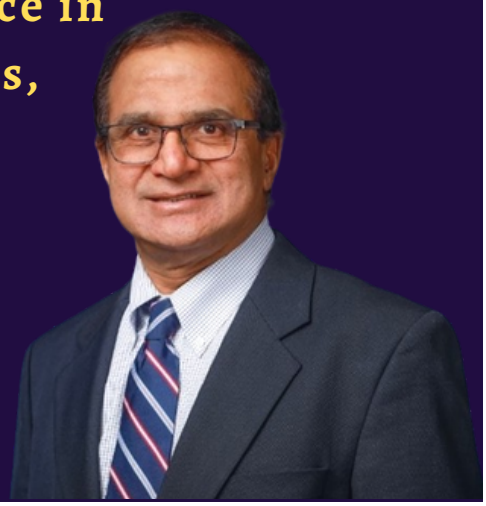
TransTech Talk Series # 12

KSCSTE-NATPAC

Integrating Sustainability and Resilience in Transportation Engineering: Challenges, Frameworks, and Applications



Prof. Krishna R. Reddy.

Friday, January 12, 2024 10:00 am - 11:00 pm (IST)

Join using the link given below

https://tinyurl.com/Transtech12

Registration Link : https://tinyurl.com/Trans-Tech-12

ABOUT THE TALK :

Explosive population growth and climate change represent the two major challenges currently confronting the world, posing significant risks to sustainable development. Sustainability is defined as the balance among environmental, social, and economic factors, whereas resilience pertains to the ability to adapt to and recover from changing or unforeseen adverse impacts, such as those brought on by climate change. It is imperative for any engineering project, regardless of its scale, to integrate considerations of sustainability and resilience throughout its entire lifecycle, encompassing stages such as planning, design, construction, operation/maintenance, and eventual demolition. A variety of frameworks and tools have been developed to systematically embed sustainability and resilience into engineering projects. This presentation aims to offer an overview of the most prominent sustainability and resilience frameworks that are relevant to transportation engineering projects, including some illustrative examples of their application.

ABOUT THE SPEAKER :

Dr. Krishna R. Reddy is a University Scholar, Distinguished Researcher, and Professor of Civil and Environmental Engineering at the University of Illinois Chicago (UIC), USA. He also serves as the Director for both the Sustainable Engineering Research and Geotechnical and Geoenvironmental Engineering laboratories. His research primarily focuses on Geoenvironmental Engineering and Sustainable Resilient Engineering, with special attention to waste management and containment, environmental pollution control and remediation, and sustainability & resiliency analytics. Dr. Reddy has authored four books, including the well-known textbook "Sustainable Engineering: Drivers, Metrics, Tools, and Application," published by Wiley. He has also published over 300 journal papers, with an h-index of 74 and more than 19,500 citations. He received several awards for excellence in research and teaching, such as the Fulbright US Scholar Award, the ASCE Wesley W. Horner Award, the ASTM Hogentogler Award, the UIC Distinguished Researcher Award, the University of Illinois Scholar Award, and the University of Illinois Award for Excellence in Teaching. He is a Fellow of the American Society of Civil Engineers.