# Book Reviews

## Introduction to the Spectroscopy of Biological polymers

*Edited by D. W. Jones*
Academic Press, New York, 1976, £11.60

This is the first book published to deal directly with the application of spectroscopic techniques to the study of biopolymers. It covers i.r., u.v., visible, raman, n.m.r., e.s.r, Mössbauer and o.r.d./c.d. with multiple authorship. Thes text is aimed at the level of the final year undergraduate and Doctoral student in biophysics or biochemistry. Whilst multiple authorship has allowed this wide range of subjects to be covered in a single volume, which is very useful, it has resulted in some variability both in length of chapters and in their emphasis. N.m.r., probably the most important single technique, covers only 28 pages, whereas i.r. (in both the fundamental and long wavelength regions) takes 126 pages and e.s.r. 48 pages. On the other hand, the longer chapters are generally more useful since the authors have been able to give a reasonable run through of the theory and leave some space for applications. I personally would have preferred to see more space devoted to applications, even though the book would be longer, particularly in the chapters on i.r., n.m.r., o.r.d./c.d. and electronic spectra since it is the successful application of a technique that develops the interest of the practising or student physical biochemist or of the spectroscopist who turns his attention to biopolymers.

Regretably the book is already rather out-of-date as regards applications in what is a rapidly changing field. In most chapters the latest references are about 1971. The editor has attempted to rectify this by writing an excellent final chapter on 'Combined Applications and Other Techniques' that, although largely concerned with the resonance methods, is right up to date.

This is a useful compendium of techniques and the book should be bought by all biochemical libraries. It is, however, only the first of its kind and its variable emphasis means that it is unlikely to become the 'classic' in the field.

*C. Crane-Robinson*

## Block Copolymers, Overview and Critical Survey

*Allen Moshay and James E. McGrath*
Academic Press, New York, 1977, $45.00

To cover the field of block copolymers in a single volume of a little over 400 pages is virtually an impossible task and the authors are to be congratulated for a very commendable attempt. The full title of the book is rather clumsy but the two part structure does enable readers with different interests to be selective in both depth and scope. It is a pity, however, that they have devoted only a fifth of the book to the Overview with the remainder given over to the survey of a wide range of block copolymers. It is in this first area that an up to date text is very much needed – one which relates the structure of block and graft copolymers, blends, etc. to the physical properties, uses and applications of the various different systems. Although the authors mention graft copolymers in developing their definition of block copolymers, they have deliberately given them anything but a passing mention in the overview and survey on the basis that they are *not* block copolymers. Whilst the reviewer would not accept the omission on scientific or technical grounds it is probably only in this way that the subject can be covered in a single volume.

The literature survey is extensive and includes a representative covering of the patent field but there are some major omissions of commercial block copolymers such as the SPANDEX, LEVERPREN and PLURONIC materials although the latter are indirectly referred to in the ether–ether block copolymer section. Surveying the patent field is always a difficult task and it is, perhaps, in this area that the book makes its greatest contribution to the review literature.

The format and style of the authors does not make easy reading and the complicated system of references does little to help the reader. However, despite these criticisms, this book is recommended to researchers and applied chemists who seek a single volume coverage of the field to date.

*R. J. Ceresa*

*Conference Announcement*

### Silylated Surfaces

Midland Macromolecular Institute, Midland, Michigan, USA, 1–3 May 1978

A symposium on the preparation, nature and applications of silylated surfaces will be held at the Midland Macromolecular Institute, Midland, Michigan, USA, 1–3 May, 1978. Topics to be discussed include: silylation reactions, the nature of silylated surfaces, and applications of these materials to various chemical problems. A limited number of submitted papers will be accepted. Those interested in submitting papers should contact the program chairman, D. E. Leyden, Department of Chemistry, University of Denver, Denver, Colorado 80208, USA, for details.

*Conference Announcement*

### 8th Europhysics Conference on Macromolecular Physics

### Structural Aspects Common to Synthetic and Biological Macromolecules

Bristol, UK, 19–22 September 1978

The European Physical Society in association with the Institute of Physics are organizing the 8th EPS Conference on Macromolecular Physics – Structural Aspects Common to Synthetic and Biological Macromolecules including methods of examination, to be held at Bristol, UK, 19–22 September 1978. The topics to be discussed include: molecular conformations; crystal structures; morphology, orientation, crystallization, gelation, aggregate formation; optical and electron microscopy; X-ray, electron and neutron diffraction; optical and spectroscopic techniques; relation between structure, function or application. Further details may be obtained from: Professor A. Keller FRS, H. H. Wills Physics Laboratory, University of Bristol, Tyndall Avenue, Bristol BS8 1TL, UK.