

Special Issue on

## Modelling Collapse Behaviour and Mechanism of the Structures

# CALL FOR PAPERS

Progressive collapse of structures refers to the spread of local failure within a structure, resulting in a disproportionate and widespread collapse beyond the initial failure zone. It occurs when the failure of a key element or a localized event triggers a cascading failure, leading to the collapse of a significant portion of the entire structure.

Progressive collapse poses significant hazards and risks, both to occupants within the collapsed structure and to the surrounding structures and the general public. It always causes loss of life and injury, damage to neighboring structures, disruption of services, and economic and social impact. In recent years, there has been an increased focus on progressive collapse mitigation in building design to enhance the resilience and safety of structures. Codes and guidelines have been developed to address progressive collapse considerations, particularly in high-risk buildings and critical infrastructure.

To mitigate these hazards, codes and regulations for structural design, construction, and maintenance have been developed to ensure adequate safety measures are implemented. Systematic research of the structural characteristics, material properties, loading conditions, and potential failure modes are essentially to understand the collapse behavior and reveal the mechanism of structures.

The aim of this Special Issue is to address the critical issue of progressive collapse in structural engineering and provide a comprehensive understanding of its causes, mechanisms, prevention, and mitigation strategies. We welcome original research and review articles.

Potential topics include but are not limited to the following:

- ▶ Failure mechanisms
- ▶ Structural response and behavior
- ▶ Experimental studies and testing
- ▶ Progressive collapse design criteria for different types of structures
- ▶ Development of computational methods and tools
- ▶ Retrofitting and resilience strategies
- ▶ Progressive collapse events survey
- ▶ Accurate analytical models and numerical simulation methods
- ▶ Risk assessment and management

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.wiley.com/submit?specialIssue=622757>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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