

# COLLEGE & RESEARCH LIBRARIES

JULY 1986  
VOLUME 47  
NUMBER 4  
ISSN 0010-0870



## PAGE CONTENTS

- 313 *Editorial: Reflective Conversation*
- 315 *Coping with Information Load: User Strategies and Implications for Librarians*  
By Joel Rudd and Mary Jo Rudd
- 323 *A View from the Trenches: Costing and Performance Measures for Academic Library Public Services*  
By Charles R. McClure
- 337 *An Organizational Paradigm for Effective Academic Libraries*  
By David W. Lewis
- 354 *Selected Papers from the ACRL Fourth National Conference, Baltimore, April 9-12, 1986: Part I*
- 354 *Financing Academic Libraries: Making the Transition from Enrollment Growth to Quality Enhancement*  
By John M. Cooper
- 360 *Born-Again Cataloging in the Online Networks*  
By Ruth Hafter
- 365 *Capturing the Mainstream: Publisher-Based and Subject-Based Approval Plans in Academic Libraries*  
By Karen A. Schmidt
- 370 *Online Searching and the Research Process*  
By Connie Miller and Patricia Tegler
- 374 *Teaching Microcomputer Literacy: New Roles for Academic Librarians*  
By Linda J. Piele, Judith Pryor, and Harold W. Tuckett
- 379 *Conversation, Preservation, and Digitization*  
By Clifford A. Lynch and Edwin B. Brownrigg
- 385 *Research Notes*
- 385 *Library of Congress Staff Test Optical Disk System*  
By Victoria Ann Reich and Melissa Ann Betcher
- 391 *The Effect of Service Awareness on Survey Response*  
By Ruth A. Pagell and Edward J. Lusk
- 397 *Letters*
- 401 *Recent Publications*
- 401 *Book Reviews*
- 412 *Abstracts*
- 413 *Other Publications*

# COLLEGE & RESEARCH LIBRARIES

**EDITOR:** Charles R. Martell, California State University, Sacramento, CA 95819

**BOOK REVIEW EDITOR:** William G. Jones, University of Illinois, Chicago, IL 60680

**RESEARCH NOTES EDITOR:** Gary Lawrence, Systemwide Administration, University of California, Berkeley, CA 94720

**ASSISTANT EDITORS:** Dorothy Koenig, 230 Kroeber Hall, University of California, Berkeley, Calif.; Larry Oberg, Albion College, Albion, Michigan

---

## EDITORIAL BOARD

**Brian Alley**  
Sangamon State University  
Springfield, Ill.

**Miriam A. Drake**  
Georgia Institute  
of Technology  
Atlanta, Ga.

**Stephen L. Gerhardt**  
Cerritos College  
Norwalk, Calif.

**Phyllis E. Jaynes**  
Dartmouth College  
Hanover, N.H.

**W. David Laird**  
University of Arizona  
Tucson, Ariz.

**Frederick C. Lynden**  
Brown University  
Providence, R.I.

**Deanna Marcum**  
Council on Library  
Resources, Inc.  
1785 Massachusetts Ave. NW  
Washington, D.C.

**Paul Metz**  
Virginia Polytechnic  
Institute and  
State University  
Blacksburg, Va.

**Brian Nielsen**  
Northwestern University  
Evanston, Ill.

**Jordan M. Scepanski**  
California State  
University, Long Beach  
Long Beach, Calif.

**Nancy Van House**  
University of California  
Berkeley, Calif.

## Ex officio:

**Sharon Hogan**  
Past President, ACRL

**Ruth Person**  
Chair, ACRL  
Publications Committee

**George M. Eberhart**  
Editor, *C&RL News*

**JoAn Segal**  
Executive Director, ACRL

---

*College & Research Libraries* (ISSN 0010-0870) is the official journal of the Association of College and Research Libraries, a division of the American Library Association. It is published bimonthly at 50 E. Huron St., Chicago, IL 60611. Second-class postage paid at Chicago and at additional mailing offices. **POSTMASTER:** Send address changes to *College & Research Libraries*, 50 E. Huron St., Chicago, IL 60611.

Manuscripts of articles and copies of books submitted for review should be sent to the Editor: Charles R. Martell, Editor, *College & Research Libraries*, The Library, 2000 Jed Smith Dr., California State University, Sacramento, CA 95819. Phone 916-454-6466.

Instructions for authors and further information on submission of manuscripts are included in a statement on p.112-13 of this volume of *College & Research Libraries*.

Production and circulation office: 50 E. Huron St., Chicago, IL 60611. Advertising office: Art Beck, Advertising Sales Manager, *Choice*, 100 Riverview Center, Middletown, CT 06457, 203-347-1387. Change of address and subscription orders should be addressed to *College & Research Libraries*, for receipt at the above address, at least two months before the publication date of the effective issue.

