

# PREFACE

The fourth European Particle Accelerator Conference, EPAC94, took place at the Queen Elizabeth II Conference Centre in London from Monday, 27 of June, to Friday, 1 of July. The local organisation was provided by the Rutherford Appleton Laboratory and the Daresbury Laboratory, and the conference was attended by 755 participants from 28 countries. A special effort was made to encourage young accelerator scientists to attend and this resulted in support being provided for 48 young scientists from 11 different countries. Some support was also provided for 31 East European participants.

EPAC94 was held under the auspices of the European Physical Society Inter divisional Group on Accelerators (EPS-IGA) and was supported by the former Science and Engineering Research Council (SERC) UK, CERN (Geneva), Apple Centre Warrington, English Electric Valve Co Ltd, Oxford Instruments Plc, Tesla Engineering Ltd and Vector Fields Ltd. In addition support for the young scientists and some of the East European participants was provided by the Commission of the European Communities (Brussels), CERN (Geneva), DESY (Hamburg), ESRF (Grenoble), GSI (Darmstadt), INFN (Italy), IRMM (Geel), the ISF (USA), KFA (Jülich) and the SERC (UK).

The conference was opened by David Davis, the British Parliamentary Secretary at the Office of Public Service, and he asked the conference participants to consider carefully the value of their work to society as well as its scientific merit when planning their future projects. This was followed by the first invited paper by Professor Llewellyn Smith, the Director General of CERN, who outlined the fascinating future options for high energy physics in Europe.

The scientific programme spanned four and a half days with parallel sessions on two. There were 53 invited papers, 34 contributed oral presentations and 733 poster papers of which 20 were selected for 5-minute oral presentation. The topics covered the whole field of accelerators and ranged from possible methods of reaching ever higher particle energies to methods of reducing the energy spread of stored ion beams to close to zero. There were descriptions of the increasing number of accelerators used for the generation of synchrotron radiation and there was a special one day session on high intensity accelerators. The programme also included an industrial seminar on the transfer of technology between laboratories and industry, with speakers from both communities reviewing the strengths and problems of the process. It was apparent from the informed debate that the continuation and further evolution of technology transfer is deemed to be essential by both sides.

The newly instigated EPS-IGA Accelerator Prize was awarded jointly to H. Danared of the Manne Siegbahn Laboratory, Stockholm and I. Syrachev of INP Protvino, Russia. The prize was awarded for the first time at EPAC94. The contenders were physicists or engineers in the early part of their careers who had made a recent and significant contribution to the field of particle accelerators.

An industrial exhibition which was supported by 44 international companies gave added interest to the conference. It ran from Monday afternoon until Thursday mid-day, displaying the high technology components and services which industry provides for the accelerator community. The exhibition produced an ideal background for discussions between the companies and their customers.

In parallel with this exhibition there was an interesting display of the proposed Large Hadron Collider (LHC) which was provided by CERN at the instigation of the British Particle Physics community. Smaller displays were presented of the SRS at the Daresbury Laboratory and of ISIS at the Rutherford Appleton Laboratory. A visit to the Rutherford Appleton Laboratory was also arranged, and 150 participants took part in the tour. The conference closed with a very interesting and entertaining talk on Cosmic Accelerators by the Astronomer Royal, Professor Wolfendale.

I would like to thank the members of the Local Organising Committee and the members of the Daresbury and Rutherford Appleton Laboratories who gave so much help in organising the conference. Andy Kurzfeld was the conference manager. Susan Humphreys was responsible for the conference secretariat. Neil Marks organised the industrial exhibition and seminar. Mike Poole arranged the poster sessions. Christine Petit-Jean-Genaz continued as the EPAC executive secretary and with Vic Suller, produced the proceedings. Finally, I would like to thank all the participants for their contributions which form the vital part of the conference.

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Chairman of the EPAC94 Local Organising Committee