Special Issue

Fire and Combustion in Microgravity: 2nd Edition

Message from the Guest Editors

Combustion, flame, and smoke characteristics under micro-gravity conditions have attracted extensive and worldwide research interest. In manned aircraft, under micro-gravity conditions, combustion behavior, flame structure, smoke particle morphology, and size distribution behave differently to how they would under terrestrial conditions. Fire is prone to occur in microgravity, and fire suppression resources are scarce in aircraft. This poses a huge threat to life safety; therefore, the systematic research of fire behaviors, fire detection, and suppression is necessary. Furthermore, the research of combustion dynamics, such as cool flames, droplet combustion, coal combustion, and so on, in a microgravity environment, will promote a deeper understanding of combustion principles and the development of advanced technology on Earth. Over the last several decades, although NASA and other research institutes across the world have carried out numerous studies and achieved fruitful results, inherently complicated combustion physics and ever-changing interdisciplinary technology necessitate greater efforts toward the fundamental research of fire and new fire prevention methods.

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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

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