

## Topics to be covered during the Workshop

The technical presentations are being planned following sub-themes for general discussions:

- Snowmelt Hydrology
- Climate change impact assessment on water resources
- Remote sensing and GIS Applications in water resources management
- GCM and downscaling
- Extreme events including flood management
- Hydrological modelling

## Resources persons

- Prof. Vinod Gaur, CMAACS Bangalore
- Prof. P. P. Mujumdar, IISc Bangalore
- Prof. M. Shekhar, IISc Bangalore
- Dr. Sharad Jain, NIH Roorkee
- Prof. Anil V. Kulkarni, IISc Bangalore
- Prof. Subashisa Dutta, IIT Guwahati

## Eligibility

Faculty, researchers and scientists who are currently working in the broad field of Water and Environmental Engineering / Science and Geo-Informatics, at various Engineering colleges, universities, R&D institutions and national laboratories.

## Registration

There is no registration fee. Participants are required to send the duly filled registration form attached here before the due date. Selected outstation participants will be paid 2<sup>nd</sup> tier train fare by the shortest route on production of tickets. Boarding and lodging arrangements will be made by the organizers at IIT Guwahati hostels / guest house subjected to availability.

## Important Dates

Last date of receipt of Registration Forms: 16 March 2015

Information about selection of Participants by email: 18 March 2015

## Preamble

Prediction of water availability in space and time has been a challenging task for the fraternity working in the water resources and hydrology. It is now clear that climate change will lead to the intensification of hydrological cycle and will have serious impact water resources, especially in developing countries. The knowledge of hydrology is useful in several areas of water resources such as real-time flood forecasting and flood warning, designing irrigation schemes and managing agricultural productivity, designing dams, water supply, hydropower generation and assessing water balance of the region, etc. Ministry of Earth Sciences (MoES), Government of India has taken an active role in this direction and funded a good number of research to active researchers in the country. The present workshop is being organized to expose young researchers of the country with meaningful research issues related with climate change, hydrology and water resources, and provide an opportunity for better interaction with eminent experts working on aforesaid themes. Participants in the workshop will be arranged in homogeneous groups and interactions will be generated with the expert team to identify a few good projects for each group. Each identified group will be mentored by one of the members of the expert team.

## Objectives of the programme

- To create awareness about priority issues for research in the area of climate change issues, concept of integrated water resources management in relation to climate change
- To develop small networking groups for taking up collaborative research on the themes of workshop and deliver tangible outputs for the benefits of the society

## Course Faculty

Eminent researchers from IITs/ IISc/ NITs/ NIH and other organizations will deliver expert lectures on a wide range of topics related to climate change, hydrology, water resources and geo-informatics.



सत्यमेव जयते

Ministry of Earth Sciences  
Government of India

*Sponsored*

One day Workshop

On

**Research opportunities in Hydrology  
and Water Resources under Climate  
Change**

April 03, 2015



Coordinator

**Dr. Subashisa Dutta**  
Professor and Head

Co-coordinator

**Dr. Manish Kumar Goyal**  
Assistant Professor

Organised by  
Department of Civil Engineering  
Indian Institute of Technology Guwahati (IITG)  
Amingaon, Guwahati, Assam-781039, India

## About the Institution

Indian Institute of Technology Guwahati (IITG), is a public institution established by the Government of India, located in the state of Assam in India. It is the sixth Indian Institute of Technology established in India. IITG is officially recognised as an Institute of National Importance by the Government of India and was set up with the objectives to provide high quality Technical education to meet the needs of the Nation in the present competitive world.

The campus of IIT Guwahati is spread over 285 hectares of land on the north bank of River Brahmaputra at around 20 km from the Guwahati city. With the majestic Brahmaputra on one side, and with hills and vast open spaces on others, the campus provides an ideal setting for advanced learning and research.

The Department of Civil Engineering IIT Guwahati since its formation has been striving hard to improve the civil aspects of India and is considered to be the pioneer in the region in this aspect. The Department offers Under Graduate course in Civil Engineering and Post Graduate Programs in the following areas:

1. **Environmental Engineering**
2. **Geotechnical Engineering**
3. **Infrastructure Engineering and Management**
4. **Structural Engineering**
5. **Transportation Systems Engineering**
6. **Water Resources Engineering and Management**

The Department offers Ph.D. Programs to promote basic and applied research activities in above mentioned areas of Civil engineering. The consulting services in diverse fields of Civil Engineering are provided to the government organizations, corporate and private sectors.

### For more information, contact us

Prof. Subashisa Dutta, Coordinator  
Dr. Manish Kumar Goyal, Co-coordinator

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## Registration Form

(Type/ written applications to be submitted)  
**Workshop on Research opportunities in Hydrology and Water Resources under Climate Change**  
April 03, 2015, IIT Guwahati

1. Name of the Applicant  
(Block letters)
2. Age : Sex: M/ F
3. Current Affiliation and Designation:
4. Address for correspondence:
5. Highest educational qualification

Degree	Specialization	Institute	Year

6. Sponsored research projects (Limit to most recent three projects, if you submitted a proposal but were not successful in obtaining the funding), pl. Include it in this list

Title of the project/ proposal	Funding agency	Status completed/ ongoing/ not funded/ under review etc.

7. Details of three publications

Brief description of research you would like to pursue in the area of climate change, hydrology and water resources (use space overleaf)

E-mail ID :

Mobile number :

Experience (Years) : Teaching:  
Research/ Others:

Require Lodging / Boarding Facility? Yes / No

### Declaration

The information submitted herein is correct to the best of my knowledge. I agree to abide by the rules and regulations governing the MoES and IITG.

Place:

Date: Signature of the Applicant

Mr./ Mrs./ Dr. .... is an employee of our Institution and permitted to attend the Workshop on “**Research opportunities in Hydrology and Water Resources under Climate Change**” to be held at IIT Guwahati on April 03, 2015.

Date:

Place: Signature & Seal of the Head of Institution

The Completed Registration Form should be sent by Fax/ Speed Post/ E-Mail to:

Prof. Subashisa Dutta/Dr. Manish Kumar Goyal,  
Department of Civil Engineering, Indian Institute of Technology Guwahati, Guwahati, Assam- 781039, India  
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