Newsletter
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Publication:

Dikshit, A., Garg, V. & Gupta, P.K. Machine learning-driven spatial-spectral-contextual analysis of airborne hyperspectral data for water quality assessment. Discov Appl Sci 7, 1392 (2025). https://doi.org/10.1007/s42452-025-07768-7

Nagashree, G. E., & Sharma, A. (2025). Evaluating sectoral water use and precipitation variability on blue water scarcity under historical and future climate conditions in the Mahi River Basin. Agricultural Water Management, 322, 110006. https://doi.org/10.1016/j.agwat.2025.110006

Sahu, G., Mangukiya, N. K., & Sharma, A. (2025). Does MC-LSTM model improve the reliability of streamflow prediction in human-influenced watersheds? Journal of Hydrology, 134711. https://doi.org/10.1016/j.jhydrol.2025.134711

Singh, A., & Sharma, A. (2025). Agricultural catchments exhibit enhanced climate and drought resilience compared to forested catchments in Peninsular India. Journal of Hydrology, 134618. https://doi.org/10.1016/j.jhydrol.2025.134618

Saha, Jain, M.K*., Joshi, P., Das, S., and Rawat, N. (2025). Development of Daily Downscaled, Bias-corrected CMIP6 climate Datasets for estimating Reference Evapotranspiration in South Asia. Scientific Data 12:1879 (https://doi.org/10.1038/s41597-025-06149-4).

Singh, A., & Sharma, A. (2025). Agricultural catchments exhibit enhanced climate and drought resilience compared to forested catchments in Peninsular India. Journal of Hydrology, 134618. https://doi.org/10.1016/j.jhydrol.2025.134618

Raghuvanshi, A.S., Agarwal, A. An Hourly Dataset of Moisture Budget Components Over the Indian Subcontinent (1940–2024). Sci Data 12, 1770 (2025). https://doi.org/10.1038/s41597-025-06044-y

Raghuvanshi, A.S., Agarwal, A. Complex network reveals propagation and moisture dynamics of Indian monsoon precipitation extremes. Clim Dyn 63, 443 (2025). https://doi.org/10.1007/s00382-025-07924-0

Li, X., Yin, S., Qian, J., Khan, S. A., Shang, W., Sun, J., Farid, M. U., Lu, Gang, Wang, G., Deka, B. J., Guo, J., Zhou, Y., Kim, S., Kim, J., An, A. K.* (2025). Thermal Shielding and Vapor Transport Enhancement in MOF-Enabled Membranes for Membrane Distillation, Advanced Science, e10323, https://doi.org/10.1002/advs.202510323 (Q1, Impact factor: 14.1)

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Award:

Prof. Bhaskar Jyoti Deka received the 'Best Innovation Stall' award for his recently patented membrane-based technologies/processes at the IIC Regional Meet 2025, hosted by DIT University, Dehradun, and organized by the Innovation Cell, AICTE, Ministry of Education, Government of India. The team includes Mr. Nagendra Kumar Jilagam (PhD scholar) and Ms. Longjam Riccirani Chanu (PhD scholar).

Akansha Keshariya has received a Student Travel Grant to attend the American Geophysical Union (AGU 2025) Annual Meeting, scheduled to be held from 15–19 December 2025 in New Orleans, LA, USA.

Conference:

Prof. Bhaskar Jyoti Deka was invited to deliver a talk on "Membrane Technologies for Sustainable Desalination and Water Treatment" during the two-day workshop on "Emerging Techniques for Sustainable Environment" held on November 21, 2025, at Doon University, Dehradun, Uttarakhand, India.

Prof. Bhaskar Jyoti Deka was invited to deliver an online talk on "Environmental Engineering Approaches to Water Conservation Using Next-Generation Membrane Technologies" during the one-day training programme on "Revisiting Theory and Practice in Civil Engineering" held on November 21, 2025 at Tezpur University, Assam, India.

Deepak P, PhD scholar, presented a virtual talk at the International Symposium on Tropical Meteorology (INTROMET 2025) held at Indian Institute of Tropical Meteorology Pune from 18 - 20 Nov 2025.

Miscellaneous:

Gaurav Vaghela defended his PhD on 11th November 2025, titled "Development of innovative nanocomposite membranes for desalination and water reclamation".