



Application of Microextraction and Chromatography in Bioanalysis and Pharmaceutical Analysis

Guest Editors:

Dr. Vincenzo Ferrone

Department of Pharmacy,
University "G. d'Annunzio" of
Chieti-Pescara, I-66100 Chieti,
Italy

Dr. Pantaleone Bruni

Department of Pharmacy,
University "G. d'Annunzio" of
Chieti-Pescara, I-66100 Chieti,
Italy

Dr. Michele Ciulla

Department of Pharmacy,
University "G. d'Annunzio" of
Chieti-Pescara, via dei Vestini 31,
66100 Chieti Scalo, CH, Italy

Deadline for manuscript
submissions:

closed (31 December 2023)

Message from the Guest Editors

Sample preparation is a crucial part of the analytical process and should be part of any analytical chemistry teaching curriculum. Over the last two decades, active research on sample preparation has been fueled by interest in the elimination of organic solvent from environmental analysis and the rapid analysis of biological samples. This new development results in the miniaturization of the extraction process, leading to new micro-configurations and solvent-free approaches. The fundamental understanding of extraction principles has advanced in parallel with the development of new technology. Recently, new sorbents such as silica, carbon-based, polymeric and metal organic frameworks have been introduced, increasing the performance of all sorbent-based sample preparation techniques. Furthermore, technological developments have made it possible to obtain these new nanomaterials (NMs) which immediately showed themselves to be promising in separations. The challenge in this Special Issue is to apply micro-extraction techniques to molecules of bio-pharmaceutical interest from various matrices and their quantification using chromatographic techniques coupled with sensitive detectors.





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 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).

Contact Us

Separations Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

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