Structures in Fire: Focus on Steel and Composite Structures

Message from the Guest Editors

Structural fire design has emerged as a promising alternative to traditional prescriptive fire-resistant designs. Applications include the design of tall buildings, signature structures, bridges, industrial structures, etc., where the use of fire protection materials can be optimized for economy and sustainability while achieving thermal and structural performance goals, leading to life safety and collapse prevention. This Special Issue will focus on highlighting innovative research methods being used to investigate the fundamental and specific behaviors of steel and steel-concrete composite members, components, and systems subjected to realistic fire scenarios. Both experimental and computational research highlighting innovative testing methods, numerical modeling approaches, and computational techniques will be emphasized. The validation of numerical models and approaches using experimental results and parametric studies conducted using validated models will also be a focus. It will also highlight papers that present the fundamental behavior, failure modes, and limit states of steel and composite structures exposed to realistic and/or standard fire scenarios.

Guest Editors

Prof. Dr. Amit H. Varma

Lyles School of Civil Engineering, Purdue University, West Lafayette, IN 47906, USA

Dr. Feng Fu

Department of Engineering, School of Science Technology, City, University of London, London EC1V 0HB, UK

Deadline for manuscript submissions

closed (31 October 2023)

Fire

About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Dr. Grant Williamson
School of Biological Sciences, University of Tasmania, Private Bag 55,
Hobart, TAS 7001, Australia

Author Benefits

Open Access:
free for readers, with article processing charges (APC) paid
by authors or their institutions.

High Visibility:
indexed within Scopus, SCIE (Web of Science), AGRIS,
PubAg, and other databases.

Journal Rank:
JCR - Q1 (Forestry) / CiteScore - Q2 (Forestry)