles through Vertical Soil Columns."
- Recipient of the Young Researcher Travel Award at the 5th International Forum on Advances in Water and Environment Technology (IFAWET-5), jointly organized by the University of Tokyo and UPES, Dehradun, recognizing promising early-career research contributions.
- Selected for the India-Australia 'Land & Water Conservation Program', an intensive eight-week international capacity-building initiative, and awarded a mini-grant of USD 125 for research and academic activities.
- Completed the diploma course on "Analytical Methods for Microplastic Quantification" at Aalborg University, Denmark, earning 3 ECTS (European Credit Transfer and Accumulation System) credits with advanced training in microplastic detection and analysis.

Ms. Soumita Mondal, SRF (SER-2040-CED), under the supervision of Prof. Akanksha Tyagi, presented the paper titled "Reliability-Based Design of Tunnels: Fundamentals to Emerging Methodologies" authored by Soumita Mondal, Siddharth Pandey, Akanksha Tyagi and Sumanta Haldar (Prof, IIT Bhubaneswar), at TUNNELLING ASIA 2025 - International Conference on Revolutionizing Underground Infrastructure through Advanced Tunnelling Techniques, held on 3-4 December 2025.



- Attended the 9th International Symposium on Geotechnical Safety and Risk, held in Oslo, Norway, from 25th to 28th August 2025. She presented her research titled "Probabilistic analysis of tunnel stability in spatially variable cohesive-frictional soil" during the symposium.



Ms. Priti Rai, Research Scholar (Transportation Engineering), under the supervision of Prof. Praveen Kumar & Prof. Nikhil Saboo, was awarded the Young Engineer Award during IRC Annual Session held at Bhubneshwar, Orissa, on November 7, 2025 for the paper authored by Priti Rai, Prof. Praveen Kumar and Prof. Nikhil Saboo.

Mr. Swapnil Balasaheb Ghodke, Research Scholar (Structural Engineering), under the supervision of Prof. Bhupinder Singh & Prof. Shubhankar Roy Chowdhury, awarded the "International Travel Support" by the Anusandhan National Research Foundation (ANRF) to attend and present his research at the Joint Conference of ISEC 2025 and ASEA SEC 7, Australia, scheduled from November 17 - 21, 2025.



Mr. Siddharth Pandey, Research Scholar (Geotechnical Engineering), under the supervision of Prof. Akanksha Tyagi, presented the paper titled 'Upper bound solution for tunnel stability in the cohesive-frictional soil slopes' authored by Siddharth Pandey, Soumita Mondal and Akanksha Tyagi at the Indian Geotechnical Conference 2025 (IGC 2025) hosted at NIT Jalandhar, India.



Mr. Kaliprasana Muduli, Research Scholar (Transportation Engineering), under the supervision of Prof. Indrajit Ghosh, has been selected for the JST Lotus (India Young Researchers Invitation Program) Program 2025, supported by the Japan Science and Technology (JST) Agency. Kaliprasana will collaborate with Prof. Toshiyuki Yamamoto of Nagoya University, Japan.

Mr. Tapobrata Lodh, Research Scholar (Geotechnical Engineering), under the supervision of Prof. Kaustav Chatterjee, was awarded the prestigious International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) Foundation Grant to attend Geo-Congress 2026 in Salt Lake City, Utah.



Mr. Vivek Tiwari, Research Scholar (Hydraulic Engineering), under the supervision of Prof. R. Vinnarasi, was selected for the 1st mHM Workshop, organized by the Helmholtz Centre for Environmental Research – UFZ, held from November 3 to 7, 2025, in Leipzig, Germany, including a travel and stay grant.

Ms. Pallavi Kumari, Research Scholar (Hydraulic Engineering), under the supervision of Prof. R. Vinnarasi, was awarded the AGU25 Student Travel Grant of \$1000 to attend the AGU25 Meeting, 15-19 December 2025, in New Orleans, Louisiana, U.S.A.

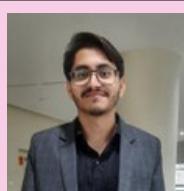


Mr. Pavan Kumar Meena, Mr. Somdutt Pathak, Mr. Pratik Goel, and Mr. Puran Sinha, Research Scholars (Geotechnical Engineering) under the supervision of Prof. Kaustav Chatterjee, received the prestigious International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) Foundation Grant to attend IACMAG 2025, held from December 18 to 21, 2025, in Hong Kong.



Ms. Pallavi Chaurasia, Research Scholar (Geospatial Engineering) under the supervision of Prof. Prakhar Misra, won first prize for her presentation titled "Spatial Distribution of Ozone Precursor Sensitivity Regimes over Delhi: Insights from Sentinel-5P and Spatial Autocorrelation" in the technical session of the 10th IICAQM, organized at IIT Delhi from December 17 to 19, 2025.

