



Removal of Metals or Other Toxic Substances from Wastewaters by Natural Sorbents

Guest Editors:

Dr. Ariana Pintor

Laboratory of Separation and Reaction Engineering—
Laboratory of Catalysis and Materials (LSRE-LCM),
Department of Chemical Engineering, Faculty of Engineering, University of Porto,
Rua Dr. Roberto Frias, 4200-465 Porto, Portugal

Dr. Sílvia Santos

Laboratory of Separation and Reaction Engineering—
Laboratory of Catalysis and Materials (LSRE-LCM),
Department of Chemical Engineering, Faculty of Engineering, University of Porto,
Rua Dr. Roberto Frias, 4200-465 Porto, Portugal

Deadline for manuscript submissions:

closed (10 January 2024)

Message from the Guest Editors

Adsorption remains a popular methodology for the fast, reliable, and easy-to-operate removal of specific compounds in the tertiary treatment of wastewater.

Traditionally, adsorbent materials of choice included activated carbons, clays, zeolites, and minerals, with large surface areas and high density of specific surface groups for chemical bonding. Research is evolving to propose alternative materials with lower prices and environmental impact. That is the case of natural sorbents derived from biomass, usually comprising byproducts or wastes from agri-food and forestry industries. Repurposing these waste flows for upcycling as adsorbents is a valuable input to reducing wastewater treatment costs and increasing the sustainability of biomass-based industrial activities, such as:

- Novel uses for raw natural sorbents;
- Modification of biomass for selective uptake of specific compounds;
- Removal of emerging contaminants;
- Scale-up of existing applications;
- Environmental and industrial assessment of natural sorbent technology.

We welcome contributions to the development and application of natural sorbents for the removal of metals and other toxic substances from wastewater.





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, *Chromatography*, 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 13.6 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2023).

Contact Us

Separations Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/separations
separations@mdpi.com
[X@Sep_MDPI](#)