

## Preface

It is a pleasure to introduce this special volume of Macromolecular Symposia, which consists of the *Proceedings* of the first International IUPAC Symposium on *Electron Transfer Processes and Short Lived Intermediates*, held on September 3–7, 1998 at the Jagiellonian University, Krakow, Poland. The Symposium was organized by the Polish Academy of Sciences, Centre of Polymer Chemistry, Zabrze, and the Chemistry Department of Jagiellonian University, Krakow, and was sponsored by the following organizations and companies:

- Polish Committee for Scientific Research
- Polish Academy of Sciences
- Jagiellonian University
- Polish Chemical Society
- Petrochemia Plock S.A.
- CIECH S.A.
- Powszechny Bank Kredytowy S.A.
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For the first time the international interdisciplinary symposium on various aspects of electron transfer in chemical processes, in biology and in material sciences has been organized under the auspices of IUPAC. The scientific program covered the area of recent developments on electron transfer in:

- organic chemistry
- physical chemistry
- chemical physics
- polymer chemistry
- bioorganic chemistry and biochemistry
- material science

The studies on electron transfer processes and their multidisciplinary implications are nowadays a strongly developing area of modern science. Electron transfer reactions are playing an increasing role in synthetic organic chemistry and physical chemistry. Moreover, the electron transfer mechanism has been found to operate in many polymerization processes. On the other hand numerous biochemical reactions in living organism proceed *via* electron transfer mechanism being controlled by various enzymatic systems. Supramolecular chemistry has developed various routes of mimicking biochemical reactions in artificial systems, providing access to the modern supramolecular materials for applications in molecular informatics, non-linear optics, molecular electronics and photonics, and other still emerging new areas of contemporary material science. All these aspects have found their reflection in the symposium contributions, a selection of which is presented in the present volume.

The Symposium was attended by over 100 scientists from 17 countries (Belgium, Canada, China, Denmark, Germany, France, Israel, Japan, Poland, Russia, Switzerland, Sweden, Tajikistan, Turkey, Ukraine, United Kingdom, USA); 22 invited lectures, 6 short talks and 25 posters were presented.

In the closing remarks Professor Joshua Jortner, the President of IUPAC, summarized briefly the present state-of-art and promising perspectives of the further research on electron transfer processes in the foreseeable future.

Some foreign participants acknowledged the interesting program and good organization of the Symposium and postulated organization of such meetings every third year.

I would like to thank all the members of International Scientific (*J. Economy, J. Guillet, J. Jortner, J.-M. Lehn, R. W. Lenz, M. Mąkosza, B. Rånby, M. Szwarc, Y. Yamamoto*) and Local Organizing Committees (*G. Adamus, E. Bortel, K. Brandt, H. Janeczek, J. Grobelny, B. Kaczmarczyk, M. Kowalczyk, P. Kurcok, M. Nowakowska, D. Sęk, A. Stolarzewicz*). I would like also to express my sincere thanks to all speakers and poster presenters for the high level of their research results and excellent contributions to the scientific program of the symposium and to the overall success of this meeting.

Inspiring discussions took place during the Symposium. Therefore a valuable contribution to the Symposium by all discussion leaders (*Prof. Prof. O. Achmatowicz, A. Bielański, M. Chanon, S. Gronowitz, J. Meyer, J. Lisowski, S. Połowiński, J. Wróbel*) and their enthusiastic participation is worth to be acknowledged. Last, but not least, I would like to express my warmest thanks and regards to the Rector of Jagiellonian University, Prof. *Aleksander Koj*, to Prof. *Stanisław Waltoś*, and to the Dean of the Chemistry Department, Prof. *Maria Nowakowska*. Due to their valuable assistance the organization of the Symposium was possible.

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(Chairman, etpi '97)