



Preface

Quantitative NMR spectroscopy—principles and applications

NMR spectroscopy has a long-standing tradition in structure elucidation of both natural products and newly synthesized compounds, ranging from small molecules to large proteins. Over the past years NMR spectroscopy is increasingly used in a quantitative manner. The fact of being orthogonal to chromatographic and electrophoretic methods makes NMR an attractive tool for drug analysis in production samples as well as in biological sources.

This special issue of the “Journal of Pharmaceutical and Biomedical Analysis” wants to illustrate the power and versatility of quantitative NMR, qNMR, in a wide range of applications. On the one hand the chemometric and spectroscopic fundamentals of qNMR and the applications in drug analysis, e.g. composition characterization of mixtures, purity assessment and identification of drugs and vaccines in both in solid state and in solution are described. On the other hand, the technique and potential of new techniques such as microcoils NMR/LC-NMR in biological application is presented. With this issue it is aimed to demonstrate the opportunities and drawbacks of qNMR to the analytical community in research and development.

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