# **Special Issue**

# Separation Techniques for Flotation and Recycling in Mineral Processing

## Message from the Guest Editors

Froth flotation is a crucial technique in mineral processing. The combination and scheme of flotation reagents such as collectors, frothers, and modifiers can dramatically increase the efficiency of the flotation process, leading to higher recoveries of valuable minerals. Furthermore, column flotation is an advanced mineral processing technique that offers several advantages over conventional flotation.

Resource recycling is a key component of sustainable resource management. The benefits of recycling include resource conservation, energy savings, pollution reduction, and economic advantages. By effectively integrating mineral processing and hydrometallurgy, the efficient and sustainable recycling of valuable materials can be achieved, contributing to a circular economy and resource conservation.

This Special Issue welcomes recent advanced technologies in the areas of theory, mechanisms, process control, chemical reagents, surface characteristics, dynamics, and separation efficiency related to froth flotation, mineral processing, hydrometallurgy, and resource recycling.

## **Guest Editors**

Dr. Chulhyun Park

Department of Advanced Energy Engineering, Chosun University, Gwangju 61452, Republic of Korea

Dr. Hoseok Jeon

Resources Utilization Division, Korea Institute of Geoscience and Mineral Resources (KIGAM), Daejeon 3413, Republic of Korea

### Deadline for manuscript submissions

closed (31 March 2025)



# **Separations**

an Open Access Journal by MDPI

Impact Factor 2.7 CiteScore 4.5



mdpi.com/si/215465

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.

