

BOOK REVIEW

Technetium In Chemistry and Nuclear Medicine
Proceedings of the 'International Symposium on Technetium in Chemistry and Nuclear Medicine', Padua, Italy, 1982.
Editors: Edward Deutsch, Marino Nicolini, Henry N. Wagner, Jnr.
Published by Cortina International, Verona, May 1984, 246 pages. Distributed worldwide (except in Italy) by Raven Press, New York City, USA.
Price: 54.00 US dollars.
ISBN 88-85037-50-X

The conference in Padua in September, 1982 brought together over 80 international scientists with a common interest in Technetium chemistry. The proceedings of that meeting will allow many others to gain an insight into the valuable contribution that the conference provided to the sharing of knowledge in this rapidly growing area of science.

The book is divided into three sections: 'Technetium chemistry', 'Production of Radiopharmaceuticals labelled with Tc-99m', and 'Use of Technetium Radiopharmaceuticals in Nuclear Medicine'.

Following an excellent overview of the coordination chemistry of Technetium by Alan Davison, the first section continues with several reports of studies involving the complexation of Technetium with a wide variety of ligands, and the physicochemical study of these complexes. While not always directed towards a particular nuclear medicine application, the research work presented in these pages represents the continued growth of knowledge of Technetium chemistry most necessary for the development of future radiopharmaceuticals.

The second section covers aspects of production of Technetium radiopharmaceuticals. Subjects such as ligand design, and quality control are examined in depth. The ever expanding role of high performance liquid chromatography (hplc) in the development and quality assurance of new radiopharmaceuticals is highlighted within these pages. Structure distribution relationships (SDRs) is another growing interest of nuclear medicine which is touched upon by a number of authors.

The application of Technetium in nuclear medicine forms the theme of the final part of proceedings. The section opens with a highly informative review by Mariani on the impact of Tc-99m on the development of nuclear medicine. Technetium radiopharmaceuticals, both old and new, are examined; the emphasis remaining on chemistry, but delving into the

interaction of chemistry with clinical and biological findings. Bone seeking agents dominate this section, confirming that this was one of the major research interests up to the time of the conference.

The book will undoubtedly be of great interest to anyone connected with Technetium chemistry, ranging from the academic researcher examining the fundamental chemistry of Technetium, to those engaged in development of new radiopharmaceuticals, and the routine users in radiopharmacies.

D.P. Nowotnik, Ph.D.
Pharmaceuticals Development Department
Medical Products Division
Amersham International plc
Amersham, Buckinghamshire
England