

Training Course on Groundwater Flow Modelling for SW-GW interaction using MODFLOW

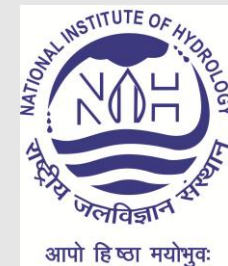


November 16–20, 2026



National Institute of Hydrology, Roorkee

DoWR, RD & GR, MoJS, Govt. of India



About the course

Groundwater flow modeling is an essential component of modern water resources management, enabling professionals to simulate aquifer behavior, evaluate extraction scenarios, and predict contaminant transport.

This training course is designed to build the technical capacity of hydrogeologists, groundwater professionals, researchers, and students by introducing them to advanced groundwater flow modeling using MODFLOW software. Participants will gain hands-on experience through a structured 5-day program covering everything from conceptual model formulation to complex simulations and real-world applications. **More emphasis will be given on Hands-On exercises**

Why This Course?

With increasing water scarcity and complex hydrogeological challenges, there is a growing demand for professionals who can effectively apply modern tools to analyze aquifer behavior and groundwater dynamics. This course will help:

- ❑ Bridge the gap between theory and field application.
- ❑ Enhance decision-making capabilities for groundwater resource development and management.
- ❑ Equip participants with software skills essential for academic research, consultancy, or government roles.

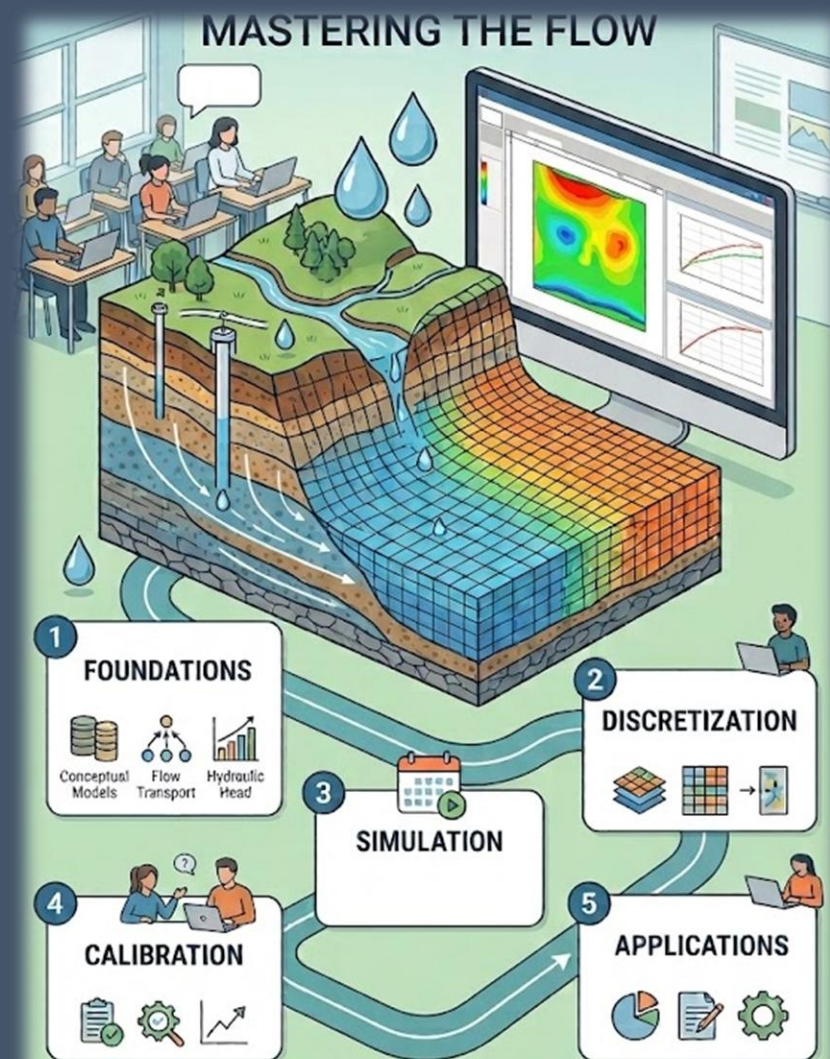
Course coordinators

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Course Director

Dr. Y.R.S Rao,
Director, NIH



Course Content

The training program will be conducted in physical mode and will consist of Lectures and hands-on by experts in the field of Groundwater hydrology. The following topics, ranging from basic to advance, will be covered.

- ✓ FOUNDATIONS - Conceptual Models & Data (Conceptual Models, Data Processing).
- ✓ DISCRETIZATION - Grid Design & Boundaries.
- ✓ SIMULATION - GW Flow .
- ✓ CALIBRATION - Sensitivity & Optimization.
- ✓ APPLICATIONS - Predictions & Decision Making

VENUE: National Institute Of Hydrology, Roorkee
Jal Vigyan Bhawan, Roorkee – 247667, Uttarakhand (INDIA)

Registration

The course fee per participant shall be Rs. 10620/- (including GST) for students and Rs. 16,520/- (including GST) for working professionals. The fee covers training kit, Working Lunch and accommodation on a sharing basis at the NIH guest house for the training period. Certificate will be provided to all participants on completion of the course.

The registration is open till **4th November, 2026**. The registration fee is to be paid in-advance through on-line transfer in the bank account provided below.

[Click Here](https://forms.gle/HD2JeZxeYUMfLtsB6) for Registration (<https://forms.gle/HD2JeZxeYUMfLtsB6>).

Account Name: NIH PROJECT
Account No: 4044 0001 0017 4852
Bank: PUNJAB NATIONAL BANK (PNB)
Branch: IIT ROORKEE
IFSC code: PUNB0404400



Register

<https://forms.gle/HD2JeZxeYUMfLtsB6>

****The seats to the course are limited and shall be filled on a first-come first-serve basis after the payment of registration fees and submission of registration form. Participants are required to carry laptops for hands-on exercises during the course.**

National Institute of Hydrology (NIH), Roorkee



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NIH is a premier research and development organization in the area of **hydrology** and **water resources** in India. The Institute was established in 1978, as an autonomous society under the **Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India**, with its headquarters at Roorkee.

NIH is an **ISO 9001:2015** Certified organization.

The Institute undertakes, aides, promotes and coordinates systematic and scientific work in all aspects of hydrology. **Seven Regional Centres** of the Institute are located in different physiographic regions of the country. The scientific and technical credibility of the Institute in conducting hydrological and water resources research is well recognized both at the national and international level.

