

# JOURNAL

## OF THE AMERICAN CHEMICAL SOCIETY

### EDITOR

ALLEN J. BARD

Department of Chemistry, University of Texas, Austin, Texas 78712  
(512) 471-3761

### BOARD OF EDITORS

Carl H. Brubaker, Jr.  
Sunney I. Chan  
W. Ronald Gentry

Jack Halpern  
Carl R. Johnson  
Richard L. Schowen  
Peter J. Stang

John K. Stille  
Donald G. Truhlar  
Peter J. Wagner

Peter A. S. Smith, *Book Review Editor*

Department of Chemistry, University of Michigan, Ann Arbor, Michigan 48104

### EDITORIAL ADVISORY BOARD

Jesse L. Beauchamp  
Eugene H. Cordes  
F. Albert Cotton  
Samuel Danishefsky

David A. Evans  
Paul G. Gassman  
William A. Goddard, III  
James A. Ibers

James C. Martin  
Thomas J. Meyer  
William H. Orme-Johnson  
Albert Padwa

George W. Marshall  
C. Dale Poulter  
Peter M. Rentzepis  
Norman Sutin  
Nicholas J. Turro, Jr.

*Journal of the American Chemical Society* (ISSN 0002-7863) is published biweekly by the American Chemical Society at 1155 16th Street, N.W., Washington, DC 20036. Second-class postage paid at Washington, DC, and additional mailing offices. POSTMASTER: Send address changes to *Journal of the American Chemical Society*, Membership & Subscription Services, P.O. Box 3337, Columbus, OH 43210.

### BOOKS AND JOURNALS DIVISION

D. H. Michael Bowen, Director

Journals Department: Charles R. Bertsch, Head; Marianne C. Brogan, Associate Head; Mary E. Scanlan, Assistant Manager; Susan H. Reich, Associate Editor; Ann Marie Mackiw, Assistant Editor; Teresa K. Towers, Staff Editor

Production Department: Elmer M. Pusey, Jr., Head

Research and Development Department: Lorin R. Garson, Head

Advertising Office: Centcom, Ltd., 25 Sylvan Road South, Westport, CN 06881

© Copyright 1985, by the American Chemical Society.

**Copyright permission:** An individual may make a single reprographic copy of an article in this publication for personal use. Reprographic copying beyond that permitted 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., 21 Congress St., Salem, MA 01970. For reprint permission, please write to the Copyright Administrator, Books and Journals Division, at the ACS Washington address.

### Editorial Information

Instructions for authors and copyright transfer form are printed in the first issue of

each volume. Please conform to these instructions when submitting manuscripts.

**Manuscripts for publication** should be submitted to the Editor, Allen J. Bard, at his Texas address. Correspondence regarding **accepted papers and proofs** should be directed to the Journals Department at the ACS Columbus address.

**Page charges** of \$25.00 per page may be paid for papers published in this journal. Payment does not affect acceptance or scheduling of papers.

**Bulk reprints** of individual articles are available. For information write to Distribution Office at the ACS Washington address.

The American Chemical Society and its Editors assume no responsibility for the statements and opinions advanced by contributors. Views expressed in the editorials are those of the author and do not necessarily represent the official position of the society.

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

**1985 subscription prices**, including postage. Subscriptions are available only on a calendar year basis. (For membership information, contact Office of Membership Development at the ACS Washington address.)

	Canada and U.S.	Mexico	Europe Air Service Included	All Other Countries Air Service Included
Printed				
Members	\$ 61	\$ 96	\$129	\$161
Nonmembers	\$299	\$334	\$367	\$399
Microfiche				
Members	\$ 61	\$ 61	\$ 79	\$ 79
Nonmembers	\$299	\$299	\$317	\$317
Supplementary material on microfiche	\$ 50	\$ 65	\$ 65	\$ 65

Rates above do not apply to nonmember subscribers in Japan, who must enter subscrip-

tion orders with Maruzen Company Ltd., 3-10 Nihonbashi 2-chome, Chuo-ku, Tokyo 103, Japan. Tel: (03) 272-7211.

**New and renewal subscriptions** should be sent with payment to the Office of the Treasurer, Financial Operations, at the ACS Washington address.

**Printed edition single issue prices:** current year \$12.00; prior year \$14.25. **Back volume price:** \$363.00. Foreign postage additional. Mail orders 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 Sales Office toll free at (800) 424-6747 from anywhere in the continental United States; Washington, D.C. area call (202) 872-8065. 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 the ACS Columbus address. 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 America—more than 90 days beyond issue date, (b) all other foreign—more than one year beyond issue date; or if the reason given is "missing from files." Hard copy claims are handled at the ACS Columbus address.

**Supplementary material** is noted in the table of contents with a ■. It is available as photocopy (\$6.00 for up to 3 pages and \$1.50 per page for additional pages, plus \$2.00 for foreign postage) or as 24X microfiche (\$6.00, plus \$1.00 for foreign postage). See supplementary material notice at end of journal article for number of pages. Orders *must* state whether for photocopy or microfiche and give complete title of article, names of authors, journal, issue date, and page numbers. Prepayment is required and prices are subject to change. Order from Microforms & Back Issues Office at the ACS Washington address. Supplementary material also appears in the microfilm edition and may be ordered by subscription (in microfiche only).

American Chemical Society  
1155 16th Street, N.W.  
Washington, D.C. 20036  
(202) 872-4600  
TDD (202) 872-8733

Journals Department  
American Chemical Society  
2540 Olentangy River Road  
P.O. Box 3330  
Columbus, Ohio 43210  
(614) 421-3600, Ext. 3171  
TELEX 6842086

Membership & Subscription Services  
American Chemical Society  
P.O. Box 3337  
Columbus, Ohio 43210  
(614) 421-3776