

Special Issue

Combustion and Fire Safety of Wood: From Built Environments to Forests

Message from the Guest Editors

Wood, rooted in forests, of immense ecological and economic importance in today's sustainability-focused world, remains an indispensable renewable material, widely used in construction. However, its inherent combustibility calls for continued innovation in fire safety and risk reduction across both built and natural environments. This Special Issue invites original research and critical reviews that advance our understanding of wood behaviour from multiple perspectives—ranging from construction applications to unmanaged wildlands. We welcome contributions on the following topics:

- Physio- chemical treatments that modify the flammability, ease of ignition, heat release, or smoke toxicity of solid wood.
- Comparative combustion characteristics of diverse species and wood products.
- Utilization of wood-derived components for fire-prevention technologies.
- Sensor networks, remote sensing, and modelling approaches for detecting, monitoring, and forecasting wildfires.
- Strategies to assess and mitigate the fire potential of logging residues, urban wood waste, and post-harvest fuels.
- Case studies linking laboratory findings.

Guest Editors

Dr. Elif Kaynak

Department of Civil, Environmental and Natural Resources Engineering,
Luleå University of Technology, 97187 Luleå, Sweden

Prof. Dr. Ágoston Restás

Institute of Disaster Management, University of Public Service, H-1083
Budapest, Hungary

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Fire
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
fire@mdpi.com

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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

School of Biological Sciences, University of Tasmania, Private Bag 55,
Hobart, TAS 7001, Australia

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