274 Book reviews

map' problems to help the student develop a systematic approach to organic analysis.

Although the level of the problems and of some of the sections on spectroscopic analysis are those of an undergraduate course, the book could be used with profit by a new postgraduate student. There are extensive tables of spectroscopic data and the physical constants of a very wide range of organic compounds are given in the appendix. There are also some useful tables of other data such as freezing mixtures, drying agents and chromatographic solvents. However, even quite simple organometallic compounds are not listed and methods for the detection of elements other than nitrogen, sulfur and the halogens are not described.

Within these limitations, this new edition of a well-established book can be recommended as a source of useful information for a laboratory involved in the identification of organic compounds.

J.R. Hanson

School of Chemistry, Physics and Environmental Science, University of Sussex, Brighton BN1 90J, UK.

Worked solutions in Organic Chemistry by J.M. Coxon and J.A. Gerrard, Blackie Academic and Professional, London, 1998, 516 pages, £29.99 (soft cover), ISBN 07514 0422 5.

The application of organometallic compounds to synthetic organic chemistry has provided the basis for many novel syntheses. Any postgraduate course on organometallic chemistry will have lectures reflecting

these developments. This book of worked solutions in organic chemistry is a companion volume to the most recent edition by Professor Coxon of Norman's 'Principles of Organic Synthesis'. The problems to which solutions are provided are those at the ends of the chapters in Norman's book. The chapters of the two books correspond and there are clear cross-references from the solutions to the parent book.

The book is in two sections. The first, shorter section covers the underlying thermodynamic, structural and mechanistic principles of organic reactivity, whereas the second section deals with specific groups of reactions of synthetic utility. Whilst not all the chapters are of direct relevance to the organometallic chemist, a number of problems are of help in placing organometallic reagents in a synthetic context. Chapters 6, 7, 15, 17 and 18–20 in particular, contain problems that may be of relevance to a student of organometallic chemistry interested in seeing the application of organometallic reagents. The parent book, 'Principles of Organic Synthesis', was written for second and third year undergraduates. However, sections could be studied with profit at the postgraduate level. The discussion in these worked solutions is sufficiently advanced to be of use in a taught postgraduate course. This book is a useful adjunct to Norman's 'Principles of Organic Synthesis' and my only reservation is that it is a pity that this relationship was not made more obvious in the title on the front cover.

> J.R. Hanson School of Chemistry, Physics and Environmental Science, University of Sussex, Brighton BN1 9QJ, UK.