Annual subscription price: to members of ACRL, \$17.50, included in membership dues; to nonmembers, \$35. Retrospective subscriptions not accepted. Single copies and back issues, \$7.50 each.

Inclusion of an article or advertisement in *College & Research Libraries* does not constitute official endorsement by ACRL or ALA.

A partial list of the services indexing or abstracting the contents of *C&RL* includes: *Current Index to Journals in Education*; *Information Science Abstracts*; *Library & Information Science Abstracts*; *Library Literature*; and *Social Sciences Citation Index*. Book reviews are included in *Book Review Digest*, *Book Review Index*, and *Current Book Review Citations*.

© American Library Association 1986

All materials in this journal subject to copyright by the American Library Association may be photocopied for the noncommercial purpose of scientific or educational advancement granted by Sections 107 and 108 of the Copyright Revision Act of 1976. For other reprinting, photocopying, or translating, address requests to the ALA Office of Rights and Permissions, 50 E. Huron St., Chicago, IL 60611.

# NEW FROM NOYES

Available Early 1986

- ADHESIVES, SEALANTS, AND COATINGS FOR THE ELECTRONICS INDUSTRY**  
by Ernest W. Flick: ISBN 0-8155-1055-1; \$39.
- ADHESIVES TECHNOLOGY HANDBOOK**  
by Arthur H. Landrock: ISBN 0-8155-1040-3; \$64.
- AERATION SYSTEMS—Design, Testing, Operation, and Control**  
edited by William C. Boyle: ISBN 0-8155-1065-9; \$42.
- AQUIFER RESTORATION—State of the Art**  
by R.C. Knox et al: ISBN 0-8155-1069-1; \$64.
- ARTIFICIAL INTELLIGENCE IN MAINTENANCE**  
edited by J. Jeffrey Richardson: ISBN 0-8155-1042-X; \$48.
- CERAMIC CONTAINING SYSTEMS—Mechanical Aspects of Interfaces and Surfaces**  
edited by A.G. Evans: ISBN 0-8155-1056-X; \$36.
- COAL EXPLORATION, MINE PLANNING, AND DEVELOPMENT**  
by Roy D. Merritt: ISBN 0-8155-1070-5; \$64.
- CONTROLLING VOLATILE EMISSIONS AT HAZARDOUS WASTE SITES**  
by John R. Ehrenfeld et al: ISBN 0-8155-1063-2; \$54.
- CORROSION AND CHEMICAL RESISTANT MASONRY MATERIALS HANDBOOK**  
edited by Walter Lee Sheppard, Jr.: ISBN 0-8155-1053-5; \$89.
- CORROSION RESISTANT MATERIALS HANDBOOK—Fourth Edition**  
edited by D.J. De Renzo: ISBN 0-8155-1023-3; \$125.
- COSTS FOR HAZARDOUS WASTE INCINERATION—Capital, Operation and Maintenance, Retrofit**  
by R.J. McCormick et al: ISBN 0-8155-1047-0; \$39.
- DISPOSAL OF HAZARDOUS WASTES IN INDUSTRIAL BOILERS AND FURNACES**  
by C. Castaldini et al: ISBN 0-8155-1067-5; \$48.
- ELECTRICAL OVERSTRESS PROTECTION FOR ELECTRONIC DEVICES**  
by Robert J. Antinone et al: ISBN 0-8155-1061-6; \$48.
- ENGINEERING AND CONFIGURATIONS OF SPACE STATIONS AND PLATFORMS**  
by NASA Lyndon B. Johnson Space Center: ISBN 0-8155-1044-6; \$64.
- FOLIAR FEEDING OF PLANTS WITH AMINO ACID CHELATES**  
edited by H. DeWayne Ashmead et al: ISBN 0-8155-1059-4; \$54.
- FUTURE ATMOSPHERIC CARBON DIOXIDE SCENARIOS AND LIMITATION STRATEGIES**  
by J.A. Edmonds et al: ISBN 0-8155-1064-0; \$58.
- HANDBOOK OF THERMOSET PLASTICS**  
edited by Sidney H. Goodman: ISBN 0-8155-1054-3; \$52.
- HOW TO AVOID PRODUCTS LIABILITY LAWSUITS AND DAMAGES—Practical Guidelines**  
for Engineers and Manufacturers, by Charles E. Witherell: ISBN 0-8155-1052-7; \$48.
- THE HUMAN ROLE IN SPACE—Technology, Economics and Optimization**  
edited by Stephen B. Hall: ISBN 0-8155-1046-2; \$45.
- IDENTIFYING AND REDUCING LOSSES IN WATER DISTRIBUTION SYSTEMS**  
by James W. Male et al: ISBN 0-8155-1050-0; \$32.
- INDUSTRIAL SYNTHETIC RESINS HANDBOOK**  
by Ernest W. Flick: ISBN 0-8155-1041-1; \$54.
- INNOVATIVE THERMAL HAZARDOUS ORGANIC WASTE TREATMENT PROCESSES**  
by Harry Freeman: ISBN 0-8155-1049-7; \$32.
- LINER MATERIALS FOR HAZARDOUS AND TOXIC WASTES AND MUNICIPAL SOLID WASTE**  
LEACHATE, by Henry E. Haxo, Jr. et al: ISBN 0-8155-1048-9; \$45.
- NASA SPACE PLANS AND SCENARIOS TO 2000 AND BEYOND**  
edited by National Aeronautics and Space Administration: ISBN 0-8155-1071-3; \$36.
- PLANT AGRICULTURE—Federal Biotechnology Activities**  
by Carolyn Bloch: ISBN 0-8155-1058-6; \$39.
- PLUMBING MATERIALS AND DRINKING WATER QUALITY**  
Thomas J. Sorg and Frank A. Bell Jr.: ISBN 0-8155-1066-7; \$36.
- PRODUCTION OF HIGH STRENGTH CONCRETE**  
by M.B. Peterman and R.L. Carrasquillo: ISBN 0-8155-1057-8; \$36.
- RADIATION-PROTECTIVE DRUGS AND THEIR REACTION MECHANISMS**  
by J.C. Livesey et al: ISBN 0-8155-1051-9; \$32.
- ROBOTICS AND FLEXIBLE MANUFACTURING TECHNOLOGIES—Assessment, Impacts**  
and Forecast, by Robert U. Ayres et al: ISBN 0-8155-1043-8; \$48.
- SOFTWARE TOOLS AND TECHNIQUES FOR EMBEDDED DISTRIBUTED PROCESSING**  
by Herbert C. Conn, Jr. et al: ISBN 0-8155-1062-4; \$72.
- SPACE INDUSTRIALIZATION OPPORTUNITIES**  
edited by Camille M. Jernigan and Elizabeth Pentecost: ISBN 0-8155-1045-4; \$54.
- TEXTILE DYEING OPERATIONS—Chemistry, Equipment, Procedures, and Environmental Aspects**  
by S.V. Kulkarni et al: ISBN 0-8155-1060-8; \$36.
- TOUGH COMPOSITE MATERIALS—Recent Developments**  
prepared by the staff of NASA Langley Research Center: ISBN 0-8155-1039-X; \$54.

