

IGWC 2025

10th INTERNATIONAL GROUNDWATER CONFERENCE

on

Groundwater Vision 2047: Towards Water Security under Changing Climate

March 05-07, 2025
Roorkee

ORGANIZED BY



National Institute of Hydrology
Roorkee, India

आपो हि ष्ठा मयोभुवः

IN ASSOCIATION WITH



Central Ground
Water Board, India



Association of Global
Groundwater Scientists



National Mission for
Clean Ganga, India



National River
Conservation
Directorate, India



British Geological
Survey, United Kingdom



Hochschule für Technik
und Wirtschaft Dresden,
Germany



KTH Royal Institute of
Technology, Stockholm,
Sweden



About the IGWC Series

The international conferences in IGWC series are the meeting point for groundwater professionals and researchers, bringing together experts in the various inter-related disciplines in the field of Groundwater Hydrology. Groundwater has emerged as a major resource in safe guarding agriculture and drinking water security in many parts of the globe. India is at present the largest and fastest consumer of groundwater in the world. Integral to life and indispensable for comprehensive growth and development, groundwater is a key resource for India in achieving its holistic vision of a developed nation by 2047, the 100th year of its independence.

The role of groundwater in contributing to water security and searching solutions for its conservation and sustainable management at present will play a crucial role to meet water demands of the population in future under a changing climate and to ensure food and water security for both the developed and developing countries.

Towards a Water-Secure Future: The aim of IGWC 2025 is to provide a common platform for researchers, academicians, water managers, industrialists and technocrats to discuss and deliberate the groundwater vision 2047 in the face of growing challenges of the needs of rising earth population and confronting climate uncertainties in water resources planning and management.

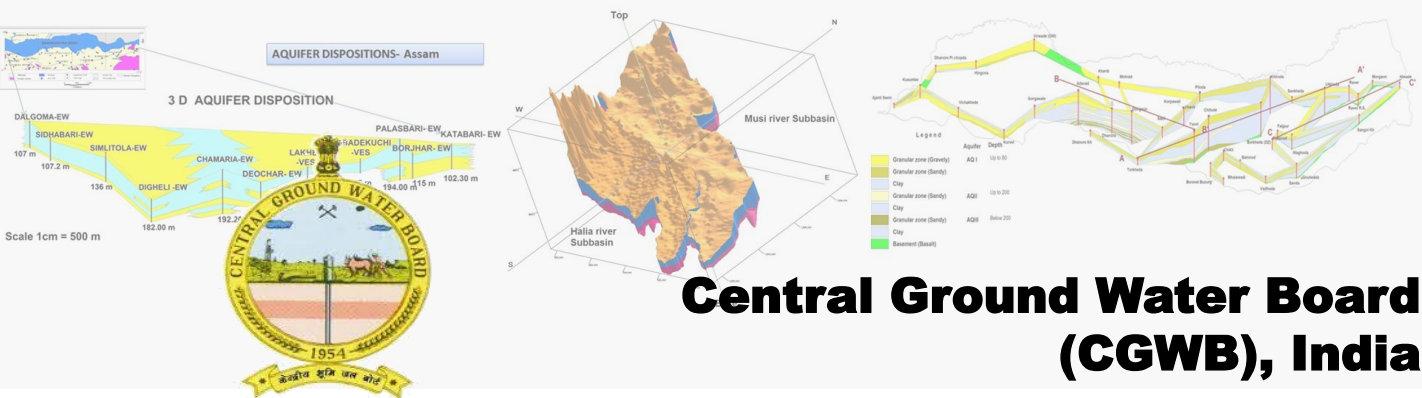


National Institute of Hydrology (NIH) Roorkee, India

NIH is a premier research and development organization in the area of hydrology and water resources in India. The Institute was established in 1978, as an autonomous society under the **Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India**, with its headquarters at Roorkee.

The Institute undertakes, aides, promotes and coordinates systematic and scientific work in all aspects of hydrology. **Seven Regional Centres** of the Institute are located in different physiographic regions of the country. The scientific and technical credibility of the Institute in conducting hydrological and water resources research is well recognized both at the national and international level. The Institute along with the joint organizers is planning an exciting three-day event that will enable delegates to examine the multi-dimensional challenges facing us in the coming years in terms of sustaining our groundwater resources, enabling a water secure future and adapting to climate change.



