the recent original literature using a slightly unusual but workable system, based on the initials of the first two authors.

Given that the book is a translation, there are relatively few inaccuracies, but some of the structures have groups missing, and in a few cases, e.g. on page 27, the stereochemistry is wrongly given. I note also that hydride reagents are a useful way of introducing deuterium and tritium labels stereospecifically into an organic molecule, and although these reactions are mentioned from time to time in the text, it would have been useful if the information could have been brought together in one place. Nevertheless this volume is a useful source book on reductions by aluminium and borohydrides and their applications in organic synthesis.

School of University and Molecular Sciences **J.R. Hanson**
University of Sussex, Brighton BN1 9QJ (UK)

Organic synthesis, the roles of boron and silicon, S.E. Thomas, Oxford Chemistry Primers 1, Oxford University Press, Oxford, 1991, pp. 94. £4.99 (Paperback). ISBN 0-19-855662-4.

This book is the first of a series which has as its aim the provision of 'accessible accounts of a range of essential topics in organic chemistry' affording a 'source of material commonly presented in lecture courses yet not adequately covered in existing text's. This particular book provides a concise account of the role of organo-boron and organo-silicon compounds in synthesis. Having lectured to both undergraduates and graduates on the application of these elements in organic synthesis, I can see the need for a slim volume of this type which provides a perspective of current applications and which can be read before the detailed reviews and comprehensive books are tackled. The presentation of the text is clear and the major points are well-exemplified from a range of different syntheses. Use is made of a column to one side of the main text to provide some brief parenthetical explanatory notes. The question which every organic chemist needs to address is 'When do I use these reagents?', is answered in the many examples. A picture of the geometry of the transition state is important in understanding the stereochemical outcome of many reactions of silicon and boron enolates and this is well-covered, with attention being paid to the introduction of chirality at appropriate points. In any book of this size where there are space limitations, it is obviously possible to quarrel with content and find omissions; for example, the use of silicon hydrides for hydrogenolysis. And perhaps there might have been a few more comparisons between different methods of achieving the same objective. However this is a useful text for the advanced undergraduate and postgraduate about to embark on an organic synthesis. It makes a good start to this new series. The paperback is priced at £4.99 as a result of a generous subsidy for the series from I.C.I. This form of sponsorship is a commendable way of furthering the education of chemists and I hope that we shall see further examples.

School of Chemistry and Molecular Sciences **J.R. Hanson**
University of Sussex, Brighton BN1 9QJ (UK)