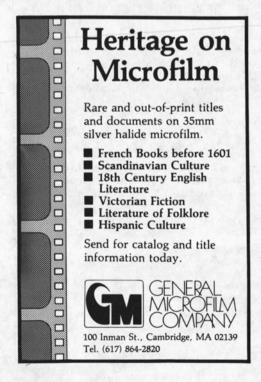scholarly societies, because of new postal and IRS regulations.

An article by Allen Clark and Jennifer Cook (USGS), on "Application of Information Handling to Applied Geology," discusses the importance of resource data and analysis for accurate planning and decision making. From the data compiled, statistical models are devised, providing an indication of how much of a commodity will be available in the foreseeable future.

Remaining papers deal with geothermal data exchange, including a description of the data base and the NATO-CCMS pilot study; data banking coal research in the International Energy Agency; international access of the Petroleum Abstracts Information System, a description of the data base, its use and projections; a description of the Hydrogeological Data Storage and Retrieval System in use in New South Wales, Australia. All these papers deal with the complex issues of the storing and retrieving of geological data.

"Documentation in Specialized Areas" includes a collection of four papers. One of

these articles of particular interest to the map librarian is by J. A. Diment and J. R. Schroeder on bibliographical control of geological maps. The authors stress the importance of cooperative cataloging systems, the standardization of descriptive cataloging, and the improving of bibliographical standards at the publishing stage. Other papers within this division deal with remote sensing, the foreign language problem in earth science literature, and data management.

The remaining section of this volume focuses on "User Viewpoints." This is a diverse group of papers ranging from the reprint industry, specifically Dowden, Hutchinson and Ross, Inc., to the information problems of geoscientists in developing countries. Julie Bichteler's well-documented paper raises some interesting points about the use of geological information: (1) the low use of indexes and abstracts, (2) the dissatisfaction with computerized indexes, and (3) the utilization of older literature.

Entry into the individual papers and chapters is rather abrupt. A useful addition to each chapter would have been a short introduction or commentary on the papers and subjects presented. The text of this book has been prepared by offset reproduction from the contributors' typed manuscripts. This method has resulted in the rapid publication of a readable and useful book.—*John Van Balen, University of South Dakota, Vermillion.*

Kemp, D. A. *Current Awareness Services.* Outlines of Modern Librarianship. London: Clive Bingley; New York: K. G. Saur, 1979. 181p. $10. ISBN 0-85157-269-3.

In an age of tightening budgets, the importance of promotion and marketing of library services cannot be overemphasized. One of the ways in which a library normally makes it patrons take notice of its resources goes under the generic label of current awareness services. Since there are many different types of libraries, these services may mean different things to different people. But, whatever the definition, it is basically a device to alert a special group of users to the latest developments, arrivals, or acquisitions in their area of interest.

Although there has been a considerable

body of journal literature covering the various types and aspects of current awareness services, the curricula in most library schools make no more than a cursory mention of the subject. There is, therefore, an obvious need for a textbook treatment that would present the material in a way that a library school student or a beginning professional can follow step by step.

Kemp's outline fills this need adequately. Not only does the book describe the historical origins of the awareness services, but it also covers the mechanics of its development, operation, costing, and evaluation. Considerable attention is given to the most notable of these services, such as the use of SDI and Viewdata.

Kemp admits that this is not a literature survey although there are references to some of the well-known contributions. There is a detailed subject index. The point is well taken that the successful operation of this service depends to a large extent on the enthusiasm and knowledge of the individual librarian. This book should be recommended reading for all public service librarians.—*Sarojini Balachandran, University of Illinois, Urbana-Champaign.*

Jahoda, Gerald, and Braunagel, Judith Schiek. *The Librarian and Reference Queries: A Systematic Approach.* Library and Information Science. New York: Academic Press, 1980. 1,975p. $12. LC 79-6939. ISBN 0-12-37960-8.

This textbook, based on the theory that teaching reference work must involve practice in answering reference queries, is intended for use in introductory reference courses. The authors suggest that it might also be used for in-service or self-paced training as well. Quoting the assertion that one-half of all reference questions are incorrectly answered, the authors of this book proceed methodically from a fairly basic discussion of just what a reference query is, through the logical steps of negotiating the reference interview and sorting out possible sources based on the type of answer required, to an eventual discussion of the application of the principles learned to on-line computer searching.

The authors, on the library school faculties at Florida State University and SUNY

at Buffalo, respectively, do not discount the value of traditional reference courses, but they do emphasize a more comprehensive need to handle the query situation effectively, assuming a familarity with the twelve categories of fundamental reference sources. They acknowledge that, in effect, the course of study they advocate allows for the traditional study of basic reference sources but simultaneously provides for the effective use of these titles as well as the newer ones being published at ever-increasing speed. The emphasis is on complementing knowledge of specific sources with a concept of logical progression that allows for addition and revision to the core reference collection.

The trained librarian may find this approach annoyingly simple at times, particularly in the early chapters, which break sample reference queries down into "givens" and "wanteds," but the process involves stating the obvious in an effort to extract the basic thought process involved in deductive reasoning. A good, experienced reference librarian has internalized this process through common sense and practice. After breaking the material down into the most basic elements, the authors then proceed to construct the systematic approach they advocate, culminating in a concise application of the principles to using on-line data bases, which are of course mechanical, though logical, products. In this regard the authors have avoided the tendency to overlook the most fundamental concepts involved in the use of technology. Neither do they view computers as magical machines unrelated to the routine process of deduction. The authors show the student that in on-line searching, computers are a logical extension of the manual and cerebral functions of a good librarian.

Although there is no lengthy supporting bibliography, there are brief lists of additional readings following selected chapters. These are recent and pertinent. Each chapter also includes a summary, questions for further discussion, and exercises. There are also ample illustrative tables, a brief index, and a general selection of practice reference queries with answers.

Some of the better chapters of the book deal with the negotiation of the query,