

Special session on ***Infrastructure and Community Resilience: Preparation, Absorption, Response, and Recovery***

Description

Critical infrastructure systems, such as transportation, energy, and water networks, are essential for the well-being of the communities they serve. These systems face numerous risks, ranging from natural and man-made hazards to technological and operational disruptions. Ensuring their resilience is becoming increasingly crucial given the rising risks and ongoing transitions. This, however, requires a balanced focus on all four phases of resilience: preparation, absorption, response, and recovery.

This session aims to explore a wide range of contributions that seek to enhance the resilience of communities and infrastructure. We welcome theoretical and practical methods, decision-making tools, critical literature reviews, or real-life case studies that address any of the four resilience phases of communities and infrastructure. Example contributions include but not limited to:

1. Response and recovery case studies of communities and infrastructure systems
2. Modeling and simulation of the behavior of interconnected infrastructure systems
3. New concepts for understanding the complexity of interconnected infrastructure
4. Methods for resilience assessment and enhancement
5. (Practical) decision-making tools for resilience action
6. Resilience metrics for infrastructure systems
7. Integration of risk mitigation strategies
8. Policy and governance approaches for infrastructure resilience
9. Innovations in public-private collaboration for resilience
10. Human factors and societal impact of infrastructure resilience

Organizers

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Potential speakers

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