



### ABOUT NIT JAMSHEDPUR

National Institute of Technology Jamshedpur is an Institution of National Importance, by an Act of Parliament (Act 29 of 2007) namely, the National Institutes of Technology Act, 2007, which received the assent of the President of India on the 5th June, 2007. This was formerly known as Regional Institute of Technology (RIT) Jamshedpur and was established on 15th August 1960 with the aim of nurturing young engineers for economic growth of the Nation. NIT Jamshedpur is situated in the western part of the city Jamshedpur. The flowing river Kharkai and picturesque backdrop of low hills on one side, and large tracts of forest on the other side, make the 341 acres of rolling campus an ideal place for higher learning and research. NIT Jamshedpur has well qualified faculty and dedicated supporting staff.

### SCIENTIFIC ADVISORY COMMITTEE

- Prof. M. Perumal, Dept. of Hydrology, IIT Roorkee
- Sri. Rakesh Kashyap, Sr. Joint Commissioner, National Hydrology Project, New Delhi.
- Prof. S. Mohan, Dept. of Civil Engg., IIT Madras
- Prof. P. P. Mujumdar, IISC, Bangalore
- Prof. K. C. Patra, Civil Engg. Dept., NIT Rourkela
- Prof. Anand Raj, NIT Warangal
- Prof. S. Balaprasad, Andhra Univ., Andhra Pradesh
- Dr. Venu Chandra, Dept. of Civil Engg., IIT Madras
- Er. Harihar Mohanthy, EE, Irri. Engg. Dept, Bhubaneswar, Orissa
- Er. Sanjay Kumar, Chief Engineer., Water Resources Dept. Govt. of Jharkhand, Ranchi
- Dr. Keshav Prasad, Dept. of Civil Engg. IIT BHU
- Prof. A. K. Choudhary, Registrar (I/C), NIT Jamshedpur
- Prof. R. V. Sharma, Dean, R&C, NIT Jamshedpur
- Prof. Prabha Chand, Dean, Faculty, NIT Jamshedpur.
- Dr. Ch Madhusundana Rao, Coordinator, TEQIP, NIT Jamshedpur

### CHIEF PATRON

*Prof. Karunesh Kumar Shukla  
Director, NIT Jamshedpur*

### PATRON

*Dr. R. P. Singh  
Head, Department of Civil Engg.  
NIT Jamshedpur*

### CHAIRMAN

*Dr. Chintalacheruvu Madhusudana Rao  
Associate Professor, Department of Civil Engg.  
NIT Jamshedpur*

### ORGANIZING SECRETARIES

*Dr. Sangeeta Kumari  
Assistant Professor, Department of Civil Engg.  
NIT Jamshedpur*  
*Mr. Nigam Prakash  
Associate Professor, Department of Civil Engg.  
NIT Jamshedpur*

### TECHNICAL ADVISORY COMMITTEE

- Dr. B. Sahoo, School of Water Resources Engg. & Management, IIT Kharagpur
- Dr. M.K. Goyal, Dept. of Civil Engg. IIT Indore
- Dr. Shashidhar, Civil Engg. Dept., IIT Hyderabad
- Dr. Deepak Jhahharia, Dept. of Soil & Water Conservation Engg., CAEPHT, CAU, Imphal
- Prof. Venkata Rathnam E, Civil Engg. Dept., NIT Warangal
- Prof. M Anjaneya Prasad, Osmania University, Hyderabad
- Prof. Lal Bahadur Roy, Civil Engg. Dept., NIT Patna
- Prof. G. Venkata Ramana, Principal, Aurora's Technological and Management Academy, Hyderabad
- Dr. D.G. Regulwar, Deptt. of Civil Engg., Govt. College of Engg. Aurangabad
- Dr. R.V. Kale, Scientist D, WHRC, NIH Jammu
- Dr. J.P. Patra, Scientist D, SWHD, NIH Roorkee
- Dr. Venkata Reddy, Dept. of Civil Engg. NIT Warangal
- Dr. M.K. Choudhary, Dept. of Civil Engg. MANIT Bhopal
- Dr. Kirthi Avishek, Dept. of Civil Engg & Env. Engg., BIT Mesra
- Dr. S.K. Pramada, Civil Engg. Dept., NIT Calicut
- Dr. Santosh Murlidhar Pingale, Scientist C, NIH Roorkee
- Dr. Rehana Shaik, IIIT Hyderabad
- Dr. Swetha H R, NIT Karnataka
- Er. Chandrakant Chandan, JEE, Water Resources Dept. Govt. of Jharkhand, Ranchi

### ORGANIZING COMMITTEE

- All Faculty Members, Research Scholars, M.Tech Students & B.Tech Final Year Students of Civil Engineering Department, NIT Jamshedpur



Published by:



Sponsored by:



Technical Education Quality  
Improvement Programme

Organized by:

