

## Special Issue

# The Impact of Wildfires on Climate, Air Quality, and Human Health

### Message from the Guest Editors

Wildfires are becoming increasingly frequent and intense, driven in part by climate change and altered land-use patterns. These events not only cause immediate ecological and economic damage but also have profound implications for climate systems, air quality, and human health. Wildfires emit large quantities of pollutants, including particulate matter and reactive gases, which can undergo complex atmospheric transformations. These emissions impact climate processes, degrade air quality, and are associated with both acute and chronic health effects in exposed populations. Despite growing research efforts, critical knowledge gaps remain in understanding the role of wildfires in atmospheric and climatic systems. There is a pressing need to better quantify emission profiles under diverse fuel types and fire regimes, to characterize the chemical transformation and aging of smoke in the atmosphere, and to assess the resulting impacts on air quality and climate forcing. This Special Issue seeks to bring together multidisciplinary research exploring the complex and interrelated impacts of wildfires on climate, air quality, and human health.

### Guest Editors

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### Deadline for manuscript submissions

30 April 2026



## 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

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