

## FOREWORD

This Volume of *Croatica Chemica Acta* is a collection of papers based on lectures delivered at the *III International Conference Chemistry at Interfaces* and at the *III International Summer School on the Chemistry of Solid/Liquid Interfaces*. Both events were organized by the »Ruder Bošković« Institute, Zagreb, and held from June 27 to 30, and July 1 to 5, at the Institute's Center for Marine Research at Rovinj.

The Council for Scientific Research of the Republic of Croatia and the Coordinating Committee for Scientific Meetings of Yugoslavia made these events possible by understanding the deep and broad importance of the field of interfacial chemistry and physics for the many areas of educational, industrial, and environmental research, and by backing this understanding with financial support.

The *Chemistry at Interfaces Conference* was essentially the third *Euchem* meeting under this title. It follows the pattern and the tradition of these events started in 1968 at Port Meirion and continued in 1970 at Luntenen. The incorporation of the Rovinj meeting into this series was made possible by the support given to the organizers by Professors G. D. Parfitt and J. Th. G. Overbeek as chairmen of the preceding Conferences. Many others have given support in various ways, of whom we have to name Prof. Armin Weiss, Prof. Lisbeth Ter-Minassian-Saraga, and, last not least, Prof. J. Lyklema.

The International Summer School on the *Chemistry of Solid/Liquid Interfaces* has become a traditional event attracting a number of distinguished lecturers from the fields of colloid chemistry, surface chemistry, and electrochemistry. The first meeting in Dubrovnik—Cavtat in 1969 pointed to the unresolved problems of the theories of colloid stability and of the double layers at metals, carbon, oxides, and of silver halides in particular. The volume of Proceedings of that meeting [cf. *Croatica Chemica Acta* 42 (1970) No. 2] contains also extensive reviews of research work done within the group usually referred to as the *Yugoslav School of Colloid Chemistry*.

The Second School held at Rovinj in 1970 has had a strong emphasis on electrochemistry, surface chemistry, and crystal growth theories. No proceedings were published, though two important papers from the meeting appeared in the regular issue of *Croatica Chemica Acta* [cf. *CCA* 43 (1971) 249 and 261.]: the first, by J. Lyklema treated the electrical double layer at oxides, the second, by G. H. Nancollas, the nucleation and growth of calcium phosphate crystals.

The present volume shows how the more than 30 lectures, resulting in 28 contributions in print, interpreting apparently diverse fields of interfacial science, were concerted into a highly informative, competent, and above all stimulating series enjoyed by 120 participants, students, scientists, and engineers.

The papers in this volume of proceedings have been put under the following headings:

1. Phenomena at Liquid/Liquid Interfaces
2. Polymers and Biopolymers at Interfaces. Their Structure, Conformation, and Reactivity
3. Adsorption at Interfaces. Structure of the Interfacial Layer and Phenomena Related to Wetting and Coagulation
4. Hydrolysis, Precipitation, and Hydration Involving Oxides and Hydroxides
5. Crystallization and Crystal Growth
6. Optical and Spectroscopic Techniques in Interfacial Chemistry
7. Precipitation Phenomena.

There was as much discussion as time permitted during the official sessions, and more at the informal level. No records are presented, except that we feel that whatever was important has been incorporated in the present final form printed here.

Finally, we have to pay a tribute to our secretaries, assistants, technicians, staff of the Center for Marine Research, the staff of the Hotel Eden, who have contributed their share to the success of the Conference and the School. And indeed, one or the other of the artists, painters, from the Rovinj colony, must have gotten the impression, that the many odd people who spent days in a dark room, neglecting the bright sunshine, the beauty of the woods and the sea, were haunted by evil spirits. And if the impression materializes sometimes in a painting, we might get a different, and possibly more humane, assessment of what was good or wrong in our devotion to interfacial science.

V. P.