

Special Issue

Reaction Kinetics in Chemical Looping Processes

Message from the Guest Editor

Chemical looping processes are based on splitting a chemical process into two or more steps in a cyclic way. In the beginning, chemical looping was proposed as an advanced combustion process with the potential to increase energy efficiency in the thermochemical conversion of fuels using the principles of thermodynamics to reduce exergy loss. Thus, an oxygen carrier was used to split the combustion process into two stages. Chemical Looping Combustion (CLC) was characterized by obtaining a CO₂ stream separated from the depleted air used for fuel combustion. Due to this, CLC was shown to be one of the most promising technologies for combustion with CO₂ capture at low energy and economic costs. These processes may be based on the transference of one atom or compound for fuel oxidation, reducing a compound, gas separation, chemical synthesis, or circumvent thermochemical equilibrium limitations in chemical reactions. I look forward to receiving your contributions.

Guest Editor

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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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