Special Issue

Fundamental Research and Case Studies on Clean and Efficient Fire Suppression Technologies

Message from the Guest Editors

The global phase-out of Halon fire suppressants has driven the civilian sector toward cleaner alternatives. Water mist, water spray, and other clean agents have gained prominence, proving effective in applications ranging from forest fires to electrochemical energy storage and aviation fires. Despite their widespread use, deeper understanding through fundamental research is needed. Exploring the interactions between these technologies and flames holds significant engineering value for optimizing system design and informing standards. For this Special Issue, we encourage submissions focusing on water mist, water spray, and Halon alternatives. Topics include extinguishing properties, flame–mist interactions, multiphase flows, and thermodynamics. Original research articles and reviews are welcome. Research areas include but are not limited to:

- Clean and efficient fire extinguishing technologies
- Fire safety and suppression
- Water mist and water spray
- Halon alternatives
- Multiphase measurement
- Forest and urban fire suppression
- Fire prevention for new energy power equipment
- Industrial fire suppression

We look forward to 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

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