Special Issue

Fire, Electrical Systems, and Safety: Advances and Solutions

Message from the Guest Editors

Electrical fires constitute around 20% of the structure fires. They are often the 4th most common type of structure fire and consequently an important type of building fire. Electrical fires can also cause wildlfires and only make up a small fraction; Their importance emerges when it is seen that, they account for the highest amount of losses incurred due to wildlfire events. There are a number of mechanisms which can lead to the ignition of an electrical fire. Some of them are not unique: ignitions from small, hot bodies ejected from an electrical short-circuit. Under some conditions, such hot bodies can ignite nearby fuels. Electricity is not the only source for small hot bodies; these can be created through torch-cutting, grinding, etc. Electricity is a unique source of energy for other ignition mechanisms such as lightning strikes and the arc tracking of insulation materials. Fires and explosions associated with li-ion batteries are an emerging area of concern due to their implications for firefighting, as such fires tend to be exceptionally difficult to suppress. All of these factors highlight the relevance of research on this topic to better understand electrical fires.

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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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