FOREWORD

The 7th International Cyclotron Conference, held in Zürich trom 19-22 August, 1975, was attended by 231 registered participants from 21 different countries. Visitors came from all 5 continents, showing the truly international character of the so-called cyclotron family. After a slight slump around 1970 in science funding in general, it is encouraging to see that cyclotrons emerge again with a promising future, rich in applications. For an informal summary of the topics and highlights of this conference, the reader is referred to the back inside cover of these proceedings. There Henry Blosser, from Michigan State University, a very active pioneer in the cyclotron field, put down his impressions in a matter of ten minutes after some small pressure from the editor.

Two and a half days were devoted to status reports on running cyclotrons, new proposals, and many technical reports on the know-how of cyclotrons. Half a day was spent on a visit to the cyclotron facilities at SIN, Villigen, and one full day on applications of cyclotrons in physics, engineering, biology and medicine. Dr. Kligerman from Los Alamos was showing to a packed auditorium (and to his cyclotron friends at TRIUMF and SIN) his brand new and very promising results from a first test with pion therapy. A panel session on "Accelerators for Hospitals" showed that cyclotrons are very strong candidates for radiation therapy with neutrons, protons and, more in the future, with pions. This panel session, and the one on "Computer Control for Cyclotrons", are included in these proceedings as recorded on tape, with only minor editing modifications.

In addition to 25 invited papers, a total of 103 papers were submitted for presentation at the conference. In order to avoid parallel sessions, only 30 papers were selected for oral presentation. The rest of the papers were displayed, with great success, in two poster sessions, with the authors explaining in detail to interested participants their reports. The high-light of the banquet was the after dinner speech by M.S. Livingston on the history of the cyclotron. The hit of the ladies program was the visit to a local chocolate factory. The rumour goes that some conference participants too preferred this visit to the session talks!

The list of old-timers who participated in all seven cyclotron conferences is now reduced to R. Richardson, J. Martin and H. Blosser.

Let me close with special thanks to the many people who contributed enthusiastically to these proceedings. The CERN Scientific Information Service gave invaluable support and help in editing (A. Jesse and A. Günther) and assistance with the typing (Mrs. Y. Piemontese). In addition, S. Adam, J. Collins, Miss E. Huber and Mrs. E. Pedroni of SIN helped putting together the panel sessions, list of participants, etc. R. Kramer caught the atmosphere of the conference with his camera, and a selection of his shots can be admired at the beginning and at the end of this book. Finally, we would like to thank F.T. Howard from Oak Ridge, who updated again the world list of cyclotrons for our conference.

W. Joho, SIN Editorial chairman