stead of merely reacting to it. Who is next?—Billy R. Wilkinson, University of Illinois at Chicago Circle.

Preservation of Paper and Textiles of Historic and Artistic Value. A Symposium Sponsored by the Cellulose, Paper and Textile Division at the 172d Meeting of the American Chemical Society, San Francisco, Calif., Aug. 30–31, 1976. Advances in Chemistry Series, 164. John C. Williams, editor. Washington D.C.: American Chemical Society, 1977. 403p. \$38. LC 77-13137. ISBN 0-8412-0360-1.

This collection of symposium papers is a prompt publication, valuable for librarians, paper conservators, and paper scientists. Most of the information presented is the result of recent research and is not printed elsewhere. In fact, many of the chapters in this volume contain footnotes citing one another. This interdependence of articles is not a weakness; it indicates the sudden surge of researcher interest in the conservation of cellulosic materials. The section on textile preservation occupies less than one-third of the book and gives evidence that textiles are both more complicated and less completely studied than paper.

Librarians and archivists should be interested in, and informed by, this collection of studies, even though much of the experimentation and data is couched in paper scientists' jargon. The first three articles include short histories of paper manufacturing and permanent paper and a synopsis by Bernard Middleton on "Book Preservation for the Librarian." Beyond this introduction, the librarian can make use of detailed reports dealing with five basic topics: the deacidification of paper, the salvage of water-damaged library materials, the manufacturing of permanent paper, the causes of paper deterioration, and the establishing of paper testing methods.

Three new deacidification processes are presented—all nonaqueous and all being tested for practicality and economy. The most promising method is detailed by Bernard F. Walker of the W. J. Barrow Research Laboratory. During a six-month pilot project, the Virginia State Library was deacidifying 250 books a day at an approximate cost of 52 cents per volume, using

morpholine vapor in an automated system. The Library of Congress has developed the use of methylmagnesium carbonate, a manual method for use on fragile paper. The compound is carried in a liquid solvent and brushed or sprayed on single documents.

Thorough studies on the salvage of water-damaged books were carried out after the Corning Museum of Glass library was flooded by tropical storm Agnes in 1972. The museum staff froze the soaked library books, as well as their card catalog and files. Since mold and other damage were retarded, there was time to research methods for thawing, drying, and sterilizing the collection. Types of drying procedures investigated were: interleave/air drying, dielectric drying, microwave drying, vacuum drying, freeze/thaw vacuum drving, and solvent extraction. In a series of three articles, David I. Fischer gives enough data for librarians to choose the best drying method in an emergency situation, based on extent of water damage, value of the collection, and type of paper in the text.

More than a third of this volume is concerned with establishing criteria for permanent paper. Unfortunately, the scientists work to improve the quality of book stock can be undermined by manufacturers. Richard A. Stuhrke, speaking to paper producers, states: "The higher strength of an alkaline sheet has allowed direct substitution of weaker, lower cost fibers . . ." (p.29). Stuhrke tries to persuade paper companies to convert to alkaline paper products as a means of saving money; the stock he advocates would be more permanent than current papers but would not gain in durability.

A number of the chapters in this volume should provide librarians an incentive for conservation. In the study of the causes of paper deterioration and the means to predict paper stability, one conclusion is outstanding—the paper in books must be preserved rather than rescued. If library materials are not manufactured with permanent/durable characteristics, it is most important to prevent deterioration with deacidification and correct handling and environment. Once paper degradation has begun, the best efforts of library administrators cannot restore a book to useful

life.—Catherine G. Asher, Indiana University, Bloomington.

On-Line Library and Network Systems. Symposium Held at Dortmund University, March 22–24, 1976. Organized by E. Edelhoff, W. Lingenberg, G. Pflug, V. Wehefritz. Edited by Edelhoff and K.-D. Lehmann. Zeitschrift für Bibliothekswesen und Bibliographie, Sonderheft 23. Frankfurt am Main: Vittorio Klostermann, 1977. 167p. DM 36.

The twelve papers that comprise this compilation deal with several aspects of library automation and networking in Germany and the United States. According to Eckhard Edelhoff's introduction, the symposium was intended to provide information—a kind of state-of-the-art report—to computing center and library personnel

in the German Federal Republic.

Demonstrations of systems included OCLC, BALLOTS, University of Bielefeld (IBIS), and University of Dortmund (DOBIS), and a description of the on-line catalog access and circulation control system at Ohio State University was also presented. Representatives from Australia, Belgium, Canada, France, Holland, Austria, and South Africa also attended, but no information about automation activities in these countries is reported.

Generally, two types of presentations were made: First, those that tried to deal with network and file design, bibliographic control standardization, and comparative analyses of certain system characteristics. Second, descriptions of systems, either in

operation or planned.

Of the former, G. Pflug's overview of library automation painted the broadest canvas; R. H. Klar dealt with the basic components of library systems analysis, emphasizing the relationships among library services and housekeeping functions; C. Bossmeyer discussed the problems and complexities of communications format design in Germany and file maintenance problems and then described an off-line network facility developed by the Hochschulbibliothekszentrum des Landes Nordrhein-Westfalen (HBZ); K. Sailer and P. Gruber discussed the interaction among three files in an off-line serials control system operating at the

Arbeitsstelle für Bibliothekstechnik: I. Griese presented an overview of file organization schemes used in the OSU, OCLC, BALLOTS, DOBIS, and IBIS systems, which he derived from oldish printed sources; E. Kohl made a strong case for cost savings, based upon use of bibliographic records from other sources-if cataloging and subject control standards are adhered to (he also makes a plea to those responsible for standards decisions in the U.S. and elsewhere to consider the international implications of those decisions): F. Kilgour asserted that the growth of OCLC is not limited by technology but by the number of titles printed since Gutenberg and that OCLC is also attempting to develop and interface with CATV for direct user access to library holdings information; H. Atkinson pointed out that OSU costs per item circulated were reduced from forty-six cents (1970) to forty-three cents after the introduction of the patron access and circulation system; M. Behnke described the IBIS (Integrated Library System), which supports cataloging and indexing for the HBZ; A. Veaner described the development and impact of BALLOTS upon technical processing activities at Stanford, including a staff reduction from eighty-five (1972) to seventythree FTE: B. Jedwabski illustrated the implementation of DOBIS at Dortmund University; V. Wehefritz dealt with work-flow analysis, particularly in acquisitions processing, as it related to use of DOBIS.

There are a number of problems with language in this publication. For instance, the foreword is printed in both English and German, but within each paper the leading abstract appears only in German, and the text is in English. In many cases the translations are not well done, and the usual acronym problem is compounded for American readers because they represent German entities, e.g., GZS, GDZS, GAZS, etc. Some are explained, and others are not. On the other side of the coin, Atkinson's use of the word "nincompoop" must have caused a humorous delay in the simultaneous translation. Typos and misplaced or unexplained illustrations abound. An annovance is the lack of institutional identification and job titles of the authors.

Edelhoff concludes that "what had been