



Book Reviews

Biobusiness World Data Base. Edited by D. N. Leff, Elsevier Science Publishers, Amsterdam, 1989, 212 pp. ISBN 0 444 99629 X. Price: £86.00, Dfl 280.

This book represents the complete text of a draft report by a US government interagency working group on competitive and transfer aspects of biotechnology, including carbohydrates. Produced by a group of 27 representatives drawn from a number of government departments and private firms active in various aspects of biotechnology, this unique text provides information on the biotechnology activities of 19 countries, and reveals proposed US biotechnology companies. It gives details of technology and projected start-up dates which will be interesting to follow-up for product developments in the US and Japan; specific strategies for commercialisation and barriers imposed by the various countries; projection of sales of existing products, equipment and potential products to the year 2000.

This book must be read by all involved in the future of biotechnology. Executives in industry, academic research workers and development officers, military contractors, government planners and policy makers, investment analysts and venture capitalists will all find this book of immense value in future planning. The lists and tables which form the basis of the text contain a wealth of information.

John F. Kennedy

Chiral Liquid Chromatography. Edited by W. J. Lough, Blackie, Glasgow, 1989. ix + 276 pp. ISBN 0 216 92499 5. Price: £45.00.

It has been known since Louis Pasteur's discovery in 1848 that enantiomeric materials can be separated. However, separation of

enantiomers was an extremely laborious task and it seemed as if improvement was virtually impossible. Thus, method development progressed only relatively slowly and it took until the 1970s for the first chiral stationary phase to be developed.

Since that time chiral liquid chromatography has taken a big step forward. The reason for this may lie in the realisation, of the pharmaceutical industry in particular, that the chirality of a drug may determine its in-vitro activity and that the presence of more than one enantiomer could have a dramatic impact on the effectiveness of a drug.

Chiral Liquid Chromatography describes a wide range of techniques and chiral stationary phases. For example, there is a choice of direct and indirect techniques, the latter usually involving a derivatisation step either to avoid or sometimes cause interaction on the stationary phase, or for the enhancement of detectability.

Direct methods are more commonly used and there is a large number of different chiral stationary phases available, thus reducing the need for derivatisation work. However, it is this vast number of different stationary phases which often causes confusion for the chromatographer, but this book provides sound guidance through the labyrinth of possibilities.

Chiral Liquid Chromatography is a book which after an introduction to molecular asymmetry, covers the need for enantiomeric separations and the development of chiral separations, to indirect and direct chiral resolution methods and then on to strategies for the development of enantiomeric liquid chromatography determination and future trends. This logical step-by-step approach must be considered necessary for a technique that has expanded so rapidly in a very short time. The very practical basis of this approach will most definitely be appreciated by anybody who has to acquaint himself with the technique.

Chapters are well illustrated and contain, without exception, extensive and up-to-date reference sections. The book will be of interest to pharmaceutical, food, and organic chemists, biochemists and forensic scientists. It must be considered essential for those who have to familiarise themselves with the technique and, even if used only as a source of reference, for those who research in this area. Authors and editor have done a superb job in putting this book together.

**Kornelia Jumel
John F. Kennedy**