

Special Issue

Progress in Advanced Combustion and Reactive Flows Related to Clean Technologies and Alternative Fuels

Message from the Guest Editors

With increasing environmental concerns and the need to reduce emissions, the field of combustion science is evolving rapidly. However, to fully realize the potential of these fuels, a deeper understanding of their combustion kinetics and mechanisms is required. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Clean combustion technologies (chemical looping combustion, oxy-fuel combustion, flameless combustion, and other low-emission combustion techniques);
- Combustor design and optimization (burner configurations, thermal management strategies, and optimization for various fuel types, from conventional to alternative fuels);
- Computational fluid dynamics (CFD) simulations to model turbulent combustion and improve the design of clean combustion systems (large eddy simulation, direct numerical simulation, and Reynolds-averaged Navier–Stokes approaches, etc.);
- Biofuels and alternative fuel combustion (biofuels, hydrogen, ammonia, and other renewable energy carriers);
- Combustion kinetic and mechanisms in clean combustion and alternative fuel systems.

Guest Editors

Dr. Yali Shao

School of Energy and Mechanical Engineering, Nanjing Normal University, Nanjing 210023, China

Prof. Dr. Ramesh Agarwal

Department of Mechanical Engineering and Materials Science, Washington University in St. Louis, St. Louis, MO 63130, USA

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Editor-in-Chief

Dr. Grant Williamson
School of Biological Sciences, University of Tasmania, Private Bag 55,
Hobart, TAS 7001, Australia

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