



Green Solvents and Advanced Materials for Gas Capture and Separation

Guest Editor:

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Message from the Guest Editor

The processes and technologies of gas capture and separation play important roles in the global economy and different industrial sectors. Due to the increasing energy demand and stronger environmental regulations, there is a constant search for improvement and optimization. Current challenges in the field include the development of new materials that may selectively retain a given gas component and process intensification via the optimization of operating conditions. Recent developments of molecular simulation tools, aided by experimental data obtained by carefully designed methods, are also reported as contributing to the understanding and further enhancement of separation and capture processes.

The goal of this Special Issue is to showcase how mainstream scientists in the fields of adsorption, extraction, membranes, separation processes and material engineering have been addressing strategies to enhance gas separation and capture efficiency sustainably via the use of different approaches and technologies.





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Message from the Editor-in-Chief

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