Foreword

The National Accelerator Centre (NAC) was honoured to be asked to host the 14th International Conference in the series on Cyclotrons and Their Applications. The conference was held in the Cape Sun Inter-Continental Hotel in the heart of the City of Cape Town from October 8th to 13th 1995. This was the first time that a conference in this series has been held in Africa – or even in the southern hemisphere – as the previous conferences have been in either Europe or America, with one having been held in Japan. The purpose of this conference series is to provide a forum for communication between designers, builders and users of cyclotrons. It is gratifying that the number of papers presented continues to increase with each conference, and this trend was maintained with the present conference.

We are pleased to acknowledge the official sponsorship of the conference by the International Union of Pure and Applied Physics, the South African Institute of Physics, the South African Medical Research Council, The South African Institute of Electrical Engineers, the Council for Scientific and Industrial Research and the Foundation for Research Development, as well as the National Accelerator Centre. A number of other sponsors, listed elsewhere, generously made donations or contributions towards the success of the conference.

President Nelson Mandela generously accepted an invitation to open the conference. More than 200 delegates, plus some spouses and companions, gathered to hear the Presidential Address. Also present were some 30 special guests from Science Departments of Universities and Technikons around the country, at the invitation of the Foundation for Research Development (FRD), the parent organisation to which NAC belongs. President Mandela was given a spontaneous standing ovation by the assembled delegates and dignitaries. In his speech, the President underlined the Government's support for Science in South Africa, and especially the role it has to play in solving the problems facing the country's people. Prof. A.C. Bawa, Chairman of the FRD Council, thanked President Mandela for his address. A special tea was arranged for the invited guests and the members of the International Organising Committee of the conference series.

The Mayor of Cape Town provided a Civic Reception hosted by Councillor Theresa Solomons: delegates were given a real Cape welcome and were invited to partake of an array of seafood snacks and to sample a variety of Cape wines.

On Monday morning, FRD's President, Dr Rein Arndt, gave a short welcoming address, after which the conference got under way. There were 14 oral session, with 28 invited speakers and 28 additional oral presentations, covering a specific topic during each session. During two poster sessions, held on Tuesday and Thursday respectively, some 125 posters were displayed and discussions with the authors took place. On Monday evening coaches transported the delegates and their companions to Cape Town's Waterfront for an informal social evening in a working harbour environment.

On Tuesday, the Official Opening took place, and in the afternoon coaches transferred delegates to the National Accelerator Centre. Of particular interest were the radiotherapy facilities, where proton and neutron therapy are performed, the large magnetic spectrometer, and the isotope production plant. Careful planning allowed 230 people to be shown round the large facility in about an hour and a half, after which a professional team of caterers provided a barbecue supper.

After the morning sessions on Wednesday, delegates availed themselves of a number of half-day tours. Unfortunately it rained that day, which meant that those who had been intending to ascend Table Mountain, either on foot or by cable-car, had instead to take a coach-tour around the Peninsula. However, for those determined enough, a very successful climb was arranged for the following Saturday, and some 18 people made the climb up to the summit at 1000 metres above sea-level. Other half-day tours took delegates to Kirstenbosch, Groot Constantia and Hout Bay, or to Stellenbosch and the Winelands, or to the Vergelegen

Homestead in Somerset West. A coach trip was also provided on each day for the delegates' companions, taking them to the Paarl, Franschhoek and Stellenbosch Winelands, to Table Mountain and the Waterfront, to Cape Point and around the Peninsula, and to go whale-watching at Hermanus.

On Thursday, after a full day at the conference, some 210 delegates and companions attended the Banquet, held in the Rotunda in Camps Bay. Champagne and orange juice was served in the foyer while an African Marimba band played. Once seated at tables decorated with magnificent arrangements of Cape Fynbos, guests were served with dinner while a classical guitarist played. In a short speech, John Cornell of NAC attempted to welcome the delegates in each of the various languages spoken in the 26 different countries represented. The previous Director of NAC, Daan Reitmann, gave the official Banquet Speech, during which he outlined the history of cyclotrons in South Africa.

The conference ended after tea on Friday afternoon, though a large number of delegates took advantage of several post-conference tours which had been arranged in consultation with American Express Travel Services, to the Overberg and Hermanus, the Garden Route, and the ever-popular Kruger National Park, respectively.

Members of NAC staff formed an efficient Local Organising Committee, which worked for more than a year, planning everything down to the last detail. The Programme Committee had the onerous job of deciding on the invited speakers, accepting or rejecting papers submitted, and choosing the papers of suitable interest for oral presentation. We thank Eric Baron of GANIL, Rudolf Maier of KFA-Jülich and Thomas Stammbach of PSI for their time and effort as part of this committee. Thanks are also due to Geraldo Dutto of TRIUMF, hosts of the previous conference, for his advice and help in preparing for this conference.

Virtually everyone in the Accelerator Group and many other members of NAC staff played a role in ensuring the success of the conference. While it is impossible to name all those who gave of their time, a special word of thanks must go to our drivers Solly Gordon and Edward Theunissen, who worked extremely long hours. Thanks are also due to Hilda Haasbroek, Ann Herbert, Annamarie van As and Hilde van Rhyn for their friendly and efficient services in the conference Secretariat. Particular mention should also be made of Lowry Conradie who carefully prepared and collated the cyclotron data sheets which are included with these proceedings.

At the meeting of the International Organising Committee (IOC), which took place during the conference, it was agreed that the conference series serves a useful purpose, as witnessed by the number and quality of papers submitted to this and the previous conferences, and that the series should therefore be continued. Thanks for their valued services were extended to the retiring members of the committee, Dr Clark (LBNL), Dr Holm (University of Uppsala), Dr Joubert (GANIL) and Prof. Kondo (RCNP). The new members of the IOC, viz. Dr Calabretta (LNS-INFN, Catania), Dr Baron (GANIL), Dr Reistad (Svedberg Lab, Uppsala), Prof. K. Sato (RCNP) and Dr Lyneis (LBNL), were warmly welcomed.

The committee recommended that a suitable number of 5-minute oral presentations of posters (with no discussion time) should be considered by the organising committee of the next conference. Dr Jongen of IBA was granted the opportunity of presenting the case for appointing employees of commercial companies to the IOC. A sub-committee consisting of six persons, with Prof. Pollock as chairman, was appointed to report on the principle of appointment to membership of the IOC, at its next meeting.

The IOC decided by vote that the next conference in this series should be held at GANIL in Caen, France during 1998, and Dr Baron was warmly thanked for his institute's invitation.

Adriaan Botha Local Organising Committee Chairman. Helge Jungwirth Acting Chairman at CYCLOTRONS '95.

Faure, November 1995.