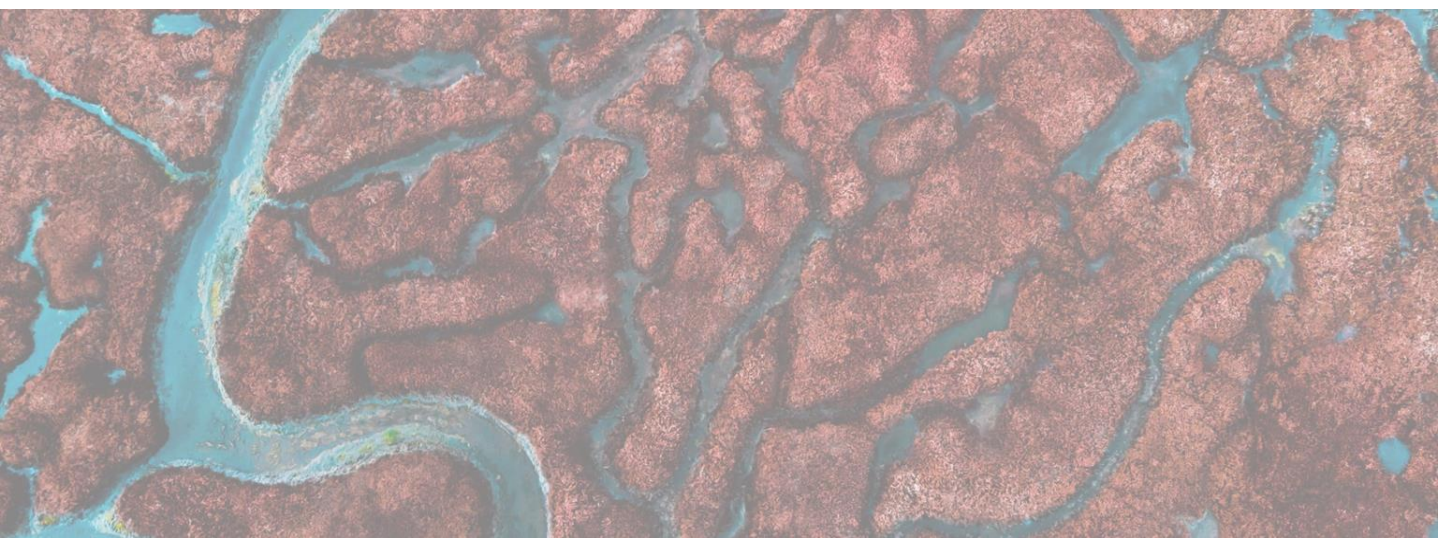


Central Ground Water Board (CGWB), a subordinate office of the **Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India**, is the National Apex Agency entrusted with the responsibilities of providing scientific inputs for management, exploration, monitoring, assessment, augmentation and regulation of ground water resources of the country. CGWB was established in 1970. Major activities being taken up by the Board include macro/micro-level ground water management studies, exploratory drilling program, monitoring of ground water levels and water quality through a network of ground water observation wells, and periodic assessment of replenishable ground water resources of the country etc. The Board also takes up special studies on various aspects of ground water sector such as ground water depletion, sea water ingress, ground water contamination, conjunctive use of surface & ground water, etc.



Association of Global Groundwater Scientists (AGGS)

AGGS with its registered office in Coimbatore, Tamil Nadu, India, is committed to work on the promotion of research for minimizing groundwater pollution and to advocate the effective use of groundwater for better health and sustainable livelihood through undertaking appropriate measures. AGGS organizes seminars/symposia at various centres in India and in the neighbouring countries viz. Bangladesh, Sri Lanka, Pakistan, Nepal and Bhutan and publishes proceedings and new findings. It also plays a partner role along with other International Associations viz., IAHS & IAH in organising international events in other developing countries as well as SAARC countries.





