PREFACE

We are grateful for the opportunity to share with a wider audience the papers presented at the United States-Japan Seminar on Electrolytic Aspects of Biopolymers and Biological Systems. We hope that readers will share in the excitement generated among participants in the Seminar, which met from June 3—June 8, 1979 in Honolulu.

Working sessions were held at the East-West Center, on the campus of the University of Hawai with its superb facilities for conferences such as ours. Participants were housed at the Kaimana Beach Hotel in Waikiki, directly on the beach. A private bus transported us between the two locations. We are indebted to James McMahon, of the East-West Center, for having made the necessary arrangements with a thorough understanding of our needs.

The meeting brought together scientists from the U.S. and Japan whose work shared a common focus, but whose personal contacts previously had been limited. The intense interest in the topics presented led to provocative and stimulating discussions. The balmy atmosphere of Hawaii helped catalyze a relaxed exchange of ideas. Participants shared the opinion that their future research would be influenced by their encounters during the seminar.

The seminar brought together a variety of experimental and theoretical developments concerning the behavior of synthetic and biological polyelectrolyted as well as the behavior of more complex biological systems. Experimental techniques reported on included electrical, hydrodynamic, optical and thermodynamic methods. Molecular processes which received special emphasis included fluctuations of counterions, the competitive binding of counterions, conformational transitions, other induced changes in molecular dimensions, and the response of membranes to changes in their ionic environment and to applied electric fields.

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