Department of Civil Engineering  
National Institute of Technology Jamshedpur  
Jamshedpur-831014, Jharkhand (INDIA)

## ABOUT AMIWRE-2020

Water plays a vital role in our daily life. The modelling of water resources system is becoming complex and more challenging due to its increasing demands and changing climates. Thus, a proper management of the available water resources (surface and ground water), flood and drought controls, and improvement of water quality must be address in an advance level of sustainable development of the environment. Therefore, various modelling techniques, climate change impacts, optimal distribution networks, geospatial techniques etc. need to be discussed thoroughly. This conference aims to find the solutions to these challenges of water resources. The objective of the conference is to provide a platform for the scientists, researchers, practitioners across the country to discuss and share their knowledge in the wide fields of water resources engineering towards sustainable developments.

### THEMES OF THE CONFERENCE:

- **River Basin Planning and Development**
- **Reservoir Planning and Management**
- **Integrated Water Management**
- **Reservoir Sedimentation**
- **Soil Erosion and Sedimentation**
- **Agricultural Technologies for Climate Change Mitigation**
- **Uncertainty Analysis in Hydrology**
- **Water Distribution Networks**
- **Floods and Droughts Management**
- **Water Quality Modelling**
- **Environmental Modelling**
- **Environmental Impact Assessment**
- **Urban Water Management**
- **Open Channel Hydraulics**
- **Hydraulic Structures**
- **Groundwater Hydraulics**
- **Groundwater Flow and Contaminant Transport Modelling**
- **Computational Fluid Dynamics**
- **Ocean Engineering**
- **HEC-RAC, SWAT, MIKE, MODFLOW Models Applications**
- **Numerical Analysis in Water Resources Engineering**
- **Climate Change Impacts on Hydrology**
- **Optimization Techniques in Water Resources**
- **Soft Computing Techniques and Applications in Water Resources**
- **Remote Sensing / Geospatial Techniques in Water Resources**

## CALL FOR PAPERS

Research papers are invited from Faculty, Research Scholars, Postgraduate students, Design Engineers, Industrialists, R & D personnel and practitioners working in water resources and related fields. The abstract shall be submitted within 300 words along with Title, Author names, Affiliations, Address for correspondence and Emails of the authors.

All submissions should be done through easychair.

<https://easychair.org/conferences/?conf=amiwre2020>

Selected Papers will be published in Springer Proceedings.

### VOLUME EDITORS FOR CONFERENCE PROCEEDINGS IN SPRINGER:

1. **Dr. Ch. Madhusudana Rao**, Associate Professor, Department of Civil Engineering, NIT Jamshedpur, Jharkhand.
2. **Prof K. C. Patra**, Professor, Civil Engineering Department, Former Head and Dean (AR), National Institute of Technology Rourkela, Odisha.
3. **Dr. Deepak Jhajharia**, Associate Professor, College of Agricultural Engineering and Post Harvest Technology (Central Agricultural University, Imphal), Ranipool, Gangtok- 737135, Sikkim.
4. **Dr. Sangeeta Kumari**, Assistant Professor, Department of Civil Engg. NIT Jamshedpur, Jharkhand.

### GUIDELINES FOR AUTHORS

- ♦ All Submissions will be peer reviewed by experts in the field based on originality significance, quality and clarity.
- ♦ All contributions must be original, should not have been published elsewhere and should not be intended to be published elsewhere during the review period.
- ♦ At least one author must register and present his/her accepted manuscripts in the online conference.
- ♦ All accepted papers will be published in the Springer's conference proceedings.
- ♦ Certificate will be provided to registered author only.

## IMPORTANT DATES

Last date of Abstract submission: **August-07, 2020**  
Intimation to selected Abstract: **August-14, 2020**  
Last date of full paper submission: **September-11, 2020**  
Last date of Registration: **September-18, 2020**  
Conference Dates: **September-19-20, 2020**

## REGISTRATION DETAILS

The registration details should be filled up in the link given below.

<https://rb.gy/8a5r2v>

### REGISTRATION CHARGE: Rs. 500 /-

The registration fee is to be paid to the Institute account by online transaction.

#### Bank details:

A/C No. 33117999641

Bank: State Bank of India

Branch: NIT Jamshedpur, Adityapur.

IFSC: SBIN0001882

Transaction slip can be sent on the following email id: [amiwrenitjsr2020@gmail.com](mailto:amiwrenitjsr2020@gmail.com).

### Contact us:

Dr. Ch. Madhusudana Rao: +91-7903964968

Mr. Nigam Prakash: +91-9973771555

Dr. Sangeeta Kumari: +91-8971492831

Email: [amiwrenitjsr2020@gmail.com](mailto:amiwrenitjsr2020@gmail.com)

#### Conference Website:

<https://sites.google.com/view/amiwre-2020/home>

Institute Website: [www.nitjsr.ac.in](http://www.nitjsr.ac.in)