

Special Issue

Novel Combustion Technologies for CO₂ Capture and Pollution Control

Message from the Guest Editors

Anthropogenic impacts on the environment have aroused a great deal of attention in recent years and the CO₂ emitted during these utilization processes is one of the main contributors to global warming. Achieving carbon neutrality along with pollution reduction is now becoming the world's most urgent mission. An important method to achieve carbon neutrality involves novel combustion technologies with carbon capture and sequestration. The development of new combustion technology and the numerical simulation of thermodynamics and reaction dynamics involved in the process is effectively used to investigate the complex reaction mechanisms in combustion processes and to ensure that the feasibility of new high-flux combustion technology can be verified. This Special Issue aims to cover research on experimental and numerical simulation in the fundamental and applied sciences as they pertain to CO₂ capture technologies during processes of energy utilization and pollution control. It includes but is not limited to:

- Chemical looping combustion/gasification;
- Oxygen-enriched combustion;
- Process simulation;
- Fluidized bed reactors;
- Pollution reduction.

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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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