# JOURNAL

### OF THE AMERICAN CHEMICAL SOCIETY

#### **EDITOR**

#### CHEVES WALLING

Department of Chemistry, University of Utah, Salt Lake City, Utah 84112 (801) 581-5