Short-course handbooks are invariably written in a hurry, and printed from typescript. This results in a high concentration of errors (nearly four pages of errata), and a certain lack of co-ordination (I read the chapters in the order 1 to 4, 9, 7, 5, 8, 6, and 10 to 15). These disadvantages are offset by a freshness of approach unusual in conventional books, by the low price, and by the opportunity to see how leading workers in the field were thinking as recently as April 1977.

Within the limitations of the form of publication, this is a good book. It is readable (which cannot be said of many books on thermodynamics), and it should provoke the interest of many of those who have been indifferent to thermodynamics and the enthusiasm of some who profess an interest in that subject. It ought to play a useful part in raising the general standard of work towards that which exists in the best laboratories. It should be bought by all libraries serving mineralogists and petrologists, and by many individuals.

R. G. J. STRENS

King (E. A.). *Space geology: an introduction.* New York and London (John Wiley and Sons), 1976. xiv + 349 pp., 180 figs. Price £10·75.

Few will find the title of this book misleading though it is somewhat biased towards petrology and terrestrial rocks are scarcely mentioned even in making comparisons. The book is lavishly illustrated, with more than 200 line diagrams and monochrome photographs making a large part of the 270 pages of text. There are also about 50 pages of notes and references and the glossary and index make about 20 pages. Many of the diagrams are taken from the literature and all are well produced. The photographs are well selected and are mostly of good quality. The text is plainly written and is well edited and presented; it is a pleasure to read but the beginner may have difficulty in understanding a few sections such as those dealing with generalized Hugoniot curves or europium anomalies. The text reports selectively what has been done and written, but the information is not analysed or discussed in depth and there is little attempt at synthesis of generalities. The last chapter, for example, is on comparative planetology and amounts to only four sides of text.

Nearly half the book is occupied by chapters on meteorites and the Moon. The remainder consists of long chapters on terrestrial impact craters, impact metamorphism, and Mars, and of short chapters on tektites, craters, asteroids, comets, and other planets and moons. At the end of each chapter there is a very useful set of notes giving extra detail and a list of references. The main themes of the book are to do with rocks and surface forms and phenomena. Geophysical aspects of the planetary bodies are mentioned, but neither they nor geodetic or astronomical topics are treated thematically and experimental petrology is not treated in the depth it may deserve.

The book requires some prior knowledge of geochemistry and petrology but would be appropriate to second and third year undergraduates. Its greatest value may be in giving an introduction to an already vast literature and a short, readable, coherent, and authoritative account of the rocks of the Solar System.

W. J. FRENCH

Schneer (C. J.), editor. *Crystal Form and Structure* (Benchmark Papers in Geology, 34). Stroudsburg, Pennsylvania (Dowden, Hutchinson, and Ross Inc.), 1977. xiv + 369 pp., 139 figs. Price £24·00.

This book provides a conducted tour through some three and a half centuries (Kepler, 1611, to McLachlan, 1974) of developing thought on the relationship between crystal morphology and structure. The courier (editor Cecil J. Schneer) provides a stimulating and knowledgeable, but never obtrusive, commentary between numerous visits to monuments (the original papers of the time) marking former positions of the frontiers of the discipline – frontiers echoing with evocative phrases like 'Bravais' law', 'Donnay-Harker principle', 'Brillouin zones', 'PBC vectors', and 'Congestion factor'.

The wide variety of type faces (English language texts are photocopied from the original while others are in English translation) adds savour and, in some cases, considerable nostalgia to the tour. It is, however, irritating to find neighbouring papers from the same journal reproduced, quite needlessly, to two different scales.

The well-chosen hard core of key papers, the wealth of references, and the modest price make this a highly desirable book.

F. E. TOCHER

Dent Glasser (L. S.). *Crystallography and its applications.* London (Van Nostrand Reinhold Co., Ltd.), 1977. viii + 224 pp., 117 figs. Price £12·00 (cloth), £5·95 (paper).

This book provides an introduction to the subject for those interested in its practical applications. The initial chapters cover the elements of crystal symmetry, optical crystallography, and diffraction theory. The various photographic techniques of data collection are then dealt with, and their uses