Ms. Prakriti, Research Scholar (Geospatial Engineering) under the supervision of Prof. Prakhar Misra, won second prize for her presentation titled "Linkage between Urban Aerosols and Urban Heat across Indian Cities" in the technical session of the 10th IICAQM, organized at IIT Delhi from December 17 to 19, 2025.



Mr. Kartik Saini, Research Scholar (Structural Engineering) under the supervision of Prof. Anjaneya Dixit, has been selected for the LOTUS Fellowship (India-Japan Exchange Programme) for doctoral research collaboration at The University of Tokyo, Japan.



Mr. Mohseni Usman, Research Scholar (Hydraulic Engineering), under the supervision of Prof. R. Vinnarasi, was received a travel grant of €500 to attend the workshop on "Dynamics of Rossby Waves, Compound Extremes and Their Impacts" at Vrije Universiteit Amsterdam, The Netherlands, to be held from 19-21 January 2026.

- Mr. Deepak Verma, Research Scholar (Geospatial Engineering), under the supervision of Prof. Saurabh Vijay, was awarded the prestigious Water Advanced Research and Innovation (WARI) Fellowship 2024. As part of the fellowship, he carried out a six-month research internship (June–December 2025) at the University of Nebraska-Lincoln, USA. 
- Won fourth place in the student poster competition at the 2025 Great Plains Water Conference, "Securing Water Resources for Tomorrow," organized by the Nebraska Water Center, University of Nebraska Omaha. He presented a poster titled "Monitoring Seasonal and Long-Term Structural Dynamics of Shasta Gravity Dam Using InSAR Data and Methods" during the conference held on September 18–19, 2025, at the Milo Bail Student Center, and received a monetary prize of USD 100.
- He presented his work titled "InSAR-Derived Seasonal Dam Deformation and Hydrometeorological Factors Interdependencies on Embankments and Gravity Dams in California, USA" and was awarded the AGU Student Travel Grant of USD 1,000 to support his participation at the American Geoscience Union (AGU) 2025 Annual Meeting in New Orleans, USA, held from December 15 to 19, 2025.



- Mr. Sarvesh Kumar Verma, Research Scholar (Geospatial Engineering), under the supervision of Prof. Saurabh Vijay, attended the American Geoscience Union (AGU) 2025 Annual Meeting in New Orleans, USA, held from December 15 to 19, 2025. He presented a poster titled "Advancing Glacier Mapping and Change Detection with Deep

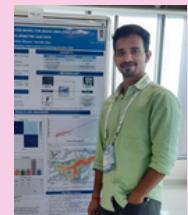
Learning: A Case Study from the Indian Himalaya" and participated in discussions on glacier mapping techniques in the Himalayan Mountain Region. His participation was supported by the fully funded AGU Berkner Travel Fellowship.

- Mr. Tarang Patadiya, Research Scholar (Geospatial Engineering), under the supervision of Prof. Saurabh Vijay, attended the International Mountain Conference 2025, held in Innsbruck, Austria, from September 14 to 18, 2025. He presented a poster titled "Integrating CARTOSAT-1 and ASTER Digital Elevation Models to Refine and Enhance Long-Term Geodetic Glacier Mass Balance: A Case Study of Chhota Shigri Glacier, Western Himalaya." 
- Visited ETH Zurich and the University of Bern, Switzerland, from September 19 to 28, 2025. The visit was part of the Indo-Swiss collaborative project "21st cEnTury Evolution of small glacieRs and their impact on regioNAL hydrology in the HIMALayas (ETERNALHIMA)."



Ms. Gopika Das K, Research Scholar (Geospatial Engineering), under the supervision of Prof. Saurabh Vijay, attended the National Conference on Polar Sciences held at the National Centre for Polar and Ocean Research (NCPOR), Goa, India, from September 16 to 18, 2025. She presented a poster titled "Volumetric Seasonal Evolution of Supraglacial Lakes on the Greenland Ice Sheet" and shared findings on seasonal changes of these lakes.

Mr. Prankur Sharma, Research Scholar (Geospatial Engineering), under the supervision of Prof. Saurabh Vijay, attended the National Conference on Polar Sciences held at the National Centre for Polar and Ocean Research (NCPOR), Goa, India, from September 16 to 18, 2025. He presented a poster titled "Snow Depth Estimation Model for Indian Himalayas Using Polarimetric SAR Data" and shared results from his model for estimating snow depth.



Mr. A. Dinesh Reddy, Research Scholar (Geotechnical Engineering), under the supervision of Prof. Aditya Singh, received the IGS-Kakinada Chapter YE Award for the Best Paper on "Deep Excavations and Underground Structures" authored by A. Dinesh Reddy and Aditya Singh, during the IGC 2025 at NIT Jalandhar, December 18, 2025.



