WORKSHOPS

COMPREHENSIVE URBAN INFRASTRUCTURE MANAGAEMENT

12 December from 9:30 a.m. – 4:30 p.m.
Indian Institute of Technology, New Delhi

Increasing urbanization with an estimate that 66% of the world population could be living in urban areas by 2050, poses a tremendous challenge to engineers involved in not only creating but also managing urban infrastructure.

The contents of the workshop have been designed to present a framework where all stakeholders operate from the same platform and better understand issues related to sustainable development and try to develop a holistic and rational approach towards management of existing infrastructure, incorporating concepts of level of service and performance (normal operations), sustainability (stressed environments), and resiliency (catastrophic events). It is expected that participants will develop a better understanding of the need of a comprehensive approach incorporating planning, design, construction, operation, maintenance, rehabilitation, and finally decommission of infrastructure in a cost effective manner.

How a nation operates, retrofits, and expands its infrastructure systems will help determine the quality of life for future generations and that nation's competitiveness in the global economy. If a nation is to meet the important challenges of the 21st century, a new paradigm for the building and retrofitting of infrastructure systems is required, one that addresses the conflicting goals of diverse economic, environmental, and societal interests. Increasing urbanization with an estimate that 66% of the world population could be living in urban areas by 2050, poses a tremendous challenge to engineers involved in not only creating but also managing urban infrastructure.

The contents of this workshop will be designed to illustrate a comprehensive approach incorporating planning, design, construction, operation, maintenance, rehabilitation, and finally disposal of assets in a cost effective manner.

The workshop will conclude with a panel discussion with experts drawn from different fields aimed at drawing up a roadmap for future collaborative efforts among different stakeholders.

Workshop Instructors:

Prof. Sudhir Misra (IIT Kanpur, India) and **Prof. Sunil Sinha (Virginia Tech, USA)**

Prof. Sunil Sinha is currently a tenured Professor of Civil and Environmental Engineering at Virginia Tech, and also the Director of the Sustainable Water Infrastructure Management (SWIM) Center. His research, teaching, and consulting are in the areas of asset management, sustainability, pattern recognition, sensor informatics, and resiliency, especially urban water systems. He is a member of the American Society of Civil Engineers (ASCE), American Water Works Association (AWWA), and International Water Association (IWA).

Prof. Sudhir Misra is Professor at the Department of Civil Engineering, Indian Institute of Technology Kanpur and has an interest in infrastructure engineering and concrete materials, construction and engineering. He has worked with consulting and construction companies also during his 35 years of professional experience, and also led the effort to initiate a graduate programme in Infrastructure Engineering and Management at IIT Kanpur. He has been a member of committees of the BIS and also worked with professional organizations in Japan and India. His research interests include durability and non-destructive testing of concrete and development and utilization of special concretes.