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PREFACE

Preface

Helmut Viernstein · Peter Wolschann

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Starting in 1982, the International Cyclodextrin Symposia have been organized every 2 years. They have evolved into a series of well-established conferences covering various topics concerning cyclodextrins and cyclodextrin complexes, bringing together researchers from various disciplines and institutions interested in a wide variety of topics concerning cyclodextrins.

The 15th International Cyclodextrin Symposium took place in Vienna from May 9th to May 12th, 2010. This symposium followed the ICS14, held in Kyoto, Japan, in 2008 and the ICS13, organized in Turin, Italy, in 2006. The topics of the symposium ranged from cyclodextrins in drug formulations and nanotechnology to cyclodextrins in cell biology, biomedicine and applications in food, cosmetics and agrochemicals. Newly synthesized cyclodextrins and cyclodextrin complexes were considered as well as analytical applications or the use in sensors and as biomaterials. Moreover, the structural aspects of cyclodextrins and cyclodextrin complexes were treated, together with physicochemical problems related to the complexes.

About 300 participants from 35 countries allover the world attended 47 plenary and keynote lectures as well as oral presentations. 191 posters were presented on a broad variety of topics, having been selected by the international advisory board of the symposium. Stimulating discussions during the poster sessions and the dining breaks between the points of the tightly organized program have initiated further cooperations between several research groups from universities and industry. Many new ideas have been established leading to new concepts and research projects.

The 16th International Cyclodextrin Symposium will be hosted by the Nankai University, located in Tianjin, a city at the Bohai Sea close to Beijing, China.

The importance of the 15th International Cyclodextrin Symposium is documented in this special issue of the *Journal of Inclusion Phenomena and Macrocyclic Chemistry*. Many participants of the symposium submitted contributions, and following peer-review, these articles are presented in this special issue. The kind support of Springer Science + Business Media, the staff and, in particular, Ms. Lutchelle Comparativo, is deeply appreciated.

The topics of the published articles reflect the general trend in the development of the applications of cyclodextrins, cyclodextrin derivatives, and their complexes. "Classical" applications as drug carriers, for solubility and subsequent bioavailability increase have been considered together with new trends of the use of cyclodextrins as active pharmaceutical ingredients. Anti-cancer active derivatives as well as compounds active against cholesterol-dependent diseases are promising subjects of recent and future research. New syntheses of cyclodextrins, modified cyclodextrins and the insertion of cyclodextrin rings into polymers and dendrimers have been reported. Particularly, mono-substitution of cyclodextrins enables the syntheses and utilizations of a broad variety of products. Another interesting application concerns the removal of industrial pollutants by polymer-linked cyclodextrins. Finally, the characterization of structural and physicochemical properties by new spectroscopic methods and molecular calculations was presented.

H. Viernstein
Department of Pharmaceutical Technology and Biopharmaceutics, University of Vienna, Althanstraße 14, 1090 Vienna, Austria
e-mail: Helmut.Viernstein@univie.ac.at

P. Wolschann (✉)
Institute of Theoretical Chemistry, University of Vienna, Währinger Straße 17, 1090 Vienna, Austria
e-mail: Karl.Peter.Wolschann@univie.ac.at

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