

NEWSLETTER

JANUARY 2026

Expert Talk



Prof. Reik Donner from the Department of Water, Environment, Construction and Safety at Magdeburg-Stendal University of Applied Sciences, Germany, visited the Department on January 28, 2026. He delivered an expert talk titled 'Spatio-temporal patterns in compound climate events: From co-occurrence statistics to complex networks.'

VISIT



A delegate from the Department of Hydrology and Meteorology, Nepal, visited the Department and provided expert insights on January 19, 2026.

Publications:

Sharma, S., Raghuvanshi, A. S., & Agarwal, A. (2026). Evaluating the Performance of Uni- and Multivariate Bias Correction Techniques: Challenges in Preserving Temporal and Dependence Structures. *Water Resources Research*, 62(2). <https://doi.org/10.1029/2025WR041526>

Mitra, S., D. Sardana, and A. Agarwal. 2026. "Seasonal Shifts and Structural Changes in Western Disturbances Over Hindu Kush Himalayas." *International Journal of Climatology* e70272. <https://doi.org/10.1002/joc.70272>.

Kumar, A., Jain, M.K. Assessment of entropy-derived 2D river velocity profiles from surface velocity radar measurements: case study of the Ganga and Bhagirathi rivers. *Sci Rep* 16, 3308 (2026). <https://doi.org/10.1038/s41598-025-33283-1>

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Invited lectures:

Prof. Bhaskar Jyoti Deka was invited to deliver his talk on "Advanced sensor technologies for real-time water quality and pollution monitoring" during the two-day workshop on Sensors for Energy, Environment & Healthcare Diagnostics (SEED), organized by Centre for Nanotechnology, Indian Institute of Technology Roorkee, India, from 9th to 10th January 2026.

Prof. Bhaskar Jyoti Deka was invited to deliver his Keynote Lecture on "Emerging Membrane Technologies for Resilient Water and Wastewater Infrastructure" during Faculty Development Programme on "Emerging Trends in Waste Management", organized by Department of Civil Engineering, Aligarh Muslim University, Aligarh, India, from 19th to 23rd January 2026.

Prof. Ankit Agarwal delivered a talk titled "Driving Mechanisms and Prediction of Occurrence of Compound Dry and Hot Extremes in India using Complexity-based Approach" during the Group Monitoring Workshop-cum meeting of the Programme Advisory Committee (PAC) for Earth & Atmospheric Sciences (E&AS), held on 06-07 January 2026 at the Indian Institute of Science Education and Research (IISER) Kolkata, West Bengal.

Patent:

Gupta, V., Anand, D. and Jain, M. K. (2025). A System and a Method for Non-contact Flood Monitoring and Warning. Patent No. 578346, Application No. 202511004610, Patentee: Indian Institute of Technology, Mandi (date of grant: 16-01-2026).

Bhaskar Jyoti Deka, Prajwal Mallikarjun Timashetti and Nagendra Kumar Jilagam

Title: An agro based coagulant from sugarcane bagasse for heavy metal sequestration from water and wastewater, Application No.: 202511023605 (IN), Patent no. 578006, Sl. No. 011225246