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Session ID: SDM-13

Title COST-EFFECTIVE RESILIENCY SOLUTIONS IN RC STRUCTURES

Convenors

L. Tobber ¹, G. Rodgers ², J. Atkinson ³

Description

This technical session aims to explore recent advances in cost-effective resiliency solutions for structures, specifically in the context of earthquake engineering. The session will focus on innovative techniques and approaches for enhancing the seismic resilience of structures considering the economic and practical considerations of implementation. The main objectives are to highlight the importance of cost-effective resiliency solutions in mitigating seismic damage, promote the widespread adoption of such solutions in practice, and foster discussion and collaboration among researchers, engineers, and practitioners.

The technical session will cover a broad range of topics related to cost-effective resiliency solutions, with a particular focus on the economic and sustainability considerations of the following areas:

- Dampers and other energy dissipation techniques and methods in high-rise structures and their role in reducing seismic damage
- Outriggers in high-rise core wall rocking systems and their impact on seismic resilience
- Experimental and numerical study on low-damage and/or precast concrete wall buildings
- Investigating cost-effective resiliency solutions in Canadian, New Zealand, and American design codes

The technical session will consist of oral presentations by experts in the field, with each presentation followed by Q&A. This technical session is expected to provide valuable insights into cost-effective resiliency solutions for structures. The session will showcase recent advancements in the field and offer a platform for experts to share their knowledge and experiences. It is expected that the session will facilitate collaborations, networking, and discussions that may lead to the development of new and improved cost-effective resiliency solutions focusing on innovative, practical, and economical techniques and approaches.

Invited Speakers

R. Henry⁴, M.H. Ahmadi¹, F. Najam¹

Affiliations

¹ The University of British Columbia, Kelowna, Canada, ² University of Canterbury, Christchurch, New Zealand,

³ Kor Structural Co., Vancouver, Canada, ⁴ University of Auckland, Auckland, New Zealand