

Reporting Experimental Data

Selected Reprints

EDITED BY
Howard J. White, Jr.

**NOW
AVAILABLE**

This practical guide will tell you everything you need to know about the proper handling of numeric data. Compiled from widely scattered sources, **Reporting Experimental Data** is a definitive reference volume which offers information on coordinating data from many disciplines. The volume gathers the recommendations for publication of data for measurements of a physical chemical nature together with current IUPAC recommendations for quantities, symbols, and units. A unified reference source for all authors of scientific publications!

Contents:

- Describing and Presenting Measurements
- Items of General Use in Chemistry
- Thermodynamics Including Biothermodynamics
- Chemical Kinetics and Transport Properties
- Electrochemistry
- Colloid and Surface Chemistry
- Photochemistry
- Analytical Chemistry
- Crystallography and Electron Diffraction
- Spectroscopies
- Automated Products

Howard J. White, Jr., Editor
360 pages (1993) Clothbound
ISBN 0-8412-2529-X—\$89.95

Order from:

American Chemical Society • Distribution
Office, Dept. 74 • 1155 Sixteenth Street, NW •
Washington, DC 20036

Or CALL TOLL FREE AT
1-800-227-5558 (in Washington,
DC, 202-872-4363) and use your
credit card!

ACS PUBLICATIONS
Essential Resources for the Chemical Sciences

Biochemistry

Biochemistry (ISSN 0006-2960) is published weekly except for the first week in January by the American Chemical Society at 1155 16th St., N.W., Washington, DC 20036. Second-class postage paid at Washington, DC, and additional mailing offices. POSTMASTER: Send address changes to *Biochemistry*, Member & Subscriber Services, P.O. Box 3337, Columbus, OH 43210. Canadian GST Reg. No. R127571347. Printed in the USA.

American Chemical Society

1155 16th St., N.W.
Washington, DC 20036
(202) 872-4600
TDD (202) 872-8733; FAX (202) 872-4615

Member & Subscriber Services

American Chemical Society
P.O. Box 3337, Columbus, OH 43210
(614) 447-3776; (800) 333-9511

Journals Department

American Chemical Society
2540 Olentangy River Road
P.O. Box 3330, Columbus, OH 43210
(614) 447-3600, Ext 3171
TELEX 6842086; FAX (614) 447-3745

Publications Division

Robert H. Marks, Director

Journals Department: Charles R. Bertsch,
Head

Editorial Office: Mary E. Scanlan, Manager;
Kathleen E. Duffy, Anne C. O'Melia, and
Joseph E. Yurvati, Journals Editing Manag-
ers; Deborah K. Miller, Senior Associate Edi-
tor; Daniel R. Kelsey, Associate Editor; Amy
S. McKee, Barbara I. Taylor, and Beth A.
Welch, Assistant Editors; David L. Norris,
Staff Editor

Advertising Office: Centcom, Ltd., 1599 Post
Road East, P.O. Box 231, Westport, CT 06881

© Copyright 1994 by the American Chem-
ical Society. Copyright permission: An indi-
vidual may make a single reprographic copy
of an article in this publication for personal
use. Reprographic copying beyond that per-
mitted by Section 107 or 108 of the U.S.
Copyright Law is allowed, provided that the
appropriate per-copy fee is paid through the
Copyright Clearance Center, Inc., 222 Rose-
wood Drive, Danvers, MA 01923. For reprint
permission, please write to the Copyright
Administrator, Publications Division, at the
ACS Washington address. Bulk reprints:
For quotes and information on placing an
order, please call (202) 872-4539 or write to
the Distribution Office at the ACS Washing-
ton address.

The paper used in this publication meets
the minimum requirements of American
National Standard for Information Sciences—
Permanence of Paper for Printed Library
Materials, ANSI Z39.48-1984.

Editorial Information

Instructions to authors and copyright sta-
tus form are printed in the first issue of each
volume. Please conform to these instructions
when submitting manuscripts.

Manuscripts for publication should be sub-
mitted to the Editor, Gordon G. Hammes,
Duke University Medical Center, P.O. Box
3673, 081 Yellow Zone, Duke South, Durham,
NC 27710. Correspondence regarding
accepted papers and proofs should be directed
to the Journals Department at the address
above. Page charges of \$30.00 per page may
be paid for papers published in this journal.
Payment does not affect acceptance or sched-
uling of papers.

