

INTRODUCTION

The goal of this workshop was to bring together those people who are involved with radionuclide production so that they could discuss the problems and possible solutions associated with this area of research. In order to facilitate the exchange of information formal presentations were kept to a minimum followed by open discussion. These formal presentations included an overview of the topic including a selected bibliography. The direction of the ensuing discussion was dictated by the participants themselves.

The topics were selected so as to cover the basic concerns of the researcher involved in the field. Thus we started with the material sciences of the target components (i.e. foils, bodies, target materials and transfer lines). Then the questions of how the beam gets to the target and how it interacts with the target material were discussed. A review of the nuclear data followed. Because many researchers share their accelerators with other groups the problems of scheduling have become an important enough issue to warrant a separate session.

The final session was opened to the participants so that they could share some approaches they have taken to provide the radionuclides in high yield and purity.

The workshop attracted more participants than we have expected so that with large cross section of representation we feel most of the majority target problems were at least acknowledged. As in any collective effort solutions are not always achieved by consensus. Much research remains to be done. However in many cases our research can now be approached in a more coordinated way.

Finally, the editing of these proceedings has been achieved via computer link between Vancouver and Heidelberg. Even with this sophisticated system much has been lost, misrepresented or misinterpreted. For these shortcomings we apologize. In any case, we hope these proceedings reflect in some small way the enthusiasm with which the participants so willingly shared their research experiences. For this we can only say - thank you.

NOTE TO THE READER

These proceedings are divided into sections so as to reflect the order in which presentations were made. After the workshop, the co-chairpersons supplied a written version of material that was presented and/or that was discussed. Obviously some sections elicited more discussion than others resulting in more updated their presentations in the written form so as to make these proceedings current and not historical (we hope). After reading the notes of several attendees we have added editorial notes at the end of each section to cover points that we felt may have been overlooked. Also supplemental material in the form of presentations, reprints, technical data have been included as appendices.