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Transportation Geo-structures in a Changing Climate: Challenges and Opportunities

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Extended Abstract

Dr. Meguid's talk focuses on the impact of climate change on transportation infrastructure longevity, specifically geostructures like highway and railway embankments. It highlights the importance of understanding climate-related vulnerabilities such as temperature and precipitation changes. A key feature of this research is its collaborative nature, combining academia and industry efforts to create more resilient and sustainable infrastructure. The talk will discuss the role of geosynthetics in transportation embankments, evaluate moisture control methods, and emphasize the need for new design models in response to climate change. This presentation not only emphasizes the urgency of innovation but also invites active participation in shaping a sustainable future for transportation infrastructure.