

IN PURSUIT OF BETTER BEAMS

It is symptomatic of the scientific way of life that as soon as an accelerator is in use, work starts on extending it beyond the original design. In this Conference two themes receiving much attention are improvements in beam quality and the possibility of accelerating many different ions to a wide range of energies, a far cry from the classical single energy proton or deuteron machines in widespread use at the time of the first of these Conferences. In honour of this tendency I reproduce as a frontispiece a figure from Dave Clark's paper (after Judd and Mackenzie) which caricatures the cyclotron as an appendage of its many ion sources.

In editing the papers published here the Committee has been moved by the need for speed and the desirability for some degree of uniformity. This latter has entailed a certain amount of adjustment of symbols and I hope that authors will not be too perturbed to find that resonance frequencies are usually ν and both turn number and charge state are usually, but not quite always, N .

As for previous conferences in this series Mr. Fred T. Howard (ORNL) has compiled a valuable set of cyclotron information sheets which were issued at the Conference and which have now been brought up to date. Unfortunately, the wealth of detail available has made it difficult to include the summary in this volume. I have included the contents page however and it is hoped to publish the whole as an Oak Ridge document, ORNL-AIC-2.

Besides attending eight lengthy sessions, delegates were entertained by Dr. Pickavance (Science Research Council) and Dr. Livingston (ORNL) at the Conference Dinner, and paid visits to Harwell, the Rutherford Laboratory, the MRC Cyclotron at Hammersmith and some of the lighter local attractions. A post Conference tour of European Cyclotron Centres was also arranged, and went off with only a small number of hitches mainly due to Continental (not English) weather. Our thanks are due to several Committees for all these arrangements and especially to the Organising Committee, the Harwell Administration and the Hosts of the European Tour.

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