

Special Issue

Green Solvents and Advanced Materials for Gas Capture and Separation

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.

Guest Editor

Dr. Moises Bastos-Neto

Associate Professor, Grupo de Pesquisa em Separações por Adsorção (GPSA)—Department of Chemical Engineering, Universidade Federal do Ceará, Fortaleza 60455-760, Brazil

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Separations
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
separations@mdpi.com

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Message from the Editor-in-Chief

Separations offers the scientific community a high-quality, open-access journal option with rapid time-to-publication without any sacrifice of a rigorous peer-review process. We invite contributions ranging from fundamental characterization and instrumentation development through application of techniques to shed light on a broad spectrum of separation science needs. Since inception, *Separations*, has become unique in its combination of rapid publication and thorough scientific content. We invite you to consider us for your next contribution.

Editor-in-Chief

Prof. Dr. Frank L. Dorman

Department of Chemistry, Dartmouth College, Hanover, NH 03755,
USA

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