



Publications

- Yasmin, T., Khamis, K., Ross, A., Sen, S., Sharma, A., Sen, D., Sen, S., Buytaert, W., and Hannah, D. M.: Brief communication: Inclusiveness in designing an early warning system for flood resilience, *Nat. Hazards Earth Syst. Sci.*, 23, 667–674, <https://doi.org/10.5194/nhess-23-667-2023>, 2023.
- Deka, B. J.*, Vaghela, G., Guo, J., & An, A. K.* (2023) "Electrical impedance spectroscopy for non-destructive detection of wetting, fouling and scaling in membrane distillation," *Journal of Water Process Engineering*, Accepted.
- Bejagam, V., Singh, A., and Sharma, A. (2023) "Spatiotemporal variability and controlling factors of ecosystem water use efficiency in India." *Theoretical and Applied Climatology*. (Accepted)

Awards and Achievements

- A paper titled "Transferring Hydrologic Data Across Continents – Leveraging Data-Rich Regions to Improve Hydrologic Prediction in Data-Sparse Regions" co-authored by Prof. Ashutosh Sharma was selected as Editor's Choice Award and Most Cited Paper 2022-23 in the *Water Resources Research (WRR)* journal.
- Nikunj Mangukiya and Pooja Patle have been selected with travel support to attend "International Soil Moisture School" at IIT Bombay, scheduled for 15-17 March 2023.
- Prof. Brijesh K Yadav chaired a Technical session during the International Conference on Emerging Contaminants in Water and Environment (ECWE-2023), organised by PSG Institute of Advanced Studies Coimbatore, Feb 20-22, 2023.

Lectures Delivered

- Prof. Sumit Sen presented an expert lecture on "Spring Instrumentation Hydrology – Experiences from Research Studies" during the first meeting of Steering Committee on "Springshed Mapping of Indian Himalayan Region (IHR) Including Mountainous Regions of the Country and Springshed Based Watershed Management Plan" on 31 Jan, 2023 at the Ministry of Jal Shakti, New Delhi.
- Prof. Ashutosh Sharma delivered a lecture on "Trend Analysis of Hydroclimatic Data" during 5-day training course on 'Hydro-Meteorological and Climate Data Analysis: Basic and Advanced Techniques (HyMCBAT-2023)' at NIH Roorkee (27th Feb 2023).
- Prof. Brijesh K Yadav delivered a talk on "In-situ Treatment of contaminated sites using Bioremediation and Permeable Reactive Barriers" during a Five Days Training Course under NHP on "Water Quality Monitoring & Management" during February 13-17, 2023 at NIH, Roorkee.
- Prof. Ankit Agarwal has been invited as a keynote speaker in a conference on rural-urban transformation hosted by the University of Agricultural Sciences at GVKV Campus in Bengaluru, India, from February 1 to 3, 2023.
- Prof. Ankit Agarwal has been invited as a panelist at the Workshop of the B-EPICC Climate Capacities Project funded by the Germany's International Climate Initiative (IKI), Magnolia Hall, India Habitat Center New Delhi, February 9 and 10, 2023.



Conferences

- **Yadav, B K, and Singh, J** (2023) 2nd International Conference on Emerging Contaminants in Water and Environment (ECWE-2023), organised by PSG Institute of Advanced Studies Coimbatore, Feb 20-22, 2023 Comprehensive Assessment of Microplastics Movement through Soil-Water System around an MSW Dumpsite.



Publications

- Mukherjee, S. Sen, S., Kumar, K. 2023. Multifactor prediction of the central Himalayan spring high-flows using machine learning classifiers. Environmental Earth Sciences, 82:85 <https://doi.org/10.1007/s12665-023-10775-9>

Awards and Achievements

- Ashish Mishra received the Sivapalan Young Scientist Travel Award (SYSTA) to participate in the workshop on 'Identifying the Topic for the Next Scientific Decade of IAHS, 2023-2032', to be held at the University of Cordoba, in Cordoba, Spain during 01-03 February 2023.
- Ms. Shivani Parashar, M Tech 1st year student, has been selected for ANSYS fellowship award.
- Mr. Anshul Yadav has received Mitacs Globalink Research Award for Canada to visit University of British Columbia for six months.

Book chapter:

- Priyank J. Sharma and Ashutosh Sharma* (2023) "Spatio-temporal drought analysis", Chapter 2 in Integrated Drought Management, Vol. 2, CRC Press. Edited by: Vijay P. Singh, Deepak Jhajharia, Rasoul Mirabbasi, Rohitashw Kumar. ISBN: 9781032231587.

Conferences

- Bejagam, V., and Sharma, A. (2023). "Characterization of ecohydrological indicators (EHIs) at multi-spatial scales in India." National conference on "Land-atmosphere interactions controlling weather & climate: Applications of numerical models and observations (LAI-2023)" 09-12 January 2023, held at National Institute of Technology, Roorkeela.
- Abhishek Kumar and Manoj Kumar Jain (2023). Non-contact Entropy-based flow Estimation in Himalayan Rivers. Session HS1.2.2 – Advances in river monitoring and modelling for a climate emergency, EGU23-4765, EGU General Assembly 2023, Vienna, Austria.

Invited Lecture

- Prof. Ankit Agarwal delivered a lecture on the topic titled "Multi-scale approaches in prediction hydro-meteorological extremes and teleconnections" on 07 Jan 2023 at NIT Warangal.
- Prof. Brijesh K Yadav delivered a Laboratory Session on "Hands on Atomic Absorption Spectrophotometer" during a Five Days Training Course under NHP on "5-Days Training Course on "Hands on Advanced Instrumentations in Water Quality Analysis" during January 16-20, 2023 at NIH, Roorkee.

Events

- Prof. Brijesh K Yadav conducted a one-day International workshop on "Sustainable Agri-Water Use" on January 20, 2023 under the aegis of the DST-NWO research collaboration at Department of Hydrology, IIT Roorkee.


