Special Issue

Ammonia Combustion: Experimental and Numerical Studies

Message from the Guest Editors

This Special Issue of *Fire* is dedicated to advancing the understanding of ammonia combustion, its applications in gas turbines and internal combustion engines, and the innovative techniques that enhance its performance. With a focus on sustainability and reduced emissions, this issue brings together a collection of research papers that provide comprehensive insights into the current state and future potential of ammonia as a clean fuel source. The aim of this Special Issue is to encapsulate the multidisciplinary nature of ammonia combustion research, ranging from fundamental combustion characteristics to practical engine performance and emission profiles. It includes systematic literature reviews that assess the progress and challenges in ammonia-fueled engines and gas turbines, highlighting the benefits and limitations of using ammonia and hydrogen as fuels. The scope extends to numerical studies that investigate the combustion process of ammonia sprays ignited by dimethyl ether jets, providing detailed insights into mixing, ignition, and combustion dynamics.

Guest Editors

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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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