## <u>Meeting Report: International Association of Hydrological Sciences</u> (IAHS) -2025

As a recipient of the IAHS 2025 **SYSTA Award**, I had the honor of participating in the IAHS Scientific Assembly held in IIT Roorkee, India from 5<sup>th</sup> October 2025 to 10 October 2025. The event brought together hydrologists, researchers, and water scientists from across the globe to discuss recent advances in hydrological sciences, promote collaborative research, and address pressing global water-related challenges.

The SYSTA Award provided essential support for my travel and participation, enabling me to engage with the international hydrological community, present my research, and build valuable professional networks.

I presented my research titled **A change in the peak timing of Indian summer monsoon rainfall due to a shifting climate: observational evidence** as part of the **1.2 Oral+ForumOral** session under the theme of ICRS on 6 October 2025 at 12:00 Hrs. The presentation focused on the change in peak time of Indian summer monsoon rainfall during 2001 to 2020 time period using an hourly GSMaP\_ISRO data nudged with IMD rain gauges. It was observed that notable increase in the rainfall by 2 mm/day over central Indian region. This rise in rainfall associated with increase in vegetation in recent decade. It was found that the rainfall peaks at early over Indo Ganegic Plains, while it peaks late over central Indian region. The changes in peak time of rainfall might be associated with the changes in aerosol loading and atmospheric stability.

The session included insightful discussions, and I received constructive feedback and suggestions from senior researchers and peers, which will contribute significantly to the further development of my work.

On  $6^{th}$  October 2025, we had the SYSTA award ceremony and had a fruitful interaction with Professor Günter Blöschl on the changes in spatial variability of rainfall over the Indian region and its impact.

During the assembly, I attended several Plenary Oral and poster sessions and workshops. These sessions provided exposure to cutting-edge research in hydrology, including innovations in modeling, water resource management, and climate change impacts on hydrological processes.

Also, I attended the Early Career IAHS India session and had the fruitful interaction with Prof. Mahesawarn, IIT Hyderabad.

The IAHS meeting provided an excellent platform for networking. I had the opportunity to:

- Interact with fellow SYSTA recipients and early-career researchers
- Engage in discussions with leading experts in my field
- Explore potential future collaborations with institutions from other regions

Participation in the IAHS 2025 Scientific Assembly has significantly contributed to my academic and professional growth. I gained, enhanced visibility for my research,

broader understanding of global hydrological challenges and direction for future research for societal applications.

I sincerely thank the IAHS and the SYSTA Award Committee for selecting me for this prestigious award. I also acknowledge the support of my home institution, mentors, and colleagues who contributed to my journey.

