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Catalysis for CO₂ Conversion, 2nd Edition

Guest Editor:

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Message from the Guest Editor

CO₂, a cheap, nontoxic, and abundant carbon feedstock, has garnered significant interest from academia and industry for its conversion into valuable products. The potential to transform CO₂ into fuels, chemicals, polymers, and building materials has opened up new avenues for sustainable development. Although some industrial processes utilizing CO₂, such as urea synthesis, are well established, the chemical conversion of CO₂ remains challenging due to its thermodynamic nature.

This new edition aims to bring together leading scientists to present their cutting-edge research in catalyst development, process design, system analysis, and multidisciplinary approaches. We invite researchers to contribute original research, reviews, and communications papers that delve into various aspects of CO₂ conversion. Topics of interest include, but are not limited to:

Catalyst synthesis and characterization;

Reactor design and optimization;

Process engineering and scale-up;

Mechanistic investigations;

Numerical simulations and modelling.





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