

## **ABOUT THE INSTITUTE**

National Institute of Technology (NIT), Rourkela, was founded as Regional Engineering College, Rourkela, in 1961. It is a prestigious Institute with a reputation for excellence at both undergraduate and postgraduate levels, fostering the spirit of national integration among the students, close interaction with industry and a strong emphasis on basic and applied research. It has been consistently ranked within the TOP 20 engineering institutes for five consecutive years as per MHRD's NIRF Ranking, Govt. of India.

Website www.nitrkl.ac.in

# ABOUT THE CIVIL ENGINERRING DEPARTMENT

Civil engineering is one of the oldest departments of NIT Rourkela is earnestly working to develop solutions to major sustainability challenges of the country. The Department is actively involved in basic and applied research in the field of Structural, Geotechnical, Transportation, Water Resources and Environmental Engineering. More details can be found on <a href="https://www.nitrkl.ac.in/CE">https://www.nitrkl.ac.in/CE</a>



A 5-Day Workshop on

# Mahanadi River Basin Management (MRBM)

Civil Engineering Department, NIT Rourkela (5<sup>th</sup> Nov – 9<sup>th</sup> Nov 2024)

## **Patron**

Prof. K. Umamaheshwar Rao, Director, NIT Rourkela

## Chairman

Prof. Suresh Prasad Singh
Head, Civil Engineering Department,
NIT Rourkela

## **Coordinator**

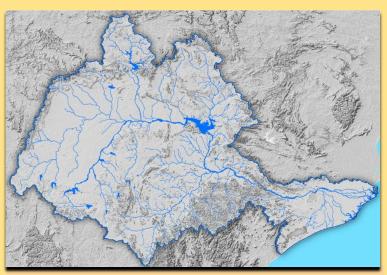
**Prof. Kishanjit Kumar Khatua** 

#### **Convenors**

Prof. Kakoli Karar Paul
Prof. Sanat Nalini Sahoo
Prof. Ratnakar Swain
Prof. Anurag Sharma
Prof. Jatin Anand
Prof. Minakshee
Mahananda
Prof. Surajit Das
Prof. Sk.Md. Eqeenuddin
Prof. Angana Sarkar

#### **Co-Convenors**

Prof. Binod Bihari Sahu Prof. Jagabandhu Panda Prof. Santos Kumar Das Prof. Vikas Kumar Das Prof. Prateeksha Mahamalik Prof. Maithili Mohanty



## **ABOUT CENTER**

cMahanadi is a centre as a part of CEWRE that has been functioning since April 2024 under the Department of Civil Engineering. More details can be found on

https://cmahanadi.nitrkl.ac.in/

## **ABOUT THE PROGRAM (MRBM)**

MRBM is an excellent platform for researchers, faculties, engineers, industry persons and professionals, to gain knowledge on Mahanadi River Basin and its components. Every river in nature is characterised by functions that define its horological, chemical, geological, spatial and ecological integrity together. Rivers impacted by human activities in the river basin and something within the river channels themselves lose some of their functional capabilities, which compromises their integral nature. River restoration, therefore, is necessary to make such rivers functionally able (or capable) once again to ensure optimal ecosystem services for human benefit. This is the basic concept of Samarth (meaning "Able") Ganga as applied to River Ganga and any other river since Ganga denotes all rivers in the Indian context. Similarly, the same could be applied to the Mahanadi River Basin for its restoration. This workshop will give an insight into the factors and how to regain the natural state of the river which is a lifeline for people of Odisha.

## **OBJECTIVES**

Mahanadi River Basin Management aims to restore and sustain the integrity of the Mahanadi River system while enhancing its ecological health. This initiative seeks to resolve conflicts arising from human land and water use across the entire river basin, ensuring a balanced and sustainable approach to resource management. This entails adequate provision for natural resources (e.g. soil, water, energy, flora and fauna) conservation and accommodating the requirements increasing development, urbanization. infrastructure industrialization and agriculture while ensuring that the following fundamental aspects of the river system are protected:

- a) Continuous River flow (Aviral Dhara)
- b) Unpolluted River flow (Nirmal Dhara)
- c) Longitudinal and lateral connectivity
- d)Adequate space for all essential river functions

## **IMPORTANT DATES**

Last date for registration	31 <sup>st</sup> October, 2024
Confirmation mail	1 <sup>st</sup> November, 2024
Workshop dates	5 <sup>th</sup> -9 <sup>th</sup> November, 2024

## **EXPERTS**

- Top officials from Water Resources Deptt, Odisha, CWC, SPCB, CGWB, Disaster Management, Urban Development Authority.
- **Experts involved in c-Ganga project** and Experienced Academicians form premier institutes like IITs, NITs and reputed universities.

#### **PROGRAM DETAILS**

## Day 1: Mahanadi River Basin Overview & Challenges

- Keynotes: "Understanding the Mahanadi River Basin and the Challenges
- Panel Discussions: "Tackling Water Challenges: River Hazards, Floods, Droughts, Pollutions, Erosions, Sedimentation"

### Day 2: Data Collection & River Basin Management

- Keynote: "Data Availability, Data applications and River Basin Management"
- Panel Discussions: "Procuring Data: Challenges, Applications & Solutions"

#### Day 3: Aviral Dhara and Nirmal Dhara

- Keynotes: "Hydraulics and Hydrological Models"
- Panel Discussions: "Integrating Models for continuous Water Flow and maintaining the Quality"

## Day 4: Sustainable Agriculture, Geological Safeguarding, and River Hazards

- Keynotes: "Geological Safeguarding, river hazards and Basin Protection from Natural Disasters and Sustainable Agriculture: Tools & Techniques"
- Panel Discussions: "Building Resilience to erosions, sedimentations, Floods, Droughts and River Hazards"

## Day 5: Ecology, Climate Resilience Environmental Knowledge Building & Policies

- Keynote: " Ecology and Environmental impacts, Climate Resilience in the Mahanadi River Basin"
- Panel Discussions: "Policy and Stakeholder Engagement for Sustainable Basin Management"

#### **Participants**

Engineers/administrators/ Scientists /Faculty members/ researchers/ social workers interested and working in River related issues and for river Basin Management can register.

#### REGISTRATION

The participant can register in the google form <a href="https://forms.gle/bJNGxveR3ov4taoTA">https://forms.gle/bJNGxveR3ov4taoTA</a>

## **Registration Fee**

For online participants	8000/-
For offline participants	10000/-

Registration fee includes Study material, certificate and working lunch.

#### **ACCOMMODATION**

Accommodation will be provided at the Institute guest house as per availability on a payment basis

Registration fee can be paid online via NEFT/RTGS/IMPS using the following information:

Name: CONTINUING EDUCATION NIT ROURKELA

A/C No.: 101 389 517 84 Bank: State Bank of India

**Branch: NIT Campus Rourkela** 

IFSC Code: SBIN0002109

### **Contacts**

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