ADVANCES IN SOLUTION CHEMISTRY

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PREFACE

From June 2nd to 5th 1980, the Vth International Symposium on Solute-Solute-Solvent Interactions was held in Florence, Italy. Owing to the large range of interests included in the program and to their interdisciplinary nature, a number of microsymposia on specific subjects were organized, in addition to plenary lectures, session lectures and poster sessions. The abstracts of the Conference were published in Inorganica Chimica Acta as a special publication and as an appendix to the issue of June 1980.

The plenary lectures have been published, as customary, in the Journal of Pure and Applied Chemistry (October 1980) and the results of the following microsymposia are being published in specialized journals:

- 1) Electronic Rearrangements Induced by Solute-Solvent Interactions (Local Editor J. H. Ammeter) - N. J. Phys. Chimie.
- 2) Anion Activation in Quaternary Salts, Crown Ethers, Cryptates and Related Systems (Local Editor F. Montanari) - J. Mol. Catalysis.
- 3) Solvent Effects in Homogeneous Catalysis By Metal Complexes (Local Editor R. Ugo) - J. Mol. Catalysis.
- 4) Theoretical Models in Biochemical and Related Systems (Local Editor E. Clementi) - J. Computational Chemistry.
- 5) Thermodynamic Approach in Coordinative Interactions in Solution (Local Editor P. Paoletti) - Advances in Molecular Relaxation and Interaction Processes.

The present book contains most of the session lectures as well as the contributions to the microsymposium on "Evaluation of Solvation Energies of Reagents and Transition States". The title "Advances in Solution Chemistry", although rather general and not pursuing a single definite goal, has been chosen in order to fit the frame of the title of the Symposium. The choice of the lectures

has been based on the scientific prestige of the contributors in the various areas needed to be discussed in the meeting and, although to a lesser extent, following a geographical criterion.

The contributions to the microsymposium on "Evaluation on Solvation Energy of Reagents and Transition States" (E. Buncel, M. H. Abraham and G. Scorrano) have been included because we thought they fit well into the overall scheme of the reactivity in solution. We acknowledge the judgement of Professor Giorgio Modena, convener of the microsymposium, for the excellent choice of speakers.

The selection of the session lectures is a result of the joint efforts of the organizing committee: U. Belluco, E. Clementi, A. Dondoni, C. Furlani, F. Montanari, L. Sacconi, R. Ugo, and the editors.

By organizing the meeting we have tried to outline the most recent aspects and trends (physical, organic, inorganic, theoretical, biological, pharmaceutical) of the chemistry of solutions. This book witnesses in part this effort.

We take the opportunity of thanking all the colleagues, friends, and students of the University of Florence, who helped in the organization of the Conference. A special thanks is due to Ms. Simonetta Donzellini who, besides delighting the participants to the meeting with her presence, patiently and skillfully retyped all the manuscripts: of all the misprints which have been left in the final draft the editors have the sole responsibility. Indeed, we decided not to return the retyped texts to the authors in order to speed up the publication.

The Editors

Firenze, 9th October 1980

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