Mr. Vikram Singh, Research Scholar (Transportation Engineering), under the supervision of Prof. Amit Agarwal, received the Best Paper Award at the 8th Conference of the Transportation Research Group of India (CTRG-2025), held at IIT Guwahati from December 17 - 20, 2025.

Dr. Lal Hruaikima, (Geotechnical Engineering), under the supervision of Prof. Mahendra Singh, received the IGS-Shri R.N. Prasad Biennial Award - 2025 for Best Paper on "Slope Stability and Landslides" published in Indian Geotechnical Journal and IGC - 2025 Best Paper presentation award for the theme 'Rock mechanics, Tunneling and Underground Excavation' during the IGC 2025 at NIT Jalandhar, December 18-20, 2025.



Dr. Shubham Chajed, (Geotechnical Engineering), under the supervision of Prof. Aditya Singh, received the IGS-Shri R.N. Prasad Biennial Award - 2025 for Best Paper on "Slope Stability and Landslides" published in Indian Geotechnical Journal and IGC - 2025 Best Paper presentation award for the theme 'Rock mechanics, Tunneling and Underground Excavation' during the IGC 2025 at NIT Jalandhar, December 18-20, 2025.

### Convocation-2025 Awardees:

- Mr. Priyanshu Joshi (B. Tech. Civil Engineering) received the Manmohan Das Seth Gold Medal, Rai Bahadur Sohan Lal Bhatia Medal, Prabhakar Swarup Civil Engineering Award, and Shri Shiv Nandan Swaroop and the Avadh Narayan Bhatnagar Cash Prize.
- Ms. Shreya Mittal (B. Tech. Civil Engineering) received the President of India Dr. Shankar Dayal Sharma Gold Medal, Surabhi Memorial Gold Medal for Most Outstanding Woman Achiever, Kunal Kaushal Award for All-round Excellence, and the Best Project Award.
- Mr. Naman Harwani (B. Tech. Civil Engineering) received the Kunal Kaushal Award for All-round Excellence.
- Ms. Parul Kairo (B. Tech. Civil Engineering) received the Best Project Award.
- Mr. Rahul Bajiya (B. Tech. Civil Engineering) received the Vinay Krishna Cash Prize, Shri M. A. Rao Cash Prize, and the Prof. C.L. Toshniwal Award in Civil Engineering

- Ms. Revati Goyal (B. Tech. Civil Engineering) received the Best Project Award.
- Ms. Sejal Deo(B. Tech. Civil Engineering) received the Best Project Award.
- Ms. Shivani Verma (B. Tech. Civil Engineering) received the Durga Award, and the Best Project Award.
- Ms. Siddhi Gupta (B. Tech. Civil Engineering) received the Prof. (Mrs.) Renu Bhargava Cash Award for Excellence in Environmental Engineering, and the Best Project Award.
- Ms. Swati Priyamvada (B. Tech. Civil Engineering) received the Best Project Award.
- Ms. Vaishnavi Anand (B. Tech. Civil Engineering) received the Best Project Award.
- Mr. Patel Nirmit Arvindbhai (M. Tech. Structural Engineering) received the Shri Suresh Chandra Kapoor Gold Medal
- Mr. Amit Mahar (M. Tech. Structural Engineering) received the NC Saxena Gold Medal.
- Mr. Gaurav Singh Bareth (M. Tech. Geospatial Engineering) received the Smt. Kuldip Kaur Memorial Gold Medal and the Amba Prasad - Kalawati Memorial Cash Prize.
- Mr. Deva Himalay (M. Tech. Transportation Engineering) received the Sunita Bahadur Memorial Medal.
- Mr. Pranshu Soni (M. Tech. Environmental Engineering) received the Prof. C.L. Toshniwal Award in Environmental Engineering.
- Mr. Prince (M. Tech. Geotechnical Engineering) received the Tara Chand Kanti Devi Cash Prize.
- Ms. Ayana Ghosh (Ph. D. Civil Engineering) received the Hari Vaish Gomti Devi Award for Research in Environment.
- Mr. Akshay Gupta (Ph. D. Civil Engineering) received the Excellence in Doctoral Research Award.

## RESEARCH PROJECTS AWARDED

Name of the Principal Investigator/ Co- PI	Research Project	Sponsoring Agency	Amount (₹ Lacs)
 <b>Prof. Amit Agarwal (PI)</b>	Smart Crowd and Traffic Management System for Kainchi Dham, Uttarakhand	MoHUA (AMRUT Division)	11.60
 <b>Prof. Anjaneya Dixit (PI)</b>	Accelerating the Acceptance of LC3	New Ventures Fund	305.52
 <b>Prof. Bihu Suchetna (PI)</b>	Development of a Satellite Imagery-informed Decision Support System for Climate Resilient Drinking Water Treatment (SiDCReW)	ISRO STC-IITR	30.10

