

THREE DAYS EXECUTIVE TRAINING on

**Integrated Approaches of Sustainable
Groundwater Resource Management
near Mining & Industrial Areas:
Recharge Strategies and Quality
Enhancement Measures**

18th – 20th December 2024



Course Coordinator
Prof. Prasoon Kumar Singh

Organized by



Landuse & Hydrogeology Lab
Department of Environment Science and Engineering
Indian Institute of Technology (Indian School of Mines)
Dhanbad-826004, Jharkhand, India



❖ ABOUT IIT (ISM), DHANBAD

Indian Institute of Technology (Indian School of Mines) Dhanbad, popularly known as IIT (ISM) Dhanbad, is a premier technical institution located in Dhanbad, Jharkhand, India. Established in 9th December, 1926 as the Indian School of Mines by Lord Irwin, the then Viceroy of India to address the need for trained manpower related to mining activities in the country with disciplines of Mining and Applied Geology. It became an IIT in 2016. Known for its strong emphasis on mining and earth sciences, IIT (ISM) Dhanbad offers a wide range of undergraduate, postgraduate, and doctoral programs in engineering, applied sciences, management, and humanities. The institute has a rich history and has been at the forefront of research and education in mining, petroleum, and earth sciences. IIT (ISM) Dhanbad boasts a sprawling campus equipped with state-of-the-art facilities, including modern laboratories, research centres, and libraries. The institute has a distinguished faculty known for its expertise and research contributions in various fields. Students at IIT (ISM) Dhanbad benefit from a rigorous academic curriculum, supplemented by hands-on training and industry exposure.

Apart from academics, IIT (ISM) Dhanbad also offers a vibrant campus life with a range of extracurricular activities, clubs, and cultural events. The institute has a strong alumni network, with many graduates holding prestigious positions in academia, industry, and government sectors worldwide. In conclusion, IIT (ISM) Dhanbad is renowned for its academic excellence, research contributions, and holistic development of students, making it one of the most sought-after institutions for higher education in India. It is situated at the heart of the country's prime coking coal belt, 260 km from Kolkata with a campus spreaded over an area of 393 acres (with 218 acres of existing campus and 175 acres under acquisition and development).

❖ ABOUT THE DEPARTMENT OF ESE

The Department of ESE is created out of the existing Centre of Mining Environment (established in 1987 as CENTRE OF EXCELLENCE in the field of Mine Environment by MoEF, Govt. of India) at Indian School of Mines in June 2007 with the commencement of a regular B. Tech. program in Environmental Engineering under IIT-JEE (first of its kind offered by any national institute).

The Department is remaining in the forefront of Environmental education, research and consultancy services in India. The ESE Department has well qualified faculty and staff dedicated to applied research in the field of Environmental Science & Engineering, Mine Environment and Environmental Geology. The Department has also excellent computing facilities with state-of-the-art software's like ARC-GIS, MODFLOW, AUTOMATIC WATER LEVEL RECORDER, AQUIFER TEST PRO, AQUA CHEM, SUPERMAP GIS & SPSS, etc. The academic curricula is continuously revised to keep abreast of the industry needs as well as vision and an all-round development of the students is aimed at through practical training, field camps and study tours, seminars, project work, inter institute student technical meets and a host of extracurricular activities.



❖ ABOUT THE COURSE

The course on " Integrated Approaches of Sustainable Groundwater Resource Management near Mining & Industrial Areas: Recharge Strategies and Quality Enhancement Measures" is designed to provide a comprehensive understanding of the challenges and solutions related to groundwater management in mining and different industrial regions. The course will cover a range of topics, including the impact of mining activities on groundwater resources, innovative recharge techniques, and remediation strategies for improving groundwater quality.

Participants will learn about the importance of sustainable groundwater resource management in mining and industrial areas and explore the various factors that contribute to groundwater depletion and contamination. The course will also highlight the role of recharge strategies in replenishing dried water sources and ensuring long-term water availability for both mining operations and local communities. Through a combination of lectures, case studies, and hands-on exercises, participants will gain practical skills in assessing groundwater quality, designing recharge systems, regulatory policies related to groundwater resource extraction and conservation and implementing sustainable groundwater management practices. The course will also emphasize the importance of stakeholder engagement and collaboration in addressing groundwater challenges in mining areas.

Overall, the course aims to equip participants with the knowledge and tools needed to implement integrated approaches to groundwater management that are environmentally sustainable, economically viable, and socially acceptable in mining regions.



❖ COURSE CONTENT

Following probable topics will be covered:

- Introduction to groundwater resource management.
- Factors influencing recharge in mining and industrial areas.
- Groundwater resource quality assessment.
- Remediation technologies for groundwater quality enhancement.
- Regulatory policies related to groundwater resource extraction and conservation.
- Technological innovations for sustainable management of the resource.
- Groundwater issues for Environmental Impact Assessment.
- Outlines for Water Auditing in mining & industrial areas

❖ RESOURCE PERSONS

Faculty members of IIT(ISM) Dhanbad and Guest faculty members from other premier Institution/Organization/Industry will deliver the lectures.

❖ WHO CAN ATTEND

- Executives, engineers, and researchers from manufacturing, service, and government organizations, including R&D laboratories.
- Students at all levels (B.Tech/MSc/M.Tech/PhD).
- Faculty from reputed academic institutions and technical institutions.
- Industry officials, Executives engaged in environmental management & planning.

❖ IMPORTANT DATES

Last date for Registration - **30th September 2024**

(Selection will be based on the first come first served basis)

❖ VENUE

From 18th – 20th December 2024 at IIT (ISM) Institute Industry Interaction Facility, NBCC Shopping Centre, 2nd floor, Action area 1, CE Block, Newtown, Rajarhat-700156, Kolkata, West Bengal.



❖ HOW TO APPLY

Applicants are requested to send the hard copy of the filled registration form along with course fee through DD/RTGS the Demand Draft/ Proof for online transfer by speed post/scanned copy by E-mail to the Course Coordinator. The Demand Draft should be drawn in favour of “**Registrar, IIT (ISM) Dhanbad**” payable at Dhanbad.

❖ NOMINATION & PAYMENT

Nomination & Payment: The nomination letter should reach to the Course Coordinator on or before **30th September, 2024** (e-mail/post) along with course fee through DD/RTGS

❖ COURSE FEE

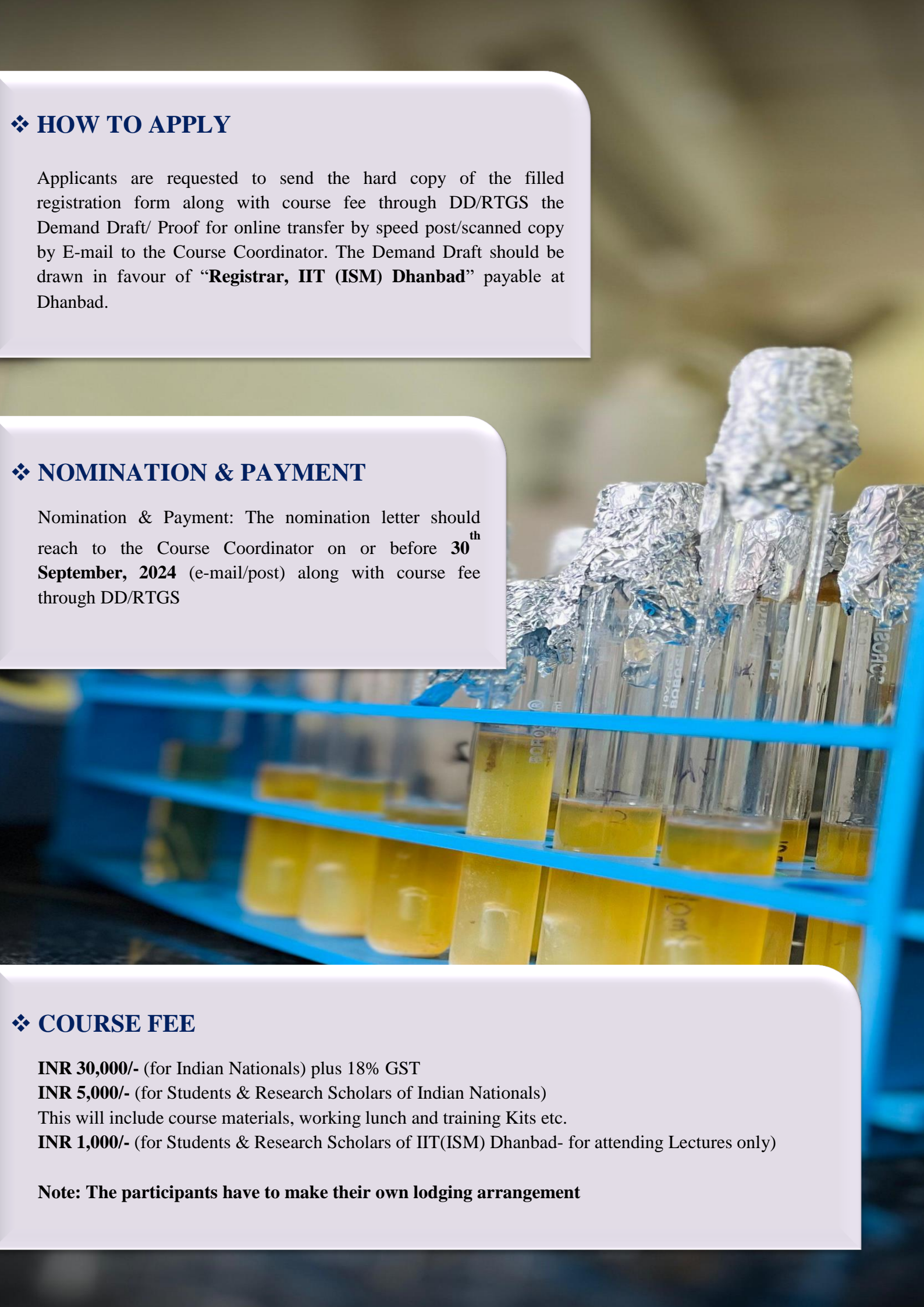
INR 30,000/- (for Indian Nationals) plus 18% GST

INR 5,000/- (for Students & Research Scholars of Indian Nationals)

This will include course materials, working lunch and training Kits etc.

INR 1,000/- (for Students & Research Scholars of IIT(ISM) Dhanbad- for attending Lectures only)

Note: The participants have to make their own lodging arrangement



❖ BANK ACCOUNT DETAILS

Bank & Branch:

Canara Bank, Seraidhela, Dhanbad

Account Holder: Registrar,

Indian Institute of Technology (ISM),
Dhanbad

Account Number: 0986101024892

IFSC Code: CNRB0000986

MICR Code: 826015003

RTGS: 0000986

A copy of e-payment transaction details is requested to be sent to the Course Coordinator

IIT(ISM), Dhanbad, being an Educational Institute, is exempted from Income Tax.

PAN No. of ISM: AA AI0686D; GSTIN: 20AAAAAI0686D1ZA

Being an educational institute IIT (ISM) is exempted of Income Tax

COURSE COORDINATOR

Prof. Prasoon Kumar Singh

Professor

Landuse & Hydrogeology Lab

Dept. of Environmental Science & Engineering

Indian Institute of Technology (Indian School of Mines),

Dhanbad - 826004, JHARKHAND

Mobile: +91-9431711057; E-mail: pks0506@iitism.ac.in

Three days Training Program

On

Integrated Approaches of Sustainable Groundwater Resource Management near Mining & Industrial Areas: Recharge Strategies and Quality Enhancement Measures

18th – 20th December 2024

Venue:

IIT (ISM) INSTITUTE INDUSTRY INTERACTION FACILITY,
NBCC SHOPPING CENTRE, 2ND FLOOR, ACTION AREA 1, CE BLOCK,
NEWTOWN, RAJARHAT-700156, KOLKATA, WEST BENGAL

To, _____



By

Prof. Prasoon Kumar Singh

Professor & Course –Coordinator

Landuse & Hydrogeology Lab

Department of Environmental Science & Engineering

Indian Institute of Technology (Indian School of Mines), Dhanbad-826 004

Mobile: +91-9431711057; E-mail: pks0506@iitism.ac.in

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Department of Environmental Science & Engineering

Indian Institute of Technology (Indian School of Mines)

DHANBAD - 826004 (Jharkhand), INDIA

REGISTRATION FORM

- 1. Full Name (in block letters):
- 2. Designation:
- 3. Mobile No.....
- 4. Mailing address:
-
- 5. Phone:
Office: Mobile:
- 6. Email:
- 7. Remittance of Registration Fee:
- 8. DD. No. /Cash Amount:Drawn on.....
- Place:
- Date:

Signature

Note: Last date of application is **September 30th, 2024.**

Send the filled registration form as scanned copy by e-mail to pks0506@iitism.ac.in