National Mission for Clean Ganga (NMCG), India

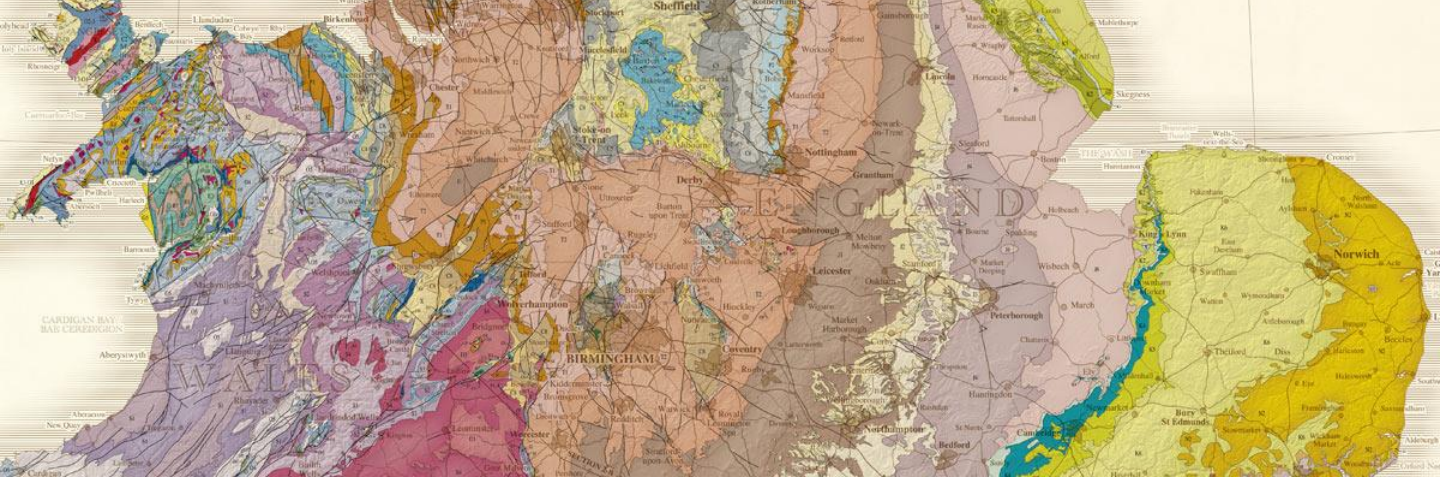
National Mission for Clean Ganga(NMCG) was registered as a society on 12th August 2011 under the Societies Registration Act 1860.It acted as implementation arm of National Ganga River Basin Authority(NGRBA) which was constituted under the provisions of the Environment (Protection) Act (EPA),1986. NGRBA has since been dissolved with effect from the 7th October 2016, consequent to constitution of **National Council for Rejuvenation, Protection and Management of River Ganga** (referred as National Ganga Council). The aims and objectives of NMCG is to accomplish the mandate of National Ganga River Basin Authority (NGRBA. The Vision for Ganga Rejuvenation constitutes restoring the wholesomeness of the river defined in terms of ensuring “Aviral Dhara” (Continuous Flow”), “Nirmal Dhara”(“Unpolluted Flow”), Geologic and ecological integrity.



National River Conservation Directorate (NRCD), India

The National River Conservation Directorate, functioning under the Department of Water Resources, River Development & Ganga Rejuvenation, and Ministry of Jal Shakti providing financial assistance to the State Government for conservation of rivers under the Centrally Sponsored Schemes of ‘National River Conservation Plan (NRCP)’. National River Conservation Plan to the State Governments/ local bodies to set up infrastructure for pollution abatement of rivers in identified polluted river stretches based on proposals received from the State Governments/ local bodies.





British Geological Survey (BGS), United Kingdom

The British Geological Survey is a world-leading geological survey and global geoscience organisation, focused on public-good science for government and research to understand earth and environmental processes. BGS is the UK's premier provider of objective and authoritative geoscientific data, information and knowledge to help society to use its natural resources responsibly, manage environmental change and be resilient to environmental hazards.



