About the IGWC Series

Groundwater has emerged as a major resource in safeguarding agriculture and drinking water security in many parts of the globe. However, groundwater depletion, contamination, and governance challenges continue to persist despite decades of groundwater research. Searching solutions for the conservation and sustainable management of groundwater is likely to play a crucial role in meeting the water demands of the population in future, under a changing climate and to ensure food and water security for both the developed and developing nations. Keeping in view the significance of groundwater in the economic growth and development of a country, a series of International Conferences on Groundwater are being organised regularly by the Association of the Global Groundwater Scientists (AGGS) in collaboration with other academic and research organizations, to deliberate on various issues related to groundwater including the recent advances in groundwater research. A total of 09 such conferences have been organised so far including the recent ones in 2012, 2015, 2017, 2019 and 2022. The present conference (IGWC 2025) is the 10^{th} such conference in this series which is being organised at the National Institute of Hydrology, Roorkee, during 5^{th} to 7^{th} March, 2025.

The key issues and challenges expected in groundwater management are needed to be clearly identified and framework for systematic and scientific research needs to be determined from time to time with formulation of specific and pinpointed recommendations for future work. The international conferences in IGWC series have served as the meeting points for groundwater experts and professionals, for this purpose. Therefore, the aim of IGWC 2025 also is to provide a common platform for researchers, academicians, policy makers, water managers, technocrats, industrialists and NGO's, to discuss and deliberate on the current groundwater issues as well as Groundwater Vision 2047, in the face of growing challenges of the needs of rising population and confronting climate uncertainties in water resources planning and management.

During the conference the implications of this perspective on data collection, scientific investigations, governance, and management are also expected to be discussed at length, with a motivation to highlight a wider, complex, interdisciplinary, and systems approach to groundwater assessment and management. It is intended and hoped that a suite of new (or existing but underutilized) concepts and interdisciplinary and transdisciplinary methodologies would emerge out of the deliberations, to aid and promote transformations towards sustainability and resilience of the groundwater systems.

Looking at the aforementioned aspects, the themes of the conference have been identified as:

1. Vision 2047: Impact of Climate Change on Groundwater & Adaptation Measures
2. Vision 2047: Environmental Flow and Rejuvenation of River Ganga
3. Vision 2047: Mountain Hydrology & Springshed Management
4. Water Resources in Arid & Semi-Arid Regions
5. Groundwater Contamination and Remediation
6. Groundwater Modeling and Management

7. Advanced Techniques for GW Exploration & Assessment
8. Augmentation of Groundwater Resources
9. Coastal Water Resources Management
10. Policy, Regulation, Governance & Community Participation for Groundwater Management
11. Application of AI, ML, IoT, Cloud Computing & Other Advanced Techniques
12. Vadose Zone Hydrology and Agriculture Water Management
13. Protection of Groundwater Dependent Ecosystems
14. Isotopic Techniques in Groundwater Investigations & Management