The American Chemical Society and its
Editors assume no responsibility for the state-
ments and opinions advanced by contributors.

Registered names and trademarks, etc.,
used in this publication, even without specific
indication thereof, are not to be considered
unprotected by law.

Subscription and Business Information

Subscriptions are available only on a calen-
dar year basis. (For membership informa-
tion, contact Office of Member Services at
the ACS Washington address.)

New and renewal subscriptions should be
sent with payment to American Chemical
Society, Department L-0011, Columbus,
OH 43268-0011. Rates do not apply to non-
member subscribers in Japan, who must enter
subscription orders with Maruzen Company
Ltd., 3-10 Nihonbashi 2-chome, Chuo-ku,
Tokyo 103, Japan. Tel: (03) 272-7211.

1994 subscription prices including postage.

	U.S.	Canada, Mexico	Europe*	All Other Countries*
Printed				
Members—1 yr	\$ 108	\$ 200	\$ 351	\$ 422
2 yr	\$ 194	\$ 378	\$ 680	\$ 822
Nonmembers	\$1328	\$1420	\$1571	\$1642
Microfiche				
Members—1 yr	\$ 108	\$ 108	\$ 156	\$ 156
2 yr	\$ 194	\$ 194	\$ 290	\$ 290
Nonmembers	\$1328	\$1328	\$1376	\$1376
Supplementary material on microfiche	\$ 50	\$ 80	\$ 80	\$ 80

* Air service included.

Printed edition single issue prices: current
year, \$27.00; 1992–93, \$31.00; 1990–91,
\$23.00; prior year, \$44.00. Foreign postage
additional. Mail orders and requests for back
volume prices should be sent to Microforms
& Back Issues Office at the ACS Washington
address.

Phone orders can be placed for printed,
microfiche, and microfilm editions by calling
the ACS TOLL FREE at (800) 333-9511
from anywhere in the United States and Can-
ada. Phone orders can be charged to Visa,
MasterCard, or American Express accounts.

Changes of address must include both old
and new addresses with ZIP code and a recent
mailing label. Send all address changes to
Member & Subscriber Services. Please allow
6 weeks for change to become effective.
Claims for missing numbers will not be
allowed if loss was due to failure of notice of
change of address to be received in the time
specified; if claim is dated (a) North Amer-
ica, more than 90 days beyond issue date; (b)
all other foreign, more than 180 days beyond
issue date. Claims are handled by Member &
Subscriber Services.

Supplementary material is noted in the
table of contents with a ■. It is available as
photocopy (\$12.00 for up to 3 pages and
\$1.50 per page for additional pages, plus
\$2.00 for foreign postage) or as 24X micro-
fiche (\$12.00, plus \$1.00 for foreign postage).
Canadian residents should add 7% GST. See
supplementary material notice at end of jour-
nal article for number of pages. Orders must
state whether for photocopy or for microfiche
and give complete title of article, names of
authors, journal, issue date, and page num-
bers. Prepayment is required and prices are
subject to change. Order from Microforms &
Back Issues Office at the ACS Washington
address. Supplementary material except
structure factors also appears in the microfilm
edition.

Cover: Based on λ repressor–DNA
complex—courtesy of David Richardson.

Biochemistry

EDITOR: GORDON G. HAMMES

Duke University Medical Center, P.O. Box 3673, 081 Yellow Zone, Duke South, Durham, North Carolina 27710
[Phone (919) 681-3250; FAX (919) 681-8344 or (800) 334-0892]

ASSOCIATE EDITORS:

MARY D. BARKLEY, LOUISIANA STATE UNIVERSITY
MARC G. CARON, DUKE UNIVERSITY
EARL W. DAVIE, UNIVERSITY OF WASHINGTON
PERRY A. FREY, UNIVERSITY OF WISCONSIN
PAUL L. MODRICH, DUKE UNIVERSITY

WILLIAM W. PARSON, UNIVERSITY OF WASHINGTON
JAMES F. RIORDAN, HARVARD MEDICAL SCHOOL
JOSEPH J. VILLAFRANCA, BRISTOL-MYERS SQUIBB
LESLIE WILSON, UNIVERSITY OF CALIFORNIA, SANTA BARBARA