Name of the Principal Investigator/ Co- PI	Research Project	Sponsoring Agency	Amount (₹ Lacs)
 <b>Prof. Nikhil Saboo (PI)</b>	Use of Reclaimed Asphalt Pavement (RAP) in Stone Matrix Asphalt (SMA)	National Highway Authority of India (NHAI), New Delhi	73.37
 <b>Prof. Prakhar Misra(PI)</b>	Developing a Scalable High-resolution Methane Emission Assessment Framework using UAV Sensing, Satellite Measurements, and Modelling Approaches for MSW Landfills	Anusandhan National Research Foundation (ARG)	TBA*
 <b>Prof. A. A. Kazmi (Co-PI)</b>			
 <b>Prof. R. Vinnarasi (Co-PI)</b>	SHIELD: Smart Hyperlocal Integrated Early-warning and Decision	Department of Science and Technology	250.00
 <b>Prof. Siddhartha Khare (PI)</b>	"Chanakya Postdoctoral Fellowship" for Artificial Intelligence (AI) Based Platform for Monitoring Crop Health Using Satellite, UAV, and Phenocam Data	IIT Tirupati Navavishkar I-Hub Foundation (IITTNiF)	12.42
 <b>Prof. Sonalisa Ray (PI)</b>	Derivation of Design Parameters for Ultra-High-Performance Fibre Reinforced Concrete (UHPFRC) in Bridge Infrastructure Applications	Ministry of Road Transport and Highways (MoRTH)	337.7
 <b>Prof. Z. Ahmad (PI)</b>	Desilting of silt-clay-sand mixture of sediment through hydro-suction in reservoirs	Ministry of Jal Shakti, India	20.00
	Piano Key Weir as a dam safety technique to enhance discharging capacity of spillways		20.00
	Scour in sedimentary rocks under turbulent water jets		20.00

(\*TBA = To be Announced.)

## EVENTS:

### WORKSHOPS/CONFERENCES/SHORT TERM COURSES

#### One day Workshop on "Development of specification for recycled waste plastic modified bitumen (RWPMB)": July 01, 2025



A one-day workshop was organized by the department of civil engineering, IIT Roorkee, on July 02, 2025, to mark the successful completion of a key research project titled "Development of Specifications for Use of Waste Plastic in Asphalt Mixtures." The project was sponsored by the National Rural Infrastructure Development Agency (NRIDA), Ministry of Rural Development. The workshop aimed to disseminate knowledge and share practical experiences related to the laboratory evaluation of recycled waste

plastic modified bitumen (RWPMB) with representatives from government agencies and private organizations. The workshop was well coordinated by Prof. Praveen Kumar and Prof. Nikhil Saboo.

#### 2<sup>nd</sup> Prof. R.J. Garde Memorial Lecture: September 26, 2025



The 2nd R. J. Garde Memorial Lecture, organized on the occasion of World Environmental Health Day on 26th September 2025 at the Department of Civil Engineering, IIT Roorkee, was a resounding success. The insightful presentations by **Dr. A. K. Goel**, DRDO Scientist G, Head of Bioprocess Technology Division DRDE, Gwalior and **Mrs. Meera Iyer**, IFS, Director of Forest Education Dehradun, sparked their engaging discussions on environmental health, sustainability, and resource management. The event saw enthusiastic participation from faculty, research scholars, and students, making it a truly enriching experience. The department sincerely thanks the speakers and all attendees for contributing to the lecture's memorable and impactful proceedings. The event was ably coordinated by Prof. A. A. Kazmi.

#### 3<sup>rd</sup> International Conference on Transportation Infrastructure Projects - Conception to Execution (TIPCE 2025): October 12-16, 2025

The 3rd International Conference on Transportation Infrastructure Projects: Conception to Execution (TIPCE 2025), hosted by the Department of Civil Engineering at IIT Roorkee from 18-21 September 2025, brought together nearly 200 participants from diverse backgrounds, including industry leaders, distinguished academicians, researchers, and government officials. This vibrant mix of stakeholders fostered a unique platform for exchanging practical insights and cutting-edge research.



The conference was uniquely structured to bridge the gap between theoretical research and field execution. Unlike traditional academic gatherings, TIPCE emphasized a two-way learning process centered on real-world case studies.

Key themes of the conference included Sustainable Pavement Materials, Smart Transport Systems, and Traffic Safety Management. Supported by technical partnerships with organizations such as the IRC, NHAI, and MoRTH, the event provided critical insights into the future of transportation infrastructure development. The conference underscores the growing importance of industry-academia collaboration in developing resilient, efficient, and sustainable transportation networks for the future. The whole event was ably organized by Prof. Indrajit Ghosh and Prof. Nikhil Saboo.

