New sample preparation technologies

Stig Pedersen-Bjergaard · Knut Einar Rasmussen

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In recent years, increasing interest has been devoted to sample preparation for chromatography and capillary electrophoresis, including development of new techniques and strategies, and to theoretical description, for better understanding of the different processes. The former activities have provided the community with new technology, and the latter efforts have taught us how to operate the technologies and have converted sample preparation to a scientific discipline. Important driving forces for this research have been to improve selectivity and clean-up, to improve analyte enrichment, to reduce analysis time, to reduce the consumption of hazardous organic solvents, and to reduce the sample volumes required for analysis.

In this special issue, different contributors to the development of sample preparation have been invited to present their recent work. Because space in this volume is limited, and because current research is a very broad field in terms of technologies and applications, the current collection is intended to give a flavor of the field rather than a comprehensive overview. Nevertheless, we hope the papers will be of high value, and that they can act as motivation for many other analytical chemists also to develop the field of sample preparation in the future. As we develop sample preparation further, we will be able to process more samples in a short time, to eliminate interferences, to detect compounds at lower concentration levels in

complicated matrices, and to analyze new types of sample material; this will definitely give us much more scientific knowledge of chemical and biological systems in the future.

We would like to thank all of the authors for their excellent contributions to this special issue on “New sample preparation technologies”.

Stig Pedersen-Bjergaard

is Professor of Pharmacy at the School of Pharmacy, University of Oslo, Norway, and Professor of Analytical Chemistry at the Faculty of Pharmaceutical Sciences, University of Copenhagen, Denmark. His research interest is development of new and miniaturized sample-preparation technologies for drugs and related substances in biological fluids and in environmental samples. Major research is focused on

micro extraction techniques combined with new concepts for transport of analytes across liquid membranes.

Knut E. Rasmussen

is Professor of Pharmacy at the School of Pharmacy, University of Oslo, Norway. His research interest also is development of new and miniaturized sample-preparation technologies for drugs and related substances in biological fluids and in environmental samples. Dr Rasmussen's major research is focused on micro extraction techniques combined with new concepts for transport of analytes across liquid membranes.

S. Pedersen-Bjergaard (✉) · K. E. Rasmussen
School of Pharmacy, University of Oslo,
P.O. Box 1068 Blindern, 0316 Oslo, Norway
e-mail: stig.pedersen-bjergaard@farmasi.uio.no

K. E. Rasmussen
e-mail: k.e.rasmussen@farmasi.uio.no