Hochschule für Technik und Wirtschaft Dresden (HTWD), Germany

The HTW Dresden - University of Applied Sciences was founded in 1992. It is the second-largest university in the capital of the state of Saxony. The degree programmes at HTWD include a number of subjects that are unique to post-secondary education in Saxony such as agriculture, horticulture, landscape planning and development, environmental monitoring and analysis, geoinformatics, surveying and cartography. The HTWD actively performs research on Groundwater and River Bank Filtration (RBF) under faculty of civil engineering. With 8 faculties, approximately 170 professors, and about 5,000 students, the university is large enough to integrate the different disciplines successfully and generate a high synergistic effect.





KTH Royal Institute of Technology, Stockholm, Sweden

The KTH Royal Institute of Technology, abbreviated KTH, is a public research university in Stockholm, Sweden. KTH conducts research and education in engineering and technology and is Sweden's largest technical university. Currently, KTH consists of five schools with four campuses in and around Stockholm. KTH was established in 1827 as the Teknologiska institutet (Institute of Technology) and had its roots in the Mekaniska skolan (School of Mechanics) that was established in 1798 in Stockholm. But the origin of KTH dates back to the predecessor of the Mekaniska skolan, the Laboratorium mechanicum, which was established in 1697 by the Swedish scientist and innovator Christopher Polhem. The Laboratorium mechanicum combined education technology, a laboratory, and an exhibition space for innovations. In 1877, KTH received its current name, Kungliga Tekniska högskolan (KTH Royal Institute of Technology). The Swedish king, Carl XVI Gustaf, is the patron of KTH. KTH is ranked 73rd in the world among all universities in the 2024 QS World University Rankings, which is higher than any other university in the Nordic countries.



SCIENTIFIC THEMES

T-1: VISION 2047
IMPACT OF CLIMATE
CHANGE ON
GROUNDWATER AND
ADAPTATION MEASURES

T-2: VISION 2047
ENVIRONMENTAL FLOW
AND REJUVENATION OF
RIVER GANGA

T-3: VISION 2047
MOUNTAIN HYDROLOGY
AND SPRINGSHED
MANAGEMENT

T-4
WATER RESOURCES IN
ARID AND SEMI-ARID
REGIONS

T-5
GROUNDWATER
CONTAMINATION AND
REMEDATION

T-6
GROUNDWATER
MODELING AND
MANAGEMENT

T-7
ADVANCED TECHNIQUES
FOR GROUNDWATER
EXPLORATION AND
ASSESSMENT

T-8
AUGMENTATION OF
GROUNDWATER
RESOURCES

T-9
COASTAL WATER
RESOURCES
MANAGEMENT

T-10
POLICY, REGULATION AND
GOVERNANCE FOR
GROUNDWATER
MANAGEMENT

T-11
APPLICATION OF AI, ML,
IoT, CLOUD COMPUTING
AND OTHER ADVANCED
METHODS IN
GROUNDWATER

T-12
VADOSE ZONE
HYDROLOGY AND
AGRICULTURE WATER
MANAGEMENT

T-13
PROTECTION OF
GROUNDWATER
DEPENDENT ECOSYSTEMS
– RIVERS, WETLANDS,
LAKES AND SPRINGS

T-14
ISOTOPIC TECHNIQUES
IN GROUNDWATER
INVESTIGATIONS AND
MANAGEMENT



ORGANIZING COMMITTEE



Patron

Mrs. Debashree Mukherjee

Secretary, DoWR, RD & GR, Ministry of Jal Shakti,
Govt. of India



Conference Chairs

Dr. M.K. Goel, Director, NIH

Dr. Sunil Kumar Ambast, Chairman, CGWB

Dr. C. Mayilswami, President, AGGS



Conference Convener

Dr. Anupma Sharma, Scientist G & Head,
Groundwater Hydrology Division, NIH



Conference Co-Conveners

Dr. S.D Khobragade, Scientist G & Head,
Hydrological Investigations Division, NIH