### Two-day Workshop on Numerical Modelling using 3DEC Software: October 09-10, 2025



The two-day workshop on Numerical Modelling using 3DEC software was successfully organised by the Department of Civil Engineering, IIT Roorkee, on 9th and 10th October 2025, with **Dr Jay Aglawe**, Director, Rockmech IT Solutions, as the resource person. The workshop aimed to equip participants with a conceptual understanding and hands-on skills in numerical modelling of rock masses using the Distinct Element Method (DEM), with particular emphasis on practical implementation in 3DEC software. The workshop was well coordinated by Prof. Aditya Singh.

### Drone4S Hackathon 2025: October 12, 2025

The Drone4S Hackathon 2025, held on October 12, 2025 at Drone Technology Lab of CED, IITR, focused on integrating UAVs and geospatial intelligence to create sustainable campus ecosystems. Aligned with India's Net Zero 2070 goal and UN Sustainable Development Goals.



The event attracted 265 participants comprising 117 teams from top institutions like IITs, NITs to develop location-intelligent solutions. Key objectives included identifying green infrastructure, enhancing eco-friendly mobility, and carbon footprint mapping. The hackathon produced impactful results, such as real-time routing that reduced vehicle idling by 32% and the development of 3D emission heatmaps. Supported by American Express and partners like MapmyIndia, the event awarded ₹180,000 in cash prizes and offered paid internships to high-performing students beginning in January 2026. Other sponsors of the event are V-Marc and Design Evolution. The Hackathon was well coordinated by Prof. R. D. Garg.

### 14th International Symposium on Plasticity and Impact Mechanics (IMPLAST 2025): October 12-16, 2025

The 14th International Symposium on Plasticity and Impact Mechanics (IMPLAST 2025) was successfully organized by the Department of Civil Engineering, Indian Institute of Technology Roorkee, from October 12th to 16th, 2025, at the IIT Roorkee campus. IMPLAST 2025 witnessed over 300 national and international participants, who presented their research papers across six parallel technical sessions. The symposium featured 15 keynote lectures, including 8 keynote speakers from foreign universities and research organizations, highlighting the strong international participation and global outreach of the event.



The conference attracted sponsorship and support from several prestigious government funding and research organizations, including DRDO, BRNS, ANRF, and AERB, reflecting the strategic importance of the symposium in the areas of impact mechanics, blast engineering, and structural resilience. In addition, the symposium received support from two international sponsors, namely ABSTRAO and THIOT, further demonstrating the international importance of the event.

In total, the symposium recorded an overall gathering of more than 400 participants, including authors, keynote speakers, session chairs, students, industry professionals, and delegates from research laboratories, indicating the remarkable success of the 14th edition of IMPLAST. The event provided an excellent platform for the exchange of ideas, the dissemination of cutting-edge research, and the fostering of collaboration between academia, industry, and government research organizations.

This successful event was well coordinated with great efforts of Prof. M. A. Iqbal.

### GiAN Course on "Urban StormWater Management": October 13 - 17, 2025

A one-credit GiAN (Global Initiative of Academic Networks) workshop on "Urban StormWater Management" was successfully conducted from 13-17 October 2025 under the supervision of the department faculty Prof. Vinnarasi R. (Assistant Professor, Hydraulics Engineering). The week-long course comprised 12 lectures and 9.5 hours of hands-on tutorials, and was delivered primarily by **Dr. William F. Hunt III**, international faculty from North Carolina State University, USA, who delivered 11 expert lectures, along with one lecture by Dr. Sharad Jain (IIT Gandhinagar, Visiting Faculty) and hands on session in the supervision of Prof. R. Vinnarasi focusing on India-centric stormwater challenges. Dr. Hunt's lectures covered a wide range of urban stormwater topics, including stormwater fundamentals; functioning of stormwater control measures (SCMs); rainwater harvesting concepts and design; swales and their design for conveyance and sediment removal; stormwater wetlands and basins; wetland design based on detention and flow rates; carbon capture in wetlands; bioretention systems; permeable pavements; and green and blue roofs.



The practical tutorials included determination of water quality depths and flow rates, sizing of rainwater harvesting systems for an installation at IIT Roorkee, campus walks to identify swale locations followed by design exercises using SwaleMod, and a field visit in Roorkee to identify a prospective wetland site with subsequent wetland sizing and layout using the Carbon Storm model. The course witnessed active participation from 35 participants, including 32 students, 2 industry and research professionals, and 1 faculty member, and concluded with a written examination to assess learning outcomes.

## Workshop on “Standards and Their Importance in Civil Engineering” : November 25, 2025



The Department of Civil Engineering, IIT Roorkee, successfully organized a workshop on “Standards and Their Importance in Civil Engineering” on 25 November 2025 under the Bureau of Indian Standards (BIS) Student Club initiative. The workshop was organized under the mentorship of Prof. Anjaneya Dixit, who served as the Faculty Mentor for the BIS Student Club activities.

