ancient forms are not "nonconventional literature," for they have long been well organized and easily approached in the traditional ways of bibliography for the sciences. There is much repetition in the various papers, as the editor recognizes and commends—a tedious luxury in so short a treatment of so prodigious a set of problems.

The best chapter is that on nuclear energy. An analysis is given of Nuclear Science Abstracts (NSA), long a model of the mission-oriented index that developed in a thoroughly responsible way to become a great subject abstracting service. Other useful avenues to the literature of nuclear energy are also cited, and reliable descriptions are given. Even it is less than thorough, however, for in his detailed description of NSA, the author has not pointed out the great usefulness of references in its cumulated reports number indexes to subsequent publication of many of the AEC reports in the conventional literature.

The editor's summary chapter on applications in industry is his best contribution; it will benefit those who have had little exposure to the complexities of report literature and its bibliography. At the end of each chapter there are several lists. Not all the lists for each chapter are of quite the same sort, but they may well prove to be the most useful parts of the volume. With titles such as "References," "Additional Reading," "Principal Organisations Mentioned in the Text," and "Principal Announcement Services Mentioned in the Text," they can be convenient guides for those who want to further their knowledge of the bibliography and the nature of technical reports.-Thomas D. Gillies, Director, Linda Hall Library, Kansas City, Missouri.

Vickery, B. C. Classification and Indexing in Science. 3d ed. London: Butterworths, 1975. 228p. £5.75. (ISBN 0-408-70662-7)

It has been sixteen years since the second edition of Classification and Indexing in Science was published, and the appearance of the third edition is very welcome indeed. Classification theories controversial in the 1950s, specifically facet analysis, are now widely accepted and practiced. Vickery describes current theories and methods and

their development. The general outline for the organization of the material has remained essentially the same as in the previous edition: (1) "The Need for Classification," (2) "The Classification of a Subment" (4) "Notation for the Classified Catalogue," (5) "Classification in Lab and (6) "Classification in Post-Coordinate Systems." However, with some exceptions, most notably chapter 4, the text has been largely rewritten, and all of the bibliographies have been revised. Appendix A, "Historical Aspects of the Classification of Science," is the same and remains the most useful brief history of classification known to this reviewer. Appendix B gives examples of two faceted classifications, soil science and container manufacture. Appendix C, "Categories," remains the same except for the addition of comment on the concept of integrative levels. Appendix D, "The Classification of Chemical Substances," has not appeared in the earlier editions of this title.

Classification in the somewhat pragmatic terms in which it is generally practiced in American academic libraries is limited to the arrangement of books on library shelves by means of general schemes of bibliographic classification, most often the Dewey Decimal Classification or that of the Library of Congress. This is but one of four main areas in which classification is used in information retrieval as described by Vickery, the other three being (1) the direct use of classification for subject bibliography ranging from the classified catalog to systematic arrangements of references to papers, reports, and other documents; (2) the implicit use of classification, casually or systematically, by alphabetical indexes to subject matter; and (3) that in which classification is used "in what have been called 'manipulative' indexes, more often known as 'post-coordinate' systems." Classification, then, "in one form or another, at one stage or another, is almost universal in information storage and retrieval." Vickery discusses in detail the techniques of classificatory analysis which can be used to construct a fully developed and coded classification and also to structure an alphabetical word list or thesaurus.

This work is obviously of special interest to those involved with the literature of science and technology and its analysis and control. The numerous examples are drawn from scientific and technical fields. It is to be emphasized, however, that it should be of equal interest to librarians, library school faculty and students, and others, regardless of subject orientation, concerned with the classification, subject analysis, control, and retrieval of information. Although written within the framework of science and technology, the concepts and methods Vickery so clearly presents and reviews are not limited to a particular area of knowledge.-J. R. Moore, Library Department, Brooklyn College of the City University of New York.

Cassata, Mary B., and Totten, Herman L., eds. The Administrative Aspects of Education for Librarianship: A Symposium. Metuchen, N.J.: Scarecrow, 1975. 407p. \$14.50. (LC 75-15726) (ISBN 0-8108-0829-3)

The editor of C & RL might have gotten a better review, and more promptly, simply by reprinting the excellent short introduction to this book by Russel E. Bidlack, who also wrote one of the best chapters, "Standards for Accreditation, 1972."

To some degree, along with other recent writing on library education, this book is a response to Targets for Research in Library Education, edited by Harold Borko, published by ALA in 1973. The title is not quite descriptive-better to have omitted 'Administrative Aspects' because it covers all aspects of the 1972 Standards (Bidlack points out in his introduction that the discussions range considerably beyond administration as one ordinarily thinks of the word); and better to have omitted "Symposium" because the papers did not result from a meeting where several speakers delivered short addresses on a topic (although symposium can also mean a collection of opinions on a subject). The twenty-two chapters, or papers, are organized, preceded by a prologue and followed by an epilogue, under eight sections, the core of which correspond to the headings of the 1972 ALA Standards for Accreditation. The Standards are reprinted as an appendix. Had I chosen the title, it would have been Education for Librarianship in the Context of the 1972 Standards for Accreditation.

The two editors and twenty-five other authors are well qualified for their assignments. Among them are names long familiar in library literature as well as those of some relative newcomers. With one exception all of the papers were written specifically for this book; and the exception (Elizabeth Stone on the "Role of the Academic Institution in Continuing Library Education") was carefully reworked from a 1974 publication. Blessedly, this is not another "reader" with the hodgepodge of chronology, lack of focus, and perpetuation of obsolescent literature which that genre so often implies. There is an excellent, reliable index. The number of chapters is fairly well distributed among the sections: one on the history of library education; one on the 1972 Standards themselves; six on program goals and objectives; two on curriculum; only one on faculty; four on students; six on governance, administration, and financial support; one on physical resources and facilities; one on the accreditation visit; and the epilogue, "Library Education: Leader or Follower?" by Mary Cassata.

Multiple authorship has its advantages and disadvantages. On the positive side, it would have been impossible for any single one of the authors or editors to have done the research in adequate depth, and then the writing, within a reasonable time. It is refreshing to have several points of view. It is reassuring to know that the authors deal with specific topics in which they are already recognized as experts or in which the papers at hand demonstrate that they have become expert.

There are also the disadvantages—redundancy, lacunae, contradictions, unevenness—which even the most skillful and conscientious editors cannot eliminate when they assemble a collection of papers solicited from many authors. Inevitably, no two authors will work from the same corpus of source material; some will overlook a significant item which another has used; on the same issue, one will use a more current or reliable text than another. An example can be found in this book: Carroll (p.22–23) discusses the two-year master's degree and the need for specialization that cannot