Analytical Sciences (2024) 40:1215
https://doi.org/10.1007/s44211-024-00563-1

SPECIAL ISSUE: EDITORIAL

Frontiers of Separation Analysis

Guest Editorial: Frontiers of Separation Analysis

Toshio Takayanagi[1] · Kenichiro Todoroki[2] · Takuya Kubo[3] · Ikuo Ueta[4]

Published online: 5 April 2024

We are pleased to launch a virtual special issue of "Frontiers of Separation Analysis" as a collection volume [1]. Chromatographic separation is one of the major streams in analytical science and involves LC, GC, CE, and microchip electrophoresis, etc. A wide variety of research is being conducted by chromatographic separations from fundamental investigations to practical applications. Hyphenated technology of chromatographic separation with state-of-the-art detection system is helpful to construct novel analysis method.

In the present collection volume, we fortunately publish 14 original papers and four notes from outstanding researchers in this field. The instruments employed are LC, GC, CE, microchip, and TLC coupled with detection devices of UV, ECD, PDA, MS, and ICP-MS. Sample pretreatments are also conducted by solid phase extraction, beads collection, and on-line preconcentration. In addition to the practical separations including speciation, characterization and identification are done with some reaction products, degradation products, and metabolites. We are pleased at having interesting papers on separation, quantification, and characterization of the substances by the separation technologies. We believe that novel methods of separation analysis will continuously be developed and contribute to the human wellness and to the ecosystem protection.

Finally, we would like to thank the authors who have contributed to this collection volume and acknowledge the reviewers for their valuable comments and fruitful discussions to improve the submitted papers. We also appreciate the editors of Analytical Sciences and the publication staffs of Springer Nature for their kind cooperation in this collection volume.

Data availability No datasets were generated or analysed during the current study.

Reference

1. T. Takayanagi, K. Todoroki, T. Kubo, I. Ueta, Collection: Frontiers of Separation Analysis (Springer, 2024), https://link.springer.com/collections/bfchejdfcg

✉ Toshio Takayanagi
toshio.takayanagi@tokushima-u.ac.jp

[1] Graduate School of Technology, Industrial and Social Sciences, Tokushima University, Tokushima, Japan

[2] School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, Japan

[3] Graduate School of Engineering, Kyoto University, Kyoto, Japan

[4] Faculty of Engineering, University of Yamanashi, Kofu, Japan