Special Issue

Buoyancy Controlled Fire Behaviors Under Special Environments

Message from the Guest Editors

We are delighted to extend an invitation for submissions to this Special Issue of Fire, aiming to attract a range of topics relating to fire and combustion. Fire behavior is dominated by buoyant flow. In real scenarios, fires may face strong outdoor winds, low pressure on plateaus, or even special gravity environments in spacecraft. In these special environments, the buoyancy effect is substantially affected, resulting in changes in the processes of thermal mass transport, fluid mechanics, chemical reaction, etc., posing challenges to the prediction, prevention, and control of fires. Consequently, systematic further research on buoyancy-controlled fires under special environments is vital.

This Special Issue serves as a valuable platform for advancing understanding of the fundamentals of buoyancy-controlled fire behaviors under special environments. Original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Combustion behaviors of pool fires
- Flame spread of cable/wire fires
- Characteristics of spill fires
- Ignition characteristics and flame extinction boundaries

We look forward to receiving your contributions.

Guest Editors

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Deadline for manuscript submissions

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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.

Editor-in-Chief

Dr. Grant Williamson

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