

# Special Issue

## Fire Numerical Simulation

### Message from the Guest Editors

Fire numerical simulation plays an important role in fire research. It takes advantage of the advances in mathematics, modeling and computing to capture the underlying physics of complex fire problems and predict fire behaviors at various scales. In addition to experiments, fire numerical simulation allows us to further understand fire and to prevent and contain it. Recently, with the development of the numerical simulation method and computing power, fire numerical simulation has faced new opportunities and challenges. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Current development and application of fire numerical simulation tools;
- Newly developed fire sub-models;
- Physics findings based on fire numerical simulation;
- Case studies with fire numerical simulation to reproduce the real fire scenarios;
- Evacuation and human behavior numerical simulation in fires;
- Fire suppression numerical simulation;
- Numerical simulation regarding fire resistance of structures;
- Wildland fire-induced geological disaster numerical simulation.

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### Guest Editors

Prof. Dr. Yanming Ding

Dr. Kazui Fukumoto

Dr. Jiaqing Zhang

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### Deadline for manuscript submissions

closed (15 August 2024)



## Fire

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## About the Journal

### Message from the Editor-in-Chief

*Fire* is an international open-access journal about the science, policy, and technology of fires and how they interact with communities and the environment. *Fire* seeks to provide a forum to help the fire science community convey how we can live with fire in a changing world. *Fire* seeks submissions from interdisciplinary studies that take a pyrogeography perspective of fires occurring in natural, cultural, and industrial landscapes and how they interact with communities in the science-policy interface. *Fire's* Editorial Board are widely recognized international leaders. The journal emphasizes quality and innovation and has a rigorous peer-review process. I strongly recommend *Fire* for the rapid publication of your innovative research publications and case studies.

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### Editor-in-Chief

Dr. Grant Williamson

School of Biological Sciences, University of Tasmania, Private Bag 55,  
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