



Process Design and Modeling of Low-Carbon Energy Systems

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Message from the Guest Editors

Dear Colleagues,

With the rapid promotion of renewable energy technologies and the trend to a low-carbon society, the positive impacts of a low-carbon energy system that realizes various forms of energy-utilizing improvement and carbon reduction have fully emerged. The technologies involved vary widely, such as synthetic and alternative fuels such as alcohols and ethers, nuclear energy, fuel cells, renewables such as wind and solar, and energy storage technologies of wide varieties. The carbon market is also one of the most cost-effective ways of incentivizing CO₂ reductions which put a price on carbon and can be accomplished through either a carbon tax or a cap-and-trade program. All of these are essential components of the future of energy systems.

This Special Issue on “Process Design and Modeling of Low-Carbon Energy Systems” will curate novel advances in research which use modeling, planning, and optimization as essential tools to design energy systems or construct effective electricity markets and carbon markets for pricing carbon dioxide.





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Message from the Editor-in-Chief

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