

Five-Days Offline Short-Term Course

on

“Water Reuse: Treatment Trend and Exposure Risks”(WR-TTER-2022)

June 6th- June 10th, 2022



Coordinators

Dr. Surjit Singh Katoch
Dr. Ray Singh Meena

Organized by



Department of Civil Engineering
National Institute of Technology Hamirpur
Hamirpur-177005 (H.P.)

About the Institute

National Institute of Technology Hamirpur is one of the thirty-one NITs of the country, which came into existence on 7th August 1986 as Regional Engineering College, a joint and cooperative enterprise of the Govt. of India and Govt. of Himachal Pradesh. On 26th June 2002, REC Hamirpur was awarded the status of Deemed University and upgraded to National Institute of Technology. The Institute offers Bachelor, Master and Doctoral programs in Engineering, Sciences, Architecture, Management and Humanities. Various programs serve the purpose of building a comprehensive foundation of knowledge and of enhancing confidence, creativity and innovation in its students.

About the Department

National Institute of Technology, Hamirpur was established in the year 1986 and the Civil Engineering Department is part of the institute since its inception. Civil Engineering is the branch with a lot of diversity right from structural to transportation engineering, environmental to hydrology to hydraulics engineering, geology to geo-technology to earthquake engineering. Being one of the primary Engineering Departments of the Institute, the Department of Civil Engineering offers B. Tech., M. Tech. and Ph.D. degree programs. The Department has been imparting quality education at undergraduate and post-graduate level. The faculty members have been active in teaching, research as well as academic activities.

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About the e-STC

This short course provides an opportunity to understand requirements of water reuse for different application and associated human health risks involved. An understanding of different contaminants, their associated toxicity to humans, fundamentals and applications of risk assessment for humans are essential skills to conduct human health risk assessment.

Focus will be given in water treatment method, water reuse scenario and health exposure risks. Human exposures to antibiotics, nanomaterials and viruses during water reuse activities will be covered. Objectives of this short-term course are as follows:

- To introduce concepts of water treatment for reuse purposes
- To introduce issues related emerging contaminants,
- To provide hands-on exercise of water reuse scenario and estimating health risks

Water is a precondition to life on Earth and is essential for sustainable development. Safe drinking water and sanitation are human rights. Water including sanitation is critical for socio-economic development, food security, and healthy ecosystems, and is vital for reducing the global burden of disease and improving the health, welfare, and productivity of populations. The global climate change crisis is inextricably linked to water reuse of treated waste water.

The primary aim of this STC & e-STC is to enhance technical and professional competency as well as organizing skills of the faculty members in the field of water resources engineering. The course will promote interaction with professionals working in specific areas of research in Academic Institutions, Research Labs, and Industries. Also, exposure will be provided to the audience from renowned speakers on the latest developments in Academia, Research, and Industry. This program will bring a positive transformation among the faculty members, research scholars, and participants from industries towards research work, and enable the participants to develop

competence in understanding recent advances in the proposed topic of the course.

Topics to be covered

- Introduction of course, water pollution and water quality policy
- Emerging water contaminants: Introduction, monitoring and modeling issues
- Emerging air contaminants: Introduction, monitoring and modeling issues
- Removal of emerging contaminants
- Risk Assessment Framework
- Toxicology for Human Health Risk Assessment
- Human Health Risk Assessment: Considerations and Data Requirements
- Membrane technology

Resource Persons

- Prof. Dr. Arun, IIT Delhi
- Dr. Surjit Singh Katoch, NIT Hamirpur
- Dr. Dharmendra, NIT Hamirpur

• Important Dates

Last date (Online Registration): 03-06-2022

On the spot Registration : based on availability of seats

Confirmation by E-mail: 04-06-2022

STC Duration: 06-06-2022 to 10-06-2022

Eligibility

This program is open to faculty members, scientists, Engineers, research scholars, PG & UG Students and industrial personnel.

e-Registration

Registration Fee: Through SBI Collect

(a) **Rs. 1000/- for students**

- (b) **Rs. 2000 for participants from Academia/R&D Labs**
 - (c) **Rs. 4000 for participants from Industry**
 - (d) **Boarding and Lodging/Hospitality to participants (Breakfast, Lunch, Dinner, Tea etc.)**
- On the spot payment to be born by the participant.**

How to Apply

The interested candidates must deposit the non-refundable registration fee through SBI collect with the following procedure:

- Go to SBI collect and choose Himachal Pradesh as the state of Institution and type of Institution as an educational institute.
- Choose NIT Hamirpur from Name of the Institutions and Select payment category as WORKSHOP FDP STC CONFERENCE.
<https://www.onlinesbi.com/sbicollect/icollecthome.htm>
- Generate the payment slip and attach it with the registration form available at the following link.
<https://forms.gle/ft5fLbAP8DMaFjtT6>

Notes: *Applications will be accepted on first-cum-first serve basis.

*Ensure the link is open before you pay the fee.

*Venue: NIT Hamirpur Civil Department

Certification

certificates will be provided to the participants, with at least 80% attendance, upon successful completion of the program.

Contact Details

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