

INTRODUCTORY REMARKS

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A scientific meeting enjoying a strong tradition and continuous support from a large number of distinguished scientists all over the world, barely needs many words of introduction. Moreover, the genesis of the summer conferences *The Chemistry of Solid/Liquid Interfaces* was reviewed recently in the similar introductory remarks to the last, 1979 meeting. Most of what was said still holds.

Once again the invited lecturers from 9 European countries and the USA provided the keynote to discussions and the framework of this interdisciplinary meeting. Devoid of any preprogrammed requirements, they selected their presentations in such a way that the lectures, and consequently the present proceedings, are representing a good cross section of contemporary trends in research and of thinking in the fields of colloid and interface science. Thus, the meeting continued to be a settling ground for many ideas advanced in recent times and brought to fruition in several publications presented here, critically reviewed in the lectures and similarly influenced by the discussions at the Conference.

The programme this time emphasized »wet« colloid chemistry, although a number of papers touched upon and dealt with neighbouring fields. Such, the structure of water at interfaces was discussed; a lecture and a paper dealt with the conceptual interface between electrochemistry and colloid chemistry; a few others with surface phenomena in adsorption and with crystal growth kinetics. The interested reader will find details in the present volume.

The Conference was followed by a *Symposium on Precipitation and Interfacial Phenomena in Biological Mineralization*. The limited time and number of presentations did not allow an extensive review of this broad field bordering on biophysics and biochemistry. Nevertheless some important aspects have been successfully described and discussed. Most of the presentations were concerned with calcium hydroxyapatite, both from the aspects of the kinetics of free and inhibited crystal growth, and from the point of view of thermodynamics and phase transformation. In a broader sense, micellar growth of billiary lipid systems has been presented as a significant aspect in biological dynamics, followed and supplemented by indepth reviews of phenomena incurred in the adsorption of biopolymers on model surfaces.

There is almost no limit to wishes to discuss various problems of interest to lecturer and the audience. In order to catalyze and promote the discussions

from small groups, or even person-to-person events to full audience events, two round-table discussions were organized. The first, moderated by E. Matijević and A. L. Smith covered a broad field of general problems of colloid science in relation to fundamental, industrial, and environmental research in other fields of physical sciences. The second discussion, moderated by J. Kratochvil and J. Lyklema reviewed the contemporary state in the theory and experiment on colloid stability. While there is no written record of these discussions, the participants have heard many problems highlighted to a level in which ideas for further work could be generated. This pertains to problems of emulsion polymerisation, to phenomena of stability of colloids in concentrated ionic solutions (including seawater), the role of surface complexation and hydrolysis in the stability of colloids, to the indication of new mathematical results in the quantification of existing theories. No pure theoretician was present and this limited the discussion to presentation of the results achieved eliminating the possibility of a glimpse into future. However, the discussions on the initial stages of colloid phase formation and particle growth need to be mentioned as outstanding contributions in the field, which has been treated continuously in all of the Conferences in the last 12 years.

To promote discussions on specific topics the Conference featured, for the first time, also poster sessions. In all 36 posters were announced and presented. Some of them were highlighting experimental details of invited lectures. Some were introducing topics like aggregation in both dye and surfactant solutions, or treating various specific aspects of precipitation in multicomponent systems. The format of the poster sessions and the limitations to numbers presented provided adequate time and opportunity for intensive discussions in front of each one. The sessions thus can be considered a significant and valuable addition to the established schedule of the Conferences and of the Symposia.

No further comments are necessary. Each meeting is as good as the presentations make it. Judging by the positive echo of the 6th Conference and of the Symposium, and its impact on the research community, the meeting can be classified as one of those essential incremental steps towards excellence in the disciplines of surface science. And it is just these disciplines, which are most intimately connected with almost every field of pure and applied science of chemistry.