EDITORIAL ADVISORY BOARD

ROBERT H. ABELES
Brandeis University
DAVID S. AULD
Harvard Medical School
JOSEPH AVRUCH
Massachusetts General Hospital
GERALD T. BABCOCK
Michigan State University
ROBERT L. BALDWIN
Stanford University
ROBERT M. BELL
Duke University
STEPHEN J. BENKOVIC
The Pennsylvania State University
E. MORTON BRADBURY
University of California, Davis
BILL R. BRINKLEY
Baylor College of Medicine
MICHAEL J. CHAMBERLIN
University of California, Berkeley
JOSEPH E. COLEMAN
Yale University
MINOR J. COON
The University of Michigan
DAVID DAVIES
NIDDK, National Institutes of Health
WILLIAM F. DEGRADO
Dupont-Merck Pharmaceuticals
JACK E. DIXON
The University of Michigan
RUSSELL F. DOOLITTLE
University of California, San Diego
RAYMOND A. DWEK
University of Oxford
MAURICE EFTINK
University of Mississippi
JULI FEIGON
University of California, Los Angeles
ALAN R. FERSHT
University of Cambridge
IRWIN FRIDOVICH
Duke University
ERROL C. FRIEDBERG
University of Texas Southwestern
Medical Center
CARL FRIEDEN
Washington University
MARTIN GELLERT
National Institutes of Health
LILA M. GIERASCH
University of Texas Southwestern
Medical Center

IRVING H. GOLDBERG
Harvard Medical School
JACK GORSKI
University of Wisconsin
ROBERT HASELKORN
University of Chicago
CLAUDE HÉLÈNE
Museum National d'Histoire Naturelle,
Paris
JOHN W. B. HERSHEY
University of California, Davis
GEORGE P. HESS
Cornell University, Ithaca
STEFAN HIGHSMITH
University of the Pacific
PETER C. HINKLE
Cornell University, Ithaca
DICK HOEKSTRA
University of Groningen
BARRY HONIG
Columbia University
TONY E. HUGLI
Scripps Clinic & Research Foundation
LINDA JEN-JACOBSEN
University of Pittsburgh
HANS JÖRNVALL
Karolinska Institute, Stockholm
H. RONALD KABACK
Howard Hughes Medical Institute, UCLA
NEVILLE R. KALLENBACH
New York University
CLAUDE B. KLEE
National Cancer Institute
JUDITH P. KLINMAN
University of California, Berkeley
ROBERT J. LEFKOWITZ
Duke University
TOMAS LINDAHL
Imperial Cancer Research Fund, London
PHILIP W. MAJERUS
Washington University
ROWENA G. MATTHEWS
University of Michigan
HENRY METZGER
NIAMS, National Institutes of Health
CHRISTOPHER MILLER
Brandeis University
LUCIANO MUELLER
Bristol-Myers Squibb
GARY L. NELSESTUEN
University of Minnesota

BERT O'MALLEY
Baylor College of Medicine
DEMETRIOS PAPAHAJOPOULOS
University of California, San Francisco
ARTHUR PARDI
University of Colorado
DAVID C. PHILLIPS
University of Oxford
M. THOMAS RECORD
University of Wisconsin
DAVID W. RUSSELL
University of Texas Southwestern
Medical Center
J. EVAN SADLER
Washington University
HAROLD A. SCHERAGA
Cornell University, Ithaca
PAUL R. SCHIMMEL
Massachusetts Institute of Technology
JOACHIM SEELIG
University of Basel
G. GRAHAM SHIPLEY
Boston University
ANTERO G. SO
University of Miami
LINDA L. SPREMULLI
University of North Carolina
JOANNE STUBBE
Massachusetts Institute of Technology
IGNACIO TINOCO, JR.
University of California, Berkeley
OLKE C. UHLENBECK
University of Colorado
BERT L. VALLEE
Harvard Medical School
DENNIS E. VANCE
University of Alberta
JANE M. VANDERKOOI
University of Pennsylvania
MARTHA VAUGHAN
National Institutes of Health
DENNIS R. VOELKER
National Jewish Center for Immunology
and Respiratory Medicine
TERESA S. WANG
Stanford University
SAVIO WOO
Baylor College of Medicine
PETER E. WRIGHT
Scripps Clinic & Research Foundation
CHENG-WEN WU
Institute of Biomedical Science, Taiwan