**ndc**

NOYES DATA  
CORPORATION

**NOYES**

120 Mill Road, Park Ridge, NJ 07656

**np**

NOYES  
PUBLICATIONS

**“I used to shudder when patrons requested information on a proceedings paper.”**



**“Now I Reach for *ISTP*<sup>®</sup> and *ISSHP*<sup>®</sup>.”**

Now you too can get easy access to individual papers published in conference proceedings . . . with the *Index to Scientific & Technical Proceedings*<sup>®</sup> and the *Index to Social Sciences & Humanities Proceedings*<sup>®</sup>. Each year, *ISTP* indexes over 123,000 individual papers, and *ISSHP* over 21,000. Over 70% of this material is not indexed in the *Science Citation Index*<sup>®</sup> or in the *Social Sciences Citation Index*<sup>®</sup>.

Since the proceedings literature is generally the first place where early research results appear, you'll find *ISTP* and *ISSHP* useful for bibliographic verification, retrospective searches—even for current awareness! Any of six access points quickly lead you to complete descriptions of proceedings and the

individual papers presented in them. And the main entries display proceedings in a contents-page format—ideal for easy scanning. Each entry provides the full bibliographic information you need.

Why not make these valuable indexes part of your library's reference collection? A yearly subscription to *ISTP* is \$775, and to *ISSHP* is \$575.

For more information—and to receive your FREE sample issue of *ISTP* or *ISSHP*—just fill out and mail the coupon below. Or call us toll-free 800-523-1850, extension 1371.

Remember, no literature search is complete without checking the proceedings in *ISTP* or *ISSHP*.

Please send me a free sample issue of the index I've checked below. I understand there is no cost or obligation.

*Index to Scientific & Technical Proceedings*<sup>®</sup>  
monthly issue

*Index to Social Sciences & Humanities Proceedings*<sup>®</sup>  
quarterly issue

Name/Title \_\_\_\_\_

Organization/Department \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State/Province \_\_\_\_\_

ZIP/Postal Code \_\_\_\_\_

Country \_\_\_\_\_

Telephone \_\_\_\_\_

**isi**<sup>®</sup>

**Institute for Scientific Information<sup>®</sup>**

© 1986 ISI

101-4112

Customer Services Department, 3501 Market Street, Philadelphia, PA 19104, Tel: (215) 386-0100, 1371

European Office: 132 High St., Uxbridge, Middlesex UB8 1DP, U.K., Tel: 44-895-70016