Solvents and Self-Organization of Polymers

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Solvents and Self-Organization of Polymers

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PREFACE

The idea of an international conference on self-organization of polymers resulted from a six-years' cooperation between the groups of the University of Texas at Austin (P. Munk and S. E. Webber) and the Czech Academy of Sciences and Charles University (Z. Tuzar and K. Procházka). Our projects dealing with block copolymer micelles and their properties have been supported by a number of agencies including the Czech-U.S. Joint Science and Technology Fund and by a NATO Collaborative Grant (ZT and PM), the U.S. Army Office of Research (PM and SW), and the National Science Foundation Polymers Program (SW). The impetus for planning a meeting at a Turkish locale grew from discussions during the stay of Prof. E. Arca (Hacettepe University, Ankara) in the laboratory of P. Munk. We feel very fortunate to have secured NATO funding for the Advanced Studies Institute that forms the basis for this book, with some important supplementary funding from the European Office of Research of the U.S. Army.

Naturally the scope has been extended from our own primary interest in the area of polymer micelles to the more general area of the role of solvents in promoting polymer self-organization. It was our aim to bring together scientists who are experts in macromolecular chemical synthesis, in the physical chemistry, and in the physics of polymer self-organization. The lectures also included experimental results and methods, analytical theory, and computer simulations. We feel that we were able to bring together scientists who would not often attend the same conferences and the cross-fertilization of ideas was most gratifying.

While the meeting concentrated on problems of basic science, we have not excluded practical applications such as pharmacology. Besides the main lectures, many interesting new results were presented by the participants in the form of posters and in lively discussions following lectures, during the formal poster sessions, and at many opportunities for informal discussion. Finally, topical subjects were discussed in five parallel round-table sessions at the end of the meeting. This discussion provided the participants a sense of where this field is at the present moment and some educated guesses about where it might go in the future.

Finally, special mention must be made of the hospitality of the Turkish people who we encountered outside the meeting and the efforts of the Turkish scientists who attended the ASI to smooth the way for the visitors and explain the fascinating mosaic that is modern Turkey. Certainly for the organizers, and we hope the participants, this was a once in a lifetime experience.

Petr Munk, Stephen E. Webber(Austin, Texas)
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June, 1996