Dr. M.S. Rao, Scientist G, NIH



Organizing Secretaries

Dr. Gopal Krishan, Scientist E, NIH

Dr. Sumant Kumar, Scientist E, NIH

Dr. Ranjan Ray, Scientist E, CGWB



Joint Organizing Secretaries

Dr. Santosh Murlidhar Pingale, Scientist D, NIH

Dr. Nitesh Patidar, Scientist C, NIH

Dr. Gajanan Ramteke, Scientist C, CGWB



Core Committee Members

Ms. Anu Chetal, Scientist B, NMCG

Mr. Peeyush Gupta, GIS Expert, NMCG

Dr. Sabita Madhvi Singh, Scientist D, NRCD

Shri Phylliewbor Nylla Rymbai, Scientist B, NRCD

KEY DATES

- Abstract submission: December 10, 2024
- Abstract acceptance: January 10, 2025
- **Early Bird Registration:** January 15, 2025
- **Pre-conference Workshop Registration:** February 15, 2025

Selected papers will be published in peer reviewed reputed international and national journals. Invitation to the Authors of selected Abstracts will be sent after the conference.

Registration Fee*	Early Bird Registration (Till 15 th January 2025)	Late Registration (After 15th January 2025)
Indian Delegates	INR 7,000	INR 9,000
Foreign Delegates	USD 350	USD 450
Research Scholars/Students	INR 3000	INR 5000
Foreign Research Scholars/Students	USD 200	USD 250

*Transaction charges and Taxes (GST@18%) will be applicable to the above amount

Sponsorship Plans and Features

Sr. No.	Features	PLATINUM	GOLD	SILVER	Hosting of lunch
1	Sponsorship Amount (Rs.)	6.0 Lakh*	5.0 Lakh*	3.0 Lakh*	2.0 Lakh*
2	No. of free delegates	06	05	03	No
3	Logo on website (with hyperlink to company website), program book, registration backdrop and side panels	Yes	Yes	Yes	No
4	Exhibition stall	Yes Large	Yes Medium	Yes Small	No
5	Time slot in any one of the technical sessions	Yes 10 min	Yes 5 min	No	No
6	Promotional videos/images on digital display in dining area during Lunch	No	No	No	Yes
7	Promotional videos/images on digital display in dining area during Dinner	Yes	No	No	No
8	No. of banners/posters at Strategic locations	02	01	00	No
9	Acknowledgement in valedictory session	Yes	Yes	Yes	Yes
10	Distribution of company brochure in registration kit	Yes	Yes	Yes	No

*GST (@18%) will be applicable to the above mentioned amounts

Plans for Supporters and Exhibitors

Sr. No.	Category	EXHIBITOR-A	EXHIBITOR-B	SUPPORTER-A	SUPPORTER-B
1	Sponsorship Amount (Rs.)	2.0 Lakh*	1.5 Lakh*	1.0 Lakh*	0.75 Lakh*
2	Display on Supporters Panel	No	No	Yes	No
3	Exhibition stall with 1 Table, 2 Chairs, dustbin, power socket, 2-spot lights	Yes Large	Yes Medium	No	No
4	Advt. in Program booklet	No	No	One full colour inner back page	One half colour inner back page
5	Dining coupons	02	02	00	00

*GST (@18%) will be applicable to the above mentioned amounts



PRE-CONFERENCE WORKSHOP

Solute Transport Modeling

March 03-04, 2025

This course aims to teach attendees the underlying theoretical concepts and provide a modeling toolkit for simulating groundwater solute transport to address practical contamination and remediation problems. The course consists of theory, practical examples, and hands-on training.

Key Topics

Theory

Definitions and governing equations for advection, dispersion, reactions

Analytical & Numerical Models

Practical examples, challenges and solutions, hands-on workshops

Advanced Topics

Dual porosity, variable density, vadose zone, kinetic reactions

Special Topics

Pump and treat systems, surface water-groundwater exchange, heat transport, and others

Models & Tools

MT3D

MODFLOW-USG

MODFLOW 6

Prerequisite

Prior experience in groundwater flow modelling is essential.

Course Instructor



DR. VIVEK BEDEKAR

Associate at S.S. Papadopoulos & Associates
Rockville, Maryland, USA

How to Register?

Visit igwc2025.nihroorkee.gov.in. Seats are limited and reserved for the conference participants. Last date for registration is **15th December 2024**

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