

WATER INFRASTRUCTURE MANAGEMENT

for Performance, Resiliency and Sustainability



A Workshop by IIT Kanpur, India & Virginia Tech, USA
Thursday, December 17th and Friday, December 18th, 2015
Indian Institute of Technology Kanpur, Kanpur, INDIA



BACKGROUND

Holistic Infrastructure Management encompasses planning, design, construction, operation, maintenance, rehabilitation, and disposal of assets in a cost effective manner. It is clear that the integrity, sustainability and resiliency of India's drinking water, wastewater and stormwater infrastructure systems are at grave risk and a concerted effort and infusion of resources is required. The goal of this workshop is to enhance the practice of water infrastructure asset management.

This workshop on 'Water Infrastructure Management for Performance, Resiliency and Sustainability' seeks to bring together professionals drawn from the different stakeholders – public utilities, academic institutions, regulatory bodies, professional organizations, and private industry – to help understand this complex infrastructure systems, to better define each other roles and responsibilities, and to develop a road map for effective utilization of available resources working towards the creation of a sustainable and resilient water infrastructure. The event will seek to bridge the gap between academia and real-world practicing professionals and bring together some of the leading industry experts and policy makers as well as academicians from both India and the United States to discuss the latest techniques and strategies for sustainable and resilient water infrastructure systems.

The event is being organized by the Department of Civil Engineering, Indian Institute of Technology Kanpur and Sustainable Water Infrastructure Management (SWIM) Center, Virginia Tech, USA. It is a part of the ongoing collaborative International Project under the UGC funded Obama-Singh 21st Century Knowledge Initiative on 'Creating an International Program on Sustainable Infrastructure'.

OBJECTIVES

- Outline a comprehensive approach to Water Infrastructure Management
- To share experiences in the latest management techniques and strategies
- Identify strategic opportunities to advance community awareness
- Identify areas for relevant research, initiatives and future collaboration
- Identify areas of online-certification, training, and outreach activities

PROGRAMME AND PARTICIPATION

Discussion in the event will be spread over 5 sessions covering different aspects of planning, construction and maintenance of water related assets. Besides covering the general framework of comprehensive asset management, discussion will cover resilience in design, non-destructive testing and evaluation, mapping and archiving of information and models for resource mobilization and utilization, besides an overview of the international efforts at creating umbrella networks for sharing resources and information.

There is no registration fee to attend this workshop, but there are only a limited number of participants that can be accommodated. Those interested are requested to send in details to the undersigned at the earliest possible.

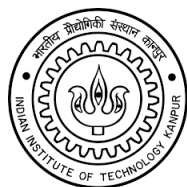
CONTACT

Prof. Sudhir Misra
Department of Civil Engineering,
Indian Institute of Technology Kanpur,
Kanpur, INDIA
Email: sud@iitk.ac.in

Prof. Sunil Sinha
Sustainable Water Infrastructure Management – (SWIM) Center,
Virginia Tech,
Blacksburg, VA, USA
Email: ssinha@vt.edu

WATER INFRASTRUCTURE MANAGEMENT

for Performance, Resiliency and Sustainability



A Workshop by IIT Kanpur, India & Virginia Tech, USA
Thursday, December 17th and Friday, December 18th, 2015
Indian Institute of Technology Kanpur, Kanpur, INDIA



WORKSHOP PROGRAMME

DAY 1: 17th December, 2015 (Thursday)

Session 1: INAUGURAL	
9:00 AM – 9:30	Welcome, Overview of Workshop, and introduction of participants and speakers
9:30 AM – 10:00	Keynote address: Water Infrastructure Management – Indian Perspective
10:00 AM – 10:30	Keynote address: Water Infrastructure Management – American Perspective
10:30 – 11:00 Coffee Break	
Session 2: FRAMEWORK FOR WATER ASSET MANAGEMENT	
11:00 AM – 11:30 PM	The Fundamental of Water Infrastructure Asset Management
11:30 PM – 12:00 PM	Water Infrastructure Management: Performance, Resiliency, and Sustainability
12:00 PM – 12:30 PM	Asset Management in Your Utility: Performance, Resiliency, and Sustainability
12:30 – 1:30 Lunch Break	
Session 3: CURRENT PRACTICE FOR WATER ASSET MANAGEMENT	
1:30 PM – 2:00 PM	Condition Assessment; Renewal Engineering; and Risk Management (Utilities, Consultants, and Technology Providers from India and USA)
2:00 PM – 2:30 PM	
2:30 PM – 3:00 PM	
3:00 – 3:30 Coffee Break	
3:30 PM – 4:00 PM	Drinking Water, Wastewater; and Stormwater Infrastructure Management Practice (Utilities, Consultants, and Technology Providers from India and USA)
4:00 PM – 4:30 PM	
4:30 PM – 5:00 PM	
5:00 PM – 5:30 PM	First Day Wrap-up and Concluding Remarks

DAY 2: 18th December, 2015 (Friday)

Session 4: COMPREHENSIVE WATER INFRASTRUCTURE MAMAGEMENT	
9:00 AM – 9:30 AM	International initiatives – WATERiD & PIPEiD National Databases
9:30 AM – 10:00 AM	Data Standards, Data Platform, Models, and Visualization for Decision Support System
10:00 AM – 10:30 AM	Data and Models for Water Infrastructure Management: American Utility
10:30 AM – 11:00 AM	Data and Models for Water Infrastructure Management: Indian Utility
11:00 – 11:30 Coffee Break	
Session 5: THE ROAD AHEAD – RESEARCH AND EDUCATION COLLABORATION POSSIBILITIES	
11:30 AM – 12:30 PM	General Discussion – Challenges, Gaps and Required Research & Education Activities
12:30 PM – 1:00 PM	Second Day Wrap-up and Concluding Remarks