The aim of the workshop was to build awareness among the students about the vital role of standards, quality, and compliance in various facets of Civil Engineering. The event was graced by Akhil Upadhyay as the Head-CED nominee, BIS Chair professor Prof Deepak Khare, Prof. Mahendra Singh, Prof. Absar Kazmi and Prof. Umesh Sharma as expert speakers.

## Two-day workshop on “APPLICATION OF AI, ML AND OPTIMIZATION IN WATER MANAGEMENT”: December 8-9, 2025

The Two-Day Workshop on “Application of AI, ML and Optimization in Water Management” was successfully organized by the Department of Civil Engineering, Indian Institute of Technology Roorkee, in collaboration with Victoria University, Australia, and in association with Visvesvaraya National Institute of Technology, Nagpur, and RV College of Engineering, Bengaluru, during December 8-9, 2025. The workshop was funded by the Centre of Australia-India Relations Maitri Grant Program, Australian Department of Foreign Affairs and Trade.



The workshop was inaugurated by Chief Guest, Dr. Subhash Chandra, HoD, Irrigation Department, Uttarakhand, Prof. K. K. Pant, Director, IIT Roorkee, Prof. N. K. Samadhiya, Head, CED, IIT Roorkee and the organizers of workshop **Dr. Ashok Sharma**, Victoria University Australia and Prof. P. K. Sharma, IIT Roorkee. The workshop was attended by 125 delegates, including 33 engineers, along with faculty members, scientists, research scholars, policymakers, and industry professionals. There were 17 technical sessions that were delivered by eminent experts from academia and industry from India and Australia and two open interactive discussion on Future of AI/ML in water management practices. The sessions focused on smart sensing and real-time monitoring, predictive modelling, optimization in urban and agricultural water systems, policy and governance challenges, and future research directions. The workshop was greatly coordinated by great efforts of Prof. P. K. Sharma.

## 2<sup>nd</sup> International Conference on Condition Assessment, Rehabilitation & Retrofitting of Structures (CARRS 2025): December 11-13, 2025

The Department of Civil Engineering at IIT Roorkee hosted successfully 2<sup>nd</sup> International Conference on Condition Assessment, Rehabilitation & Retrofitting of Structures (CARRS 2025) from December 11-13, 2025. CARRS 2025 stands as a premier global platform dedicated to the longevity and safety of the built environment. As infrastructure worldwide ages, the technical and economic challenges of maintaining structural integrity have become important.



CARRS 2025 addresses these challenges by fostering a high-level knowledge exchange between the research community, practicing engineers, contractors, and government policymakers. Through 6 Plenary sessions, 20 Keynote lectures, and over 80 technical presentations, this edition explored the frontiers of non-destructive evaluation, condition assessment and rehabilitation.

This conference was honored to host distinguished experts including **Akhil Kumar Gupta** (CEO Shapoorji Pallonji E&C), **Nemy Bantha**, **Venkatesh Kodur**, **Subodh Jain** (Member Board, Indian Railways), **Kaizad Engineer**, **Sze Dai Pang**, **Rajeev Goel**, **Biswajit Bhattacharjee**, **Utkarsh Goyal**, **Suriya Prakash**, **Radhakrishna Pillai**, **Dipti Ranjan Sahoo**, **Shweta Goyal**, **Anil Agarwal**, to name a few. Their contributions elevated the academic discourse significantly.

The organizing committee (Conference Chair: Prof. N. K. Samadhiya(HOD), Convenor: Prof. Umesh Sharma, Organizing Secretary: Prof. Rajib Chowdhury, Joint Organizing Secretaries: Prof. Tarun Gangwar & Prof. Anjaneya Dixit) extend their deepest gratitude to the entire student volunteer committee for the stupendous job in executing the event with precision and panache, making CARRS 2025 a resounding success.



### Survey Camp 2025: November 25- December 08, 2025



Survey Camp 2025 was organized by Dr Prakhar Misra, as part of CEC201 and CEC519 course at Chandi Ghat, Haridwar from 25 November to 8 December, 2025. During the camp, students performed survey using Total station, GPS, Drone and Lidar.

Using the terrain maps, contours etc. they will worked on hypothetical problem statements related to upcoming Kumbh in Haridwar, such as cut and fill required for campsite planning, placement of CCTV and viewshed, drainage flow and accumulation, creating a 3D model of the bridge etc.

## GUEST LECTURES/AWARD CEREMONIES

### Technical Talk by Dr. Pascal Emanuel Egli, NTNU, Norway : July 07, 2025



As part of the Geospatial Lecture Series, Talk 14 was delivered by **Dr. Pascal Emanuel Egli**, Associate Professor at the Norwegian University of Science and Technology (NTNU), on the topic "Glacier Hazards from Europe to Asia" on July 7, 2025. The talk was coordinated by Prof. Saurabh Vijay.

