Pre-Conference Workshop

A one-day pre-conference workshop on "Modeling and Management of Groundwater in Fractured Geologic Media" is scheduled on 04 Dec 2023. As a part of this workshop, the participants will be taught on interpretation of geophysical, tracer, pumping data, and modeling strategies specific to fractured aquifers.

A field trip to IITH hydro-geologic test bed is proposed, where the participants will be field demonstrated on geophysical, tracer, and pumping experiments, use of advanced and state of art equipment like ABEM Terrameter, Heat pulse flow meter, Low pressure Packers, Level loggers, TLC meter, Multi-level monitoring system, et

Call for Papers

High quality, original research papers (abstracts) relating to one of the conference themes are invited. Abstracts should be submitted through Email only to ingwc2023@ce.iith.ac.in_,with subject: INGWC-2023 Abstract

Important Dates

Deadline for submission of Abstract: 30 Sep 2023 Acceptance of submitted Abstract: 15 Oct 2023 Dead line for Registration : 31 Oct 2023 Workshop Date: 04 Dec 2023 Conference Dates: 05-06, Dec 2023

Contact Us

Dr. K.B.V.N. Phanindra | Dr. N Seetha Convener Organizing Secretary Department of Civil Engineering, IIT Hyderabad Kandi, Sangareddy—502 285, Telangana Phone: (040)2301-6306, (040)2301-8300 E-Mail: ingwc2023@ce.iith.ac.in Web Page: https://sites.google.com/ce.iith.ac.in/ ingwc-2023

Conference Venue

- The conference will be conducted in Convention Center (CC), IIT Hyderabad
- IIT Hyderabad is located about 60 km from Secunderabad railway station, 30 km from Lingampalli station, and 60 km from Airport
- Geographical coordinates of the venue: 17.5876 N, 78.1197 E

Local Organizing Team

Principal Organizer IIT Hyderabad Co-Organizers CSIR-NGRI Hyderabad		
	JNTUHUCEST Hyderabad	
	BITS Pilani, Hyderabad	
Convener	Dr. K.B.V.N Phanindra	
	Associate Professor, IIT Hyderabac	
Organizing Secretary Dr. N. Seetha		
	Assistant Professor, IIT Hyderabad	
Members	Dr. Satish Regonda, IITH	
	Dr. Sk Zeeshan Ali, IITH	
	Dr. Maheswaran Rathinasamy, IITH	
	Dr. Shruthi Upadhyaya, IITH	

Registration fee

Category	Conference	Workshop
Students /	Rs. 3,000/- (+	Rs. 2,000/- (+
Research scholars	18% GST)	18% GST)
Faculty / Scientists	Rs. 6,000/- (+ 18% GST)	Rs. 4,000/- (+ 18% GST)
Industry / Work-	Rs. 8,000/- (+	Rs. 5,000/- (+
ing professionals	18% GST)	18% GST)

Registration fee includes: workshop/ conference kit; working lunches; and dinner

FIFTH INDIAN NATIONAL GROUNDWATER CONFERENCE

INGWC-2023

05-06 December 2023



First Announcement & Call for Paper

Organized by Department of Civil Engineering Indian Institute of Technology Hyderabad

In Association with Association of Global Groundwater Scientists



Indian Institute of Technology Hyderabad



About the Conference:

The national conferences in the INGWC series are the meeting point for hydrogeologists, groundwater professionals, research scholars, and working professionals across the country. The conference brings together experts in various interrelated disciplines of groundwater hydrology to share their ideas. India is the largest user of groundwater in the world, drawing more than 25 % of global groundwater abstraction. More than 85 % of rural water needs, more than 50 % of urban water needs, and more than 50 % of agricultural water needs are exclusively met from groundwater resources. If the current rate of groundwater extraction continues, it may soon lead to unsustainable balance, depletion of groundwater levels and quality, leading to poverty and food insecurity in many parts of the country. This conference is expected to bring awareness on monitoring, modelling, and management of groundwater in India using the state of the art technologies for sustainable development. This is the 5^{Th} conference in the INGWC series.

About the Host Institute (IITH):

Indian Institute of Technology Hyderabad (IITH) is a premier institute of science and technology established in 2008. IITH has been consistently ranked in the top 10 institutes in India for Engineering as per NIRF. The very foundation of IIT Hyderabad is based on research and innovation. IITH offers graduate programs at both a masters, and a doctoral level in several diverse areas. There are separate programs for technology, applied sciences, design and liberal arts.

<u>About the Civil Engineering Department ,</u> <u>IITH:</u>

Department of civil engineering, since its inception in 2008 has been the forefront of teaching, research and consulting with a focus in the broad areas of Hydraulic and Water Resources, Environmental, Structural, Geotechnical, and Transportation Engineering. The department offers B.Tech program in civil engineering and M.Tech programs in various streams. The Department also offers a Ph.D program. With a strength of 27, the department faculty are committed to deliver knowledge and expertise in the broad spectrum of Civil Engineering and are actively involved with research that caters to social needs in general.

About Association of Global Groundwater Scientists (AGGS):

The Association of Global Groundwater Scientists (AGGS) alias International Groundwater Congress (IGWC) is an international NGO that aims to instill human resources for the sustainable growth of groundwater and its allied areas through knowledge sharing, logical thinking, and qualitative analysis. AGGS is envisaged as a functional network and collaboration of different organizations including govt. Depts., IITs, national institutes/ labs, waterrelated industries NGOs for better sharing, and collaboration on emerging issues in groundwater management. Journal of Groundwater Research (JGWR) is an international peer reviewed journal published by AGGS. Apart from this, AGGS has conducted a series of conferences in various parts of India.

Conference Themes

Papers on the following Themes/Sub-themes are invited from academicians, scientist, Practising Engineering, Researchers, consultants and other associated with ground water engineering

I. Hydro-geologic Characterization

Geophysical exploration techniques, Inverse problems in geophysics, Aquifer mapping; Pumping/ recovery tests.

2. Groundwater Assessment, Monitoring, and Management

Applications for groundwater Monitoring and Assessment, Monitoring techniques, Application of AI and IoT, Groundwater management under changing climatic conditions. Remote platforms for groundwater.

- 3. Surface Water- Groundwater Interactions Artificial recharge of groundwater, Effect of irrigation on groundwater, Water budgeting/water audit, Water economics, governance, policies and capacity building.
- 4. Groundwater Modelling and Management Modelling flow in groundwater and vadose zones, Aquifer parameter estimation, Computational methods in groundwater, Groundwater resources and climate change, Availability of groundwater resources under increasing demands, Decision support system and simulation
- 5. Fate and Transport of Contaminants in Subsurface

Groundwater quality monitoring and assessment, Transport of pathogens, Emerging contaminants, heavy metals, geogenic contaminants, Contaminants transport modelling, Groundwater chemistry, Remediation of contaminated sites, and Water treatment and recycling of waste water

6. **Multi-Phase/Density Flow in Subsurface** NAPL flow in groundwater, Multiphase flow in oil and gas reservoirs, Salt water intrusions in coastal aquifers and C0₂ Geo Sequestration.