Foreword

The Eighth International Conference on Cyclotrons and Their Applications, as its name implies, is one of a series of meetings which provides for the exchange of ideas and information by cyclotron builders and users throughout the world. The preceding conference was held in Zurich in 1975.

The international character of these Conferences is confirmed by the list of countries represented. Delegates were registered from Australia, Belgium, Canada, France, the Federal Republic of Germany, the Germany Democratic Republic, India, Italy, Japan, the Netherlands, Spain, Sweden, Switzerland, the U.S.S.R., the United Kingdom, and the United States, 205 delegates in all.

This Conference had many technical high points. For an overview of these topics, see John A. Martin's "Conference Summary" in this volume. Another highlight was the banquet address by David L. Judd of LBL, in which, guided by his imaginary crystal ball, he projected future cyclotron developments with an entertaining mixture of fantasy and extrapolation.

Of the 128 papers published in these Proceedings, 49 were presented orally and 73 in poster sessions. Six papers published here were not presented at the Conference: four of these arrived from the U.S.S.R. and the fifth from Japan too late to be included in the program. The author of one invited paper was called away shortly before his oral presentation was due.

Some manuscripts have been retyped, and almost all have received some form of emendation. Where the English language of a manuscript contained ambiguities, an edited version was generally returned to the author(s) for confirmation. The published accounts of the discussions are taken from tape transcripts and from written material provided by the participants. The authors have in all cases had the opportunity to correct and confirm the text.

A noteworthy feature of this volume is "Cyclotrons - 1978," an updated compilation of cyclotron data from all laboratories, which is dedicated to the memory of the late Fred T. Howard, who ably carried on this work for many years.

Finally, I would like to express my gratitude to many of my colleagues for their contributions to the Conference and to the Proceedings. Foremost among these is Charles Foster, who, with Judy Lankford, handled the difficult job of Conference arrangements with skill and aplomb. In preparing the Proceedings for publication, grateful acknowledgement is due to members of the ORNL staff for much valuable advice, to Hank Davis for his skill in proofreading and typography; to faculty and staff colleagues at IUCF for reading and correcting manuscripts; to an able clerical staff headed by Joyce Pace, Jane Thornburg, and Becky Westerfield; and to Kent Berglund for the photographs in this volume.