## Guest Lecture by Prof. J. Murali Krishnan, IIT Madras: July 14, 2025

**Prof. J. Murali Krishnan**, Professor at IIT Madras delivered lecture on "Shakedown Analysis and the Curious Case of Resilient Modulus" on July 14, 2025. The lecture was organised in collaboration with the Indian Geotechnical Society - Student Chapter Roorkee.



## Guest Lecture by Prof. Subhamoy Bhattacharya, University of Surrey, UK: August 05, 2025



An expert lecture on "Offshore Wind Farms: Opportunities, Challenges, and Risk Analysis" was delivered by **Prof. Subhamoy Bhattacharya**, Chair Professor of Geomechanics at the University of Surrey, UK, on 5th August 2025. The lecture was organised in collaboration with Indian Geotechnical Society - Student Chapter Roorkee.

## Guest Lecture by Dr. U N Mishra, Survey of India: September 18, 2025

The Geospatial Lecture Series - Talk 15 was held on 10 September 2025 at 4:00 PM. The session was delivered by **Dr. Upendra Nath Mishra**, former Additional Surveyor General, Survey of India. His talk on "Recent Developments on Geo-Spatial Landscapes and Their Nuances" offered deep insights into the evolving geospatial domain. This talk was coordinated by Prof. Saurabh Vijay



## Industry 4.0 Lecture by Prof. Malaya Ranjan Khare, IIT Bhilai: September 24, 2025



**Dr. Malaya Ranjan Khare**, Visiting Professor, IIT Bhilai delivered lecture titled "Industry 4.0 in Civil Domain (VR, BIMxAR, IoT, Robotics, 3D Printing & Smart Materials in Geotechnical Engineering and Construction Applications in testing, surveying, safety, structural health monitoring, tunnel building, and sustainable infrastructure)" on September 24, 2025. The lecture was organised in collaboration with the Indian Geotechnical Society - Student Chapter Roorkee.

## Technical Talk by Dr. Aleah N Sommers, Dartmouth College, USA: September 25, 2025

As part of the Geospatial Lecture Series, Talk 16 was delivered by guest speaker **Dr. Aleah N. Sommers**, Research Scientist at the Thayer School of Engineering, Dartmouth College (USA), who delivered a lecture titled "Coupled Modeling and Collaborations: Understanding Himalayan Glacier Dynamics, Future Evolution, and Floods" on September 25, 2025. Prof. Saurabh Vijay ably coordinated the talk.



## Guest Lecture by Dr. Kedar Otta, Moody's Analytics: October 08, 2025



**Dr. Kedar Otta**, flood modeller and climate change researcher at Moody's Analytics, Insurance Business Unit. Dr. Otta delivered Geospatial Lecture Series, Talk 17 on 'Remote Sensing Applications in Hydrological Modelling' on 8 October, 2025. The lecture was well coordinated by Prof. Prakhar Misra

## Guest Lecture by Prof. Arkopal Goswami, IIT Kharagpur: October 30, 2025



**Prof. Arkopal Goswami**, Chairperson, Ranbir and Chitra Gupta School of Infrastructure Design and Management, and Associate Dean, International Relations, IIT Kharagpur, West Bengal, visited the Civil Engineering Department on October 28-30, 2025, for a PhD Defence and delivered a talk on "Promoting Sustainable Travel Behaviour in Urban India".

## Guest Lecture by Prof. Krishna R. Reddy, University of Illinois Chicago, USA: November 24, 2025



An expert lecture on "Sustainability and Resiliency-Based Innovation: Research and Practices in Geoenvironmental Engineering" was delivered by **Prof. Krishna R. Reddy**, Professor and University Scholar at the University of Illinois Chicago, USA, on 24th November 2025. The lecture was organised in association with Indian Geotechnical Society Roorkee Chapter. Prof. Reddy visited the Geotechnical Engineering Laboratory at IIT Roorkee, and interacted with research scholars and faculty members.

## Guest Lecture by Prof. Rao Martand Singh, Norwegian University of Science and Technology (NTNU), Norway: December 15, 2025



A guest lecture on "Driven Geothermal Energy Pile Foundations for Heating/Cooling Buildings" was delivered by **Prof. Rao Martand Singh**, Professor in the Department of Civil and Environmental Engineering at the Norwegian University of Science and Technology (NTNU), Norway, on 15th December 2025. The lecture was organised in collaboration with the Indian Geotechnical Society Student Chapter Roorkee.

## FORTHCOMING EVENTS

### Workshop on "Data-Driven Climate Change and Resilient Infrastructure": February 2-3, 2026



The Department of Civil Engineering, IIT Roorkee, in collaboration with the Ministry of Education's SPARC initiative, is organizing a Workshop on "Data-Driven Climate Change and Resilient Infrastructure" from 2-3 February 2026 at IIT Roorkee, Uttarakhand. The workshop is being conducted in collaboration with Prof. Satish V. Ukkusuri, Hubert and Audrey Kleasen Professor in Civil Engineering, Purdue University, USA, and will bring together researchers and practitioners to discuss data-driven approaches for addressing climate change impacts and enhancing infrastructure resilience. The workshop focuses on addressing climate risks and infrastructure vulnerabilities through advanced data-driven approaches. Prof. Indrajit Ghosh is the organizing chair of the workshop.

## ALUMNI CONNECTS



The 1975 batch Golden Jubilee Alumni visited the department on December 04, 2025. The alumni shared their experiences and interacted with the faculty members.

## VISITORS



**Prof. S. K. Kaushik and Prof. G. L. Asawa**, former Head of Department alongwith **Prof. K. K. Singh** visited the department on Dec 04, 2025 during Alumni week of the 1975 Batch.

## INFRASTRUCTURE (NEW FACILITIES/ INSTRUMENTS)



### Asphalt Adhesion Tester (₹ 24.72 Lakh)

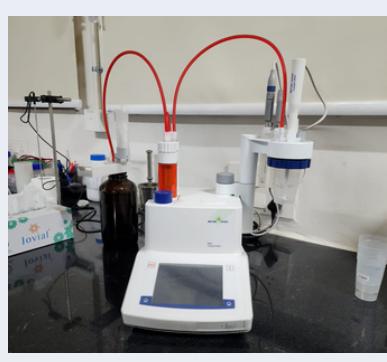
The Asphalt Adhesion Tester is a specialized laboratory equipment used to evaluate the bonding strength between asphalt binder and aggregate surfaces. The test assesses the resistance of asphalt-aggregate systems to stripping and moisture damage by measuring the adhesion and cohesion properties under controlled loading and environmental conditions.



**Accelerated Polishing Machine**  
(₹ 15.16 Lakh)



**Static Soil Triaxial Setup**  
(₹ 19.13 Lakh)



**Potentiometer Titrator Mars**  
**Technology and Services**  
(₹ 12.67 Lakh)



**UV-Visible Spectrophotometer**  
**Single Beam**  
(₹ 7.99 Lakh)



**Vibration Calibration Model BST**  
(₹ 5.46 Lakh)



**Steam Curing Assembly**  
(₹ 4.83 Lakh)



**Biosafety Cabinet**  
(₹ 6.64 Lakh)



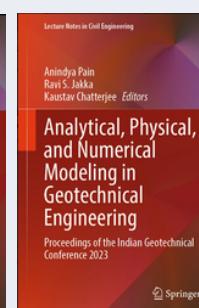
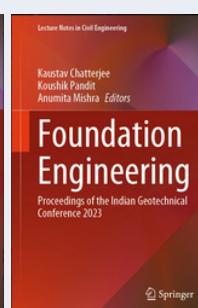
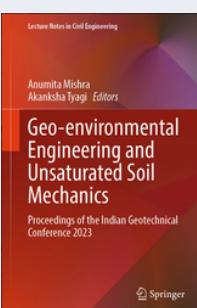
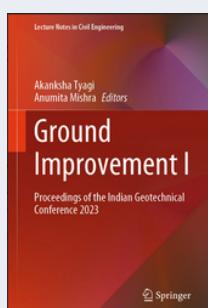
**Concrete Surface and Bulk**  
**Resistivity Meter**  
(₹ 6.10 Lakh)



**PMIX Planetary Pan Mixer**  
(₹ 5.46 Lakh)

## BOOK PUBLISHED

Six Volumes of Indian Geotechnical Conference 2025 Proceedings published. **Prof Priti Maheshwari, Prof. Vishwas A. Sawant, Prof Kaustav Chatterjee, Prof Akanksha Tyagi, Prof Anumita Mishra and Prof Alok Bhardwaj** from Civil Department along with Prof Ravi Jakka, Earthquake Engineering Department, Dr Anindya Pain, CBRI and Dr. Koushik Pandit, CBRI, served as the proceedings Editors.

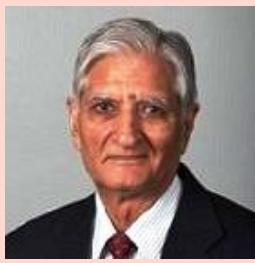


## FAREWELL



The Department bid a heartfelt farewell to **Mr. Rishi Pal, MTS**, of the Structural Engineering Laboratory, on his retirement on September 30, 2025 and wished him good health, happiness, and a fulfilling post-retirement life.

## OBITUARY



The Department mourns the passing of **Prof. Shamsher Prakash, former Head of the Department (1981-1983)**. He was a distinguished academician and an inspiring leader who guided the department with vision and integrity. His contributions to teaching, research, and institutional growth will be remembered with deep respect. The Department extend heartfelt condolences to his family and pay tribute to his enduring legacy.

### *Editor*

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