Special Issue

Novel Green Solvents for the Separation and Purification of Valuable Natural Ingredients

Message from the Guest Editor

Natural plants contain countless ingredients, and many of them are pharmacologically active. These useful compounds could be used to cure diseases, become construction materials, inspire researchers, and much more. To obtain these valuable natural ingredients, many technologies have been developed over a long history. Specifically, solvents play an important role in their separation. Traditional solvents, such as methanol, ethanol, and petroleum ether, have the disadvantages of polluting the environment, a high toxicity, and the inability to regenerate. Thus, seeking alternative solvents has sparked the interest of researchers. Ionic liquids, called "solvents of the future", have a diverse composition of organic cations and inorganic anions. Moreover, deep eutectic solvents are a new type of green mixed solvent that has rapidly developed in recent years. These novel solvents have broad application prospects due to their advantages, which include low volatility, low vapor pressure, strong thermal stability, and molecular designability. Considering the diversity of natural ingredients, more research on this topic is still warranted.

Guest Editor

Dr. Liangliang Liu
Institute of Bast Fiber Crops, Chinese Academy of Agricultural Sciences, Changsha 410205, China

Deadline for manuscript submissions

10 January 2026

Separations

an Open Access Journal by MDPI

Impact Factor 2.7
CiteScore 4.5

mdpi.com/si/219631

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

mdpi.com/journal/separations

Separations

an Open Access Journal by MDPI

Impact Factor 2.7
CiteScore 4.5

mdpi.com/journal/separations

MDPI

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.