ISHS 2022

9th International Symposium on Hydraulic Structures

24-27 October, 2022

IIT ROORKEE, INDIA

ishs2022@ce.iitr.ac.in

www.ISHS2022.com

INVITATION


Anderson Weir, India

The local organizing committee is delighted to invite you to participate in the 9th International Symposium on Hydraulic Structures (ISHS 2022) to be held at Indian Institute of Technology (IIT) Roorkee, India during 24-27 October, 2022. This symposium will bring together academia and industry from across the globe to discuss issues and solutions in the design and construction of hydraulic structures. The symposium will provide a distinctive opportunity for engineers and researchers to present their works and be mentored by senior engineers and researchers. The symposium will be organized under the aegis of IAHR, Indian Society for Hydraulics (ISH), CBIP, India.

ABOUT IIT ROORKEE

Indian Institute of Technology Roorkee is among the foremost of institutes of national importance in higher technological education and in engineering, basic and applied research. The Institute will celebrate its demisemisept-centennial in year 2022. The Department of Civil Engineering at the IIT Roorkee is the oldest and the largest in the country and is considered as the best in the country for education in Civil Engineering. It was established on October 19, 1847 as Roorkee College of Civil Engineering and renamed as the Thomason College of Civil Engineering in 1854. The department is producing several eminent engineers who are making notable contributions in the planning and execution of Civil Engineering projects in India as well as abroad. Hydraulics Laboratory of Civil Engineering was established in 1956, having a floor area of 4400 m^2 and a discharge of 1.0 m^3/s and equipped with state-of-art equipments.

TRAVEL INFORMATION

Roorkee is a city in North India and spread over a flat terrain under Sivalik Hills of Himalayas. The city is developed on the banks of Ganges Canal, its dominant feature, which flows from north–south through middle of the city. It is well connected with New Delhi, the capital of India by train (https://etrain.info/in) and road. Nearest domestic airport is about 60 km from Roorkee at Dehradun while International airport is Indira Gandhi International (IGI) Airport, New Delhi, which is about 200 km from Roorkee. A cab takes about four hour to travel from IGI airport to Roorkee and about one and half hour from Dehradun Aiport to Roorkee.


Tehri Dam, India

SYMPOSIUM FORMAT

The Symposium would be four days in duration. A workshop shall be organized on the first day while next two days will be dedicated to ISHS technical sessions, including keynote addresses. The final day will be a technical field tour.

TIME SCHEDULE

Abstract submission	:	15 January 2022
Abstract acceptance	:	01 March 2022
Full paper submission	:	20 April 2022
Notification of acceptance	:	25 May 2022
Revised papers submission	:	01 July 2022
Notification of final acceptance	:	05 August 2022
Registration Opens	:	10 August 2022
Workshop	:	24 October 2022
Symposium	:	25-26 October 2022
Technical tour	:	27 October 2022

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AWARDS

Given the 20th anniversary of the IAHR Hydraulic Structures Technical Committee in 2018, the Leadership Team decided to create the Philip H. Burgi Best Paper Award, named after the first chair of the Technical Committee. This award aims at rewarding the best technical paper presented during the International Symposium on Hydraulic Structures.

Authors aiming at applying to Philip H. Burgi Best Paper Award–ISHS 2022 should mention it when submitting their abstract. Nominated papers will be selected prior to the symposium regarding their scientific content, innovation and impact as well as link with hydraulic structures. Award winner will be selected among selected papers after oral presentations and will be announced during the ISHS banquet.

TECHNICAL TOUR


Tehri Dam, India

Tehri Dam: It is one of the highest dams of its type in the world on the Bhagirathi River near Tehri in Uttarakhand, India. Its length is 575 m, crest width 20 m, and base width 1,128 m. The dam creates a reservoir of 4.0 km^3 with a surface area of 52 km^2. It comprises of a 260.5 m high Earth & Rockfill dam, a Spillway System having one Chute Spillway and four Shaft Spillways designed for PMF of 15540 m^3/s and a drop of 220 m and an underground Power House containing four Turbine/Generator sets of 250 MW each, designed to operate with a head variation of 90 m. Project was commissioned in 2006-07 and all four machines of Tehri Power Station are under commercial operation.

Upper Ganga Canal: After the disastrous Agra famine of 1837–38, in which nearly 800,000 people died, Colonel Proby Cautley, who has been affectionately remembered as a British Engineer with an Indian heart, conceived a canal irrigation system known as upper Ganga canal during the period 1840-1854. Its command area is 24000 km^2 and augmented flow is 297 m^3/s. The system consists of main canal of 272 miles and about 4000 miles long distribution channels. The upper Ganga canal was the largest and costliest man-made waterway in the world in its opening year 1854. Various types of cross-drainage works are provided on the canal. Acciavatti writes in his book that engineers came from around the world to see such cross drainage works which outdid any canals and aqueducts that had been built before. Four major cross-drainage works are Ranipur Syphon, Pathri super passage, Dhanuri level crossing and Solani aqueduct which was ranked as one of the most remarkable massive brick masonry structure in the whole world. This canal was the reason why the first engineering college in India, the Thomason College of Civil Engineering was set up at Roorkee which was later converted into IIT Roorkee in the year 2001.

PROCEEDINGS

All papers will be peer-reviewed for technical content by the scientific committee. Accepted and presented papers will be allocated a direct object identifier (DOI), and be published in the Proceedings. The proceedings will be indexed in Scopus and made freely available online at Utah State University Digital Commons. One registered author shall be allowed to present a maximum of two papers.

TECHNICAL THEMES

Storage and Diversion Structures
Dams and Weirs
Spillways
Intakes and outlets
Fish passes
Navigational locks

Energy Dissipators
Stilling basins
Block ramps
Stepped spillways
Plunge pools

Flow Conveyance Structures
Canals, tunnels, pipes
Penstocks & surge tanks
Flood mitigation channels
Gates and Valves

Physical and Numerical Modeling
Instrumentation
Scale effects
Modelling of roughness & sediment
Multiphase modelling
Hybrid modelling
Fluid structure interaction
Case studies and prototype measurements

Scour around Hydraulics Structures
Scour and sediment transport
Aggradation and degradation
River training and protection works

Coastal Engineering
Ports and harbours
Coastal and offshore structures
Caisson & rubble mound breakwaters

Best Practices in Risk Management
Dam safety and rehabilitation
Risk and hazard assessment
Sustainable design
Adaptation to climate change

Miscellaneous Structures
Non-linear weirs
Pump sump
Trench/tyrolian weirs
Permeable weirs

REGISTRATION INFORMATION

	Early Bird	Regular
Full delegate	450 USD	500 USD
Full Delegate Rate IAHR Members	350 USD	400 USD
Student / Young Professional	200 USD	250 USD

The registration fee includes participation at all congress sessions, lunch meals, coffee breaks and evening reception.

Note: If the pandemic conditions will not be favorable to hold the symposium with physical presence of the delegates, it could be held online at reduced registration fee.

SPONSORSHIP

The symposium will provide an opportunity for sponsoring organizations to publicize their products/services to the participants and interact with them. Sponsorship packages for sponsoring the ISHS 2022 under Platinum, Golden and Silver categories shall be 1000 USD, 750 USD and 500 USD, respectively.

CONTACT

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