

IMPORTANT DEADLINES

Abstract submission	Aug 10, 2022
Abstract acceptance	Sep 05, 2022
Early bird registration	Sep 15, 2022
Full paper submission	Sep 30, 2022
Presentation mode information	Sep 30, 2022

VENUE OF CONFERENCE

Conference will be organized in the hybrid mode. The on-site programs will be held in the Department of Hydro and Renewable Energy located in the lush green campus of Indian Institute of Technology Roorkee at Roorkee Campus, Uttarakhand, India.

175 YEARS OF IIT ROORKEE



Indian Institute of Technology Roorkee is among the foremost institutes of national importance for higher education in the fields of Engineering, and Basic and Applied Sciences. The Institute has rich legacy in the field of technical manpower development since 1847 when it was established as Roorkee Civil Engineering College.

It was renamed in 1854 as Thomason College of Civil Engineering, and it became University of Roorkee in 1947. On September 21, 2001, through an Ordinance issued by the Government of India and an Act of the Parliament, the institute was declared as the nation's seventh Indian Institute of Technology. From Nov 25, 2021 till Nov 24, 2022, IIT Roorkee is celebrating 175 years (1847-2022) of imparting technical education and contributing to the development of the society.

ORGANIZING COMMITTEE

Patron:	Prof. Ajit K. Chaturvedi
Chairman:	Prof. Mukesh Kumar Singhal
Organizing	Prof. Himanshu Jain
Secretaries:	Prof. Rhythm Singh
Organizing Team:	Prof. Sanjeev Kumar Prof. Sonal K. Thengane, Ms. Priya Gupta, Mr. Harshit Varshney, Mr. Md. Mustafa Kamal, Mr. Pankaj Garkoti, Mr. Praveen Kumar Vidyarthi, Mr. Ankush Halba, Ms. Akanksha Chauhan, Ms. Pooja Upadhyay, and Ms. Minakshi Patel

CONTACT DETAILS

Prof. Himanshu Jain, Prof. Rhythm Singh
Assistant Professor,
Department of Hydro and Renewable Energy
Indian Institute of Technology Roorkee,
Roorkee – 247667, Uttarakhand, India
Website : ichre.iitr.ac.in
Email : ichre@iitr.ac.in

Phone no. : +91 1332- 284978, 285148, 285213

Proceedings to be published by
Springer Nature in **Scopus** Indexed
Lecture Notes in Civil Engineering

International Conference on HYDRO AND RENEWABLE ENERGY- NET-ZERO CARBON ENERGY SYSTEMS

October 17-18, 2022



Organized by :

Department of Hydro and Renewable Energy,
Indian Institute of Technology Roorkee ,
Roorkee – 247667, Uttarakhand, India.

DEPARTMENT OF HYDRO AND RENEWABLE ENERGY

Department of Hydro and Renewable Energy (HRED) formerly Alternate Hydro Energy Centre, an academic department of Indian Institute of Technology, Roorkee was established in the year 1982 and is going to complete its Ruby jubilee this year. The vision of HRED is to tap the huge renewable energy potential available in the country and to build up the expertise and the power generation capacity through the research and development in the areas of small hydro and other renewable energy sources.



CONFERENCE OVERVIEW

This conference will provide a platform for national and international experts to discuss pathways to achieving net-zero carbon energy systems. Given the wide range of advancements that need to be in place for net zero energy systems, papers will be invited on eight tracks that are listed below. The topics have been selected to cover all aspects of energy systems- energy generation, energy storage, grid integration, and policies, and regulations required to providing an enabling environment for greening the energy systems. A panel session on day 2 of the conference will also be organized to get views of experts from academia, industry, and government on the developments required to achieve net zero energy goals. To enable wide dissemination of the research presented in the conference, the proceedings shall be published by a reputed publisher as an edited book.

THEME OF THE CONFERENCE

The theme of conference aligns with the Honorable Prime Minister's commitment at COP26 for creating net zero carbon energy systems in India by 2070. It will consist of eight technical tracks as listed below.

TRACKS

Technical papers are invited on the following topics:

1. Role of hydro energy and pumped storage hydro in power sector decarbonization.
2. Advances in established renewable energy technologies.
3. Upcoming renewable energy technologies.
4. Energy storage development and deployment.
5. Grid integration challenges and opportunities.
6. Role of distributed energy resources in net-zero carbon energy systems.
7. Negative emission technologies.
8. Policies and regulations for achieving net zero carbon Goals

Other relevant papers are also welcome.



CONFERENCE FEE

India/SAARC countries		
Participant Category	Early bird rate (till Sep 15, 2022)	Late registration (after Sep 15, 2022)
Students	INR 600	INR 1,200
Academicians	INR 1,800	INR 2,400
Industry professionals	INR 3,000	INR 3,600
Non-SAARC countries		
Students	USD 50	USD 75
Others	USD 100	USD 150

Conference fee includes registration kit, two lunches, one gala dinner, and tea-coffee between technical sessions.

WHO CAN ATTEND

This international conference will be of most benefit to researchers, academicians, industry professionals, engineers, policy makers, government officials, and doctoral and master's students.

ACCOMMODATION

Limited accommodation may be made available on request if available in the institute guest houses, else it has to be arranged in hotels around the campus. There are many good hotels of different star ratings near the campus.

