



## Development and Applications of Porous Materials in Adsorptions

Guest Editor:

**Dr. Byong Chol Bai**

Division of Energy Engineering,  
Daejin University, Pocheon  
11159, Republic of Korea

Deadline for manuscript  
submissions:

**closed (20 June 2024)**

### Message from the Guest Editor

The development of advanced porous materials has witnessed strides in recent years. These materials exhibit unique properties that make them highly effective for adsorption, ranging from gas separation and purification to water treatment and pollutant removal. The tailored design of these materials allows for the fine-tuning of their pore sizes, surface chemistries, and functionalities, enabling precise control over adsorption capabilities.

In industrial contexts, porous materials find applications in gas storage, separation processes, and catalysis. Their adaptability to different substances and efficient adsorption capacities makes them indispensable in addressing contemporary challenges related to energy, environmental sustainability, and resource management.

This Special Issue aims to bring together cutting-edge research and innovative applications of porous materials in adsorption, providing a platform for researchers to share insights into the latest developments. From fundamental studies to practical implementations, the contributions in this issue promise to deepen our understanding of porous materials' diverse roles and impact on adsorption processes.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Frank L. Dorman**

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

## 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.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [CAPlus / SciFinder](#), and [other databases](#).

**Rapid Publication:** manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.3 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

## Contact Us

*Separations* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/separations](http://mdpi.com/journal/separations)  
[separations@mdpi.com](mailto:separations@mdpi.com)  
[X@Sep\\_MDPI](#)