included, and that is regrettable. More significant deficiencies can undoubtedly be attributed to the book's genesis as lecture notes: For different topics the level of presentation is quite uneven. The discussions of kinetics are reasonably detailed, for example, while techniques are sketched much more broadly. Perhaps much of the material on techniques should have been omitted. Elementary presentations are available, in Martin Prutton's book Surface Physics (Oxford U. P., New York, 1983), for example, and the space gained could have been devoted to a more intensive examination of kinetics. In its present form the book does not offer the topical insights into current problems that an expert such as Gasser could provide, even in an introductory exposition. Furthermore, the references to the literature are not adequate. The reader gets an impression neither of how the field developed historically nor of good sources for keeping up with current studies. Poor editorial work mars the limited citations that are offered. Despite these failings, I certainly recommend this book to new graduate students interested in entering upon chemical surface studies-it offers a quick, well-written and much needed introduction.

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book note

McGraw-Hill Encyclopedia of Science and Technology, Volumes 1–20

Edited by Sybil P. Parker. Sixth edition. 12 807 pp. McGraw-Hill, New York, 1987. ISBN 0-07-079292-5 \$1600.00 hardcover

Now in its sixth edition, the McGraw-Hill Encyclopedia of Science and Technology has expanded in five years from 15 to 20 volumes. The encyclopedia includes both an analytical index and a topical index (arranged by subject). About 3500 contributors, including 20 Nobel Prize winners, provide summaries of well-established topics in science and technology. New entries in this edition in physical science and technology include catastrophe theory, computer vision, fractals, inflationary universe cosmology, the intermediate vector boson, nonlinear optical devices, proton-induced x-ray emission and the Weinberg-Salam model.

What is the intended readership? The preface tells us that the encyclopedia is addressed to the reference and educational needs of students, professionals and librarians. An encyclopedia can offer its readers an authorita-

tive introduction—although necessarily brief—to many topics outside each scientist's narrow specialty. Based on several samples, the references listed at the end of most articles vary considerably in the background required for comprehension. Bibliographies are said to have been revised and updated as needed, but in at least some cases, the average reference appears to be about ten years old.

The encyclopedia emphasizes the technical aspects of science, so the reader looking for history, personalities or philosophy will be disappointed. But for the beginning or confirmed browser in science, the multidisciplinary scope of the encyclopedia is its great appeal. For very specific, highly technical treatments, the reader will need to look elsewhere.

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