Special Issue

Current Status and Prospects of Adsorption and Separation in Chemical Industry

Message from the Guest Editors

The purpose of this Special Issue is to bring together research and advances on adsorption processes in different areas, such as in the petrochemical industry, environmental applications, biotechnology, and pharmaceutical industry, as well as to connect and disseminate the main results and achievements of recent projects in these areas to the scientific community. Topics to be covered include recent theoretical and experimental developments on adsorption, new techniques and methods, adsorbent characterization, and adsorption processes as well as the synthesis and tailoring of novel adsorbents, including the assessment of materials and processes. Advances in adsorption modelling ranging from molecular simulations to process simulation and optimization are also included in the scope this Special Issue, with papers including optimization, meta-heuristic methods, and machine learning also being included.

Guest Editors

Dr. Alexandre Ferreira

LSRE-LCM-Laboratory of Separation and Reaction Engineering-Laboratory of Catalysis and Materials, Associate Laboratory, Faculdade de Engenharia, Universidade do Porto, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal

Dr. Maria João Regufe

Laboratory of Separation and Reaction Engineering, Associate Laboratory LSRE/LCM, Department of Chemical Engineering, Faculty of Engineering, University of Porto, 4200-465 Porto, Portugal

Deadline for manuscript submissions

closed (10 November 2022)



Separations

an Open Access Journal by MDPI

Impact Factor 2.7 CiteScore 4.5



mdpi.com/si/116232

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

mdpi.com/journal/ separations





Separations

an Open Access Journal by MDPI

Impact Factor 2.7
CiteScore 4.5



About the Journal

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

Author Benefits

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).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.

