## **PREFACE**

An article entitled "The Ultracentrifuge, A New Instrument for the Determination of Size and Distribution of Size of Particles in Amicroscopic Colloids" was published by The Svedberg and Herman Rinde in the December 13, 1924 issue of the Journal of the American Chemical Society. Thus was described the basic instrument and techniques which J.D. Watson in "The Molecular Biology of the Gene" characterized as "Perhaps the most striking contribution of physical chemistry to the study of biological macromolecules ...". The readers of this journal should not need amplification of that statement.

In spite of the fact that this conference celebrated a fiftieth anniversary, ultracentrifugation is far from being a static field of scientific endeavor. For this reason, with the exception of Professor Kai Pedersen's inaugural paper reviewing the development of the ultracentrifuge in Svedberg's laboratory, we have sought to focus the conference on some representative current topics in ultracentrifugation where the major portion of the work presented has not been published. We regret that it was not possible to present all of the topics that would have been appropriate, but the inevitable scheduling conflicts that accompany any conference precluded this. We also greatly regret that personal circumstances beyond our control delayed the editing of the proceedings.

We are grateful to Dr. Arnold W. Pratt, Director of the Division of Computer Research and Technology, N. I. H. and to Dr. Milo D. Leavitt, Jr., Director of the Fogarty International Center for Advanced Study in the Health Sciences, N. I. H. for their generous support of this conference. Our thanks also go to Mrs. Michiko Cooper and Mrs. Janice Weymouth of the Fogarty International Center for their invaluable assistance in the organization and running of the conference, and to Beckman Instruments, Inc. and Ehrenreich Photo-Optical Industries, Inc. for their generous support of the travel expenses of some of the overseas participants. Finally, we thank the conference participants and the editorial staff of the North-Holland Publishing Co. for making the publication of these conference proceedings possible.

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