

## TRAINING COURSE

on

# CONSERVATION AND MANAGEMENT OF LAKES, WETLANDS AND SPRINGS

(25<sup>th</sup> February-1<sup>st</sup> March, 2019)

at  
NIH, Roorkee



**Organized by**



**National Institute of Hydrology  
Roorkee - 247 667  
(Uttarakhand)**

## INTRODUCTION

The increasing demand for fresh water for various purposes due to ever growing population, calls for proper conservation and management of all the available fresh water resources, including lakes, wetlands and springs. Lakes are quite often the catalysts in the development of the region by supplying water for variety of uses such as drinking and civil water supply, industrial supply, irrigation, aqua-culture, recreation and tourism etc. Springs are primary sources of drinking water in many areas, particularly in the Himalayas. Wetlands are also a critical part of our natural environment. They provide an important range of environmental, social and economic services. They provide habitat for animals and plants and many contain a wide diversity of life, supporting plants and animals that are found nowhere else. Wetlands are the vital link between land and water. Unfortunately many lakes and wetlands are reported to have undergone quantitative and qualitative degradation in the last few decades. They are under increasing stress due to growing demands, urbanization and human interference in the catchments. Heavy sedimentation and siltation, organic pollution, eutrophication, reduced inflows etc. are some of the major problems which are common to most of the lakes and wetlands. Similarly many springs are reported to be going dry. As such, conservation and proper management of lakes, springs and wetlands for the socio-economic benefits of the society, has assumed great significance in recent times.

## OBJECTIVES

To impart knowledge to the field engineers, planners, managers bureaucrats, researchers and academicians about:

- latest approaches for monitoring and investigating the processes in lakes, springs and wetlands
- developing strategies and action plans for conservation and management lakes, wetlands and springs

## COURSE CONTENT

The Training Course will consist of lectures by experts on hydrology of lakes, wetlands and springs from the National Institute of Hydrology, Roorkee. It is intended to cover the theoretical and practical aspects, case studies, tutorials, hands-on in laboratory and field. The course is intended to

be interactive so that problems being experienced by the field organizations could be shared and discussed. In general, the various hydrological and hydro-geological processes, application of advanced techniques such as isotope techniques etc, water balance, sedimentation, eutrophication etc of lakes and wetlands, ILBM approach to conservation and management etc shall be covered.

## WHO CAN PARTICIPATE?

The Training Course is intended for field engineers, junior/middle level officers, managers, bureaucrats and policy makers of various organizations related to Water Resources, Environment, Irrigation, Public Health Engineering, Water Pollution Control, and other related departments of Central and State Governments, Municipal Corporations/local bodies, Lake and Wetland Development Authorities, NGOs and all other govt. and non-govt. agencies concerned with conservation, restoration and management of lakes, wetlands and springs.

## REGISTRATION

The **registration fee** is as follows:

<b>Govt. Employee (Central/State)</b>	<b>= Rs. 3,000/-</b>
<b>NGO's and Industry</b>	<b>= Rs. 4,000/-</b>
<b>Local Bodies/Municipal Corporations</b>	<b>= Rs. 2,000/-</b>
<b>Students/Research Scholar</b>	<b>= Rs. 2,000/-</b>

Accommodation will be arranged on payment basis at NIH guest house. Participants will have to arrange for TA/DA from their own organizations. It is intended to register only a limited number of participants for the course, on first come first served basis. The intending participants are, therefore, requested to register themselves early by filling and mailing the attached registration form preferably by 5<sup>th</sup> February, and latest by 20<sup>th</sup> February, 2019.

## DATE AND VENUE

The Training Course is proposed to be held at the National Institute of Hydrology, Roorkee during 25<sup>th</sup> February-1<sup>st</sup> March, 2019. Roorkee is known as hub of water resources experts in India. Besides NIH, IIT Roorkee and UP Irrigation Research Institutes at Roorkee are contributing significantly to water resources development and management in India. Roorkee is a medium size town located in Haridwar district of Uttarakhand, located at about 170 kms

from Delhi, 32 kms from Haridwar and 90 kms from Dehradun. During the month of February daytime weather would be pleasant but mornings and evenings would be cooler, so participants would need warm clothes.

## ABOUT NIH

National Institute of Hydrology (NIH) is a premier research Institute of India in the field of hydrology. It is an autonomous society under the Ministry of Water Resources, RD & GR, Govt. of India. The main objectives of NIH are to undertake, aid, promote and coordinate systematic and scientific work in all aspects of hydrology. The Institute has six regional centres located at Belgaum, Guwahati, Jammu, Patna, Kakinada and Bhopal. The institute frequently organizes a number of training courses on different aspects of hydrology at Roorkee and other places in India. The institute is well equipped with state of art laboratories and library. For more details, please visit [nihroorkee.gov.in](http://nihroorkee.gov.in)

## COURSE COORDINATOR:

Dr. S.D. Khobragade  
Scientist-F  
Hydrological Investigations Division,  
NIH, Roorkee- 247 667 (Uttarakhand)  
e-mail: [suhas.nihr@gov.in](mailto:suhas.nihr@gov.in)  
Tel: 01332-249220 (O)  
Fax: 01332-272123

## CONVENOR:

Dr. Sudhir Kumar,  
Scientist- G & Head  
Hydrological Investigations Division,  
NIH, Roorkee- 247667 (Uttarakhand)  
Ph: 01332-249308; Fax: 01332-275969  
E-mail: [skumar.nihr@gov.in](mailto:skumar.nihr@gov.in)

**All correspondence/queries should be made with the course coordinator, Dr. S. D. Khobragade**

## For information about NIH, please contact:

Dr. Sharad Kumar Jain  
Director  
National Institute of Hydrology  
Roorkee – 247 667 (Uttarakhand)  
Ph. 01332-272106, Fax: 01332-272123  
E-mail: [director.nihr@gov.in](mailto:director.nihr@gov.in)

# **Registration Form**

Five Days Training Course on

## **CONSERVATION AND MANAGEMENT OF LAKES, WETLANDS AND SPRINGS**

25 February-1 March, 2019 at NIH, Roorkee

Name: Mr/Ms/Dr. ....

Designation: .....

Organization: .....

Address: .....

.....

Telephone No.(Office): .....

Mobile No: .....

E-mail: .....

FaxNo.: .....

Qualification: .....

Field of Specialization: .....

Is accommodation required?: Yes/No

.....  
(Signature of Candidate)

.....

**Sig. & Seal of Sponsoring Authority**

(Note: Photocopy of the form can also be used)

To,

**Dr. S. D. Khobragade  
Scientist F & Course Coordinator  
Hydrological Investigations Division  
National Institute of Hydrology  
Jalvigyan Bhavan  
Roorkee – 247 667 (Uttarakhand)**