## Editorial

The Fourth International Symposium on Pharmaceutical and Biomedical Analysis (PBA '93) was held from 18 to 21 April 1993 in the Stouffer Harborplace Hotel in Baltimore, Maryland, USA. This meeting followed the highly successful symposia held in Barcelona, Spain in 1987 (reported in J. Pharm. Biomed. Anal. 6, 531-1068, 1988), in York, UK in 1990 (reported in J. Pharm. Biomed. Anal. 8, 613-1104, 1990) and in Boston, USA in 1991 (reported in J. Pharm. Biomed. Anal. 9, 787-1190, 1991). Baltimore, which is close to the nation's capital, Washington DC, is one of the most historic cities in North America; its universities are noted as being among the finest in the world for their excellence in science, medicine and technology. These features combined with the superb conference facilities provided by the Stouffer Harborplace Hotel, which is conveniently located on the picturesque Inner Harbor, made Baltimore the ideal location for the fourth symposium in this series. The symposium was blessed with sunny skies and temperatures in the 70s and 80s. Indeed, the delegates were most fortunate in that respect because the meeting was preceded by thunderstorms and then followed by snow! The perfect weather allowed ample opportunities for exploration of the city and the surrounding areas; however, the highlight of the social program was the evening at Oriole Park at Camden Yards, where 200 delegates enjoyed dinner in the Warehouse Banquet Room overlooking the Stadium followed by a Major League Baseball Game between the Baltimore Orioles and the Chicago White Sox.

The success of the meeting may be judged by the attendance of 488 delegates and the presentation of 188 papers of which 46 are published in this special issue of the *Journal*. Twenty-three nations from North America, South America, Europe, Africa and Asia were represented and the total attendance represents an increase of 30% over the previous meeting in Boston. Following the format developed first in Barcelona at PBA '87, the Poster Presentations and associated Discussion Sessions constituted the primary focus of the scientific sessions and

were supported by a single stream of Lecture Sessions. The 155 posters were divided into 10 themes and each author was invited to give a short oral synopsis for discussion by a small group of delegates. The topics for the Poster Sessions were: Optimization and validation of analytical methods; Analysis of drugs in biological fluids-preclinical studies; Spectroscopy and detection technology; Sample preparation and derivatization; Advanced separation systems; Preformulation studies and analysis of bulk drugs and dosage forms; Analysis of drugs in biological fluids—clinical studies; Microdialysis; Analytical biochemistry and biotechnology; and Analysis of chiral drugs.

The scientific sessions were opened by Prof. Jack Henion and Prof. James Jorgenson, who spoke on 'Recent Developments in Electrospray Mass Spectrometry including Implementation on a Mass-selective Detector and an Ion-trap' ard 'Applications of LC-CE in Biomedical Analysis', respectively. The high standards set by the opening speakers were maintained throughout the meeting, which closed with presentations by Dr William Hancock ('Key Analytical Issues in the Development of Drugs Produced by Biotechnology'), Dr Ralph Riggin ('Development of LC Methodologies for the Quality Control of Peptide and Protein Drugs') and Prof. J. Calvin Giddings ('Future Perspectives on Field-flow Fractionation'). The single-stream Lecture Sessions featured a combination of invited and contributed papers in the following areas: Advanced separation systems in pharmaceutical and biomedical analysis; Recent advances in bioanalytical chemistry; Optimization and validation of pharmaceutical methods; Analysis of drugs in biological samples; Spectroscopic and electrochemical methods of analysis; Analysis of chiral drugs; Recent developments in pharmaceutical analysis; and Analytical biotechnology.

The Chromatographic Society (UK) chose the Fourth International Symposium on Pharmaceutical and Biomedical Analysis as a venue for the presentation of the Martin Medal to Prof. Fred Regnier for his outstanding, internationally recognised contributions to chromatography and analytical biotechnology.

These scientific sessions were supported by an excellent exhibition of analytical instrumentation, materials and facilities, which allowed the delegates to be updated on the latest developments at first hand. The Scientific Sessions were preceded on Sunday by a series of workshops presented by internationally recognized experts in the fields of: Capillary electrophoresis (Dr David K. Lloyd, Prof. Shigeru Terabe and Dr John F. Stobaugh); Sample preparation and derivatization in biomedical analysis (Dr Henk Lingeman and Dr John F. Stobaugh); Assay validation (Prof. Anthony F. Fell and Dr John C. Wahlich); Analysis of chiral drugs (Dr Brian J. Clark and Dr W. John Lough); Microdialysis (Prof. Peter T. Kissinger and Dr Craig E. Lunte); and Laboratory information management systems (Dr Robert D. McDowall).

The Symposium was chaired by one of these editors (CMR) who wishes to thank the members of the Organizing Committee and the Symposium Manager, Ms. Shirley Schlessinger, in particular, for their hard work and for the excellent arrangements in Baltimore. Sincere thanks are also due to Dr Terry Wilson, Dr Marty Kral, Dr Helen McPherson and Ms. Nancy Harmony for their assistance on the editorial desk, and to Ms. Paddy Batchelder, Ms. Cynthia Beall and to the team of graduate students and post-doctoral researchers, led by Joe Ault and Sheila Flory, for the tremendous amount of work put into the smooth running of the meeting.

Once again, it is a great pleasure to publish the papers presented at this International Symposium on Pharmaceutical and Biomedical Analysis, which is now an annual event. The Fifth International Symposium on Pharmaceutical and Biomedical Analysis (PBA '94) will be organized in Stockholm, Sweden on 21-23 September 1994 by Prof. Douglas Westerlund while the Sixth International Symposium on Pharmaceutical and Biomedical Analysis (PBA '95) will be organized in St Louis, USA on 23–26 April 1995 by Dr John F. Stobaugh. Both these meetings will be held in conjunction with the series of International Symposia on Chiral Discrimi-nation. Finally, we wish to thank the Associate Editors and the Editorial Assistants, Ms. Nancy Harmony and Ms. Sarah Kenny, for their invaluable assistance in preparing the papers for publication. Thanks are also due to the numerous scientists who kindly gave of their time to review the manuscripts.

> Christopher M. Riley Anthony F. Fell



Prof. J. Henion (Cornell University) delivering his lecture on 'Recent Developments in Electrospray Mass Spectrometry, Including Implementation of a Mass-Selective Detective Detector and an Ion Trap' at the Opening Session.



Prof. A. Fell (right) presenting the Chromatographic Society's Martin Medal to Prof. F. Regnier of Purdue University.



Prof. J. Jorgenson (University of North Carolina) delivering his lecture on 'Applications of LC-CE in Biomedical Analysis' at the Opening Session.



(Left to right) Prof. D. Westerlund (Uppsala University and Symposium Chair—PBA '94), Prof. C. Riley (University of Kansas and Symposium Chair—PBA '93) and Dr Brian Clark (University of Bradford).



Members of the Symposium Organizing Committee—(left to right) Ms. N. Harmony, Dr T. Karnes, Dr N. Meltzer, Dr J. Stobaugh, Mr J. Hobbs, Prof. C. Riley, Dr M. Kral and Prof. A. Fell. (Not shown: Ms. S. Schlessinger, Prof. P. Kissinger and Dr R. Majors.)



The Editorial Desk—(left to right) Ms. N. Harmony (Editorial Assistant), Dr T. Wilson (Bristol-Myers Squibb and Associate Editor of the Journal) and Dr H. McPherson (Senior Publishing Editor, Pergamon Press).



Ms. C. Beall (Higuchi Biosciences Center, University of Kansas).



Members of the Editorial Advisory Board of the Journal.



Dr T. Malefyt (left—Syntex) and Dr M. Kral (Marion-Merrell Dow and Associate Editor of the Journal).



Prof. C. Fenselau (University of Maryland-Baltimore County).



Prof. T. Karnes (left—Virginia Commonwealth University) and Dr N. Meltzer (formerly Hoffman-La Roche, now Astra-Merck).



(Left to right) Dr W. Hancock (Genentech), Prof. G. Blaschke (University of Münster) and Dr J. Stobaugh (University of Kansas and Symposium Chair PBA '95).



Prof. D. Armstrong (left—University of Missouri-Rolla) and Dr R. Riggin (Eli Lilly).



(Left to right) Dr I. Krull (Northeastern University), Prof. C. Riley (University of Kansas and Symposium Chair PBA '93) and Prof. S. Terabe (Himeji Institute of Technology).



(Left to right) Dr T. Rosanske (Marion-Merrell Dow), Dr L. Kissinger (Upjohn), Dr C. Decedue (University of Kansas) and Dr C. Lunte (University of Kansas).

EDITORIAL

## SCENES FROM THE POSTER SESSIONS



Prof. A. Fell (Editor-in-Chief of the Journal).



Dr M. Priston (Exeter University) and Mr J. Zhou (University of Kansas).



Dr D. Radzik (Hoechst-Roussel).



Ms. S. Knaub (University of Kansas),



Ms. S. Rabel (University of Kansas).



Dr C. Lunte (left-University of Kansas) and Mr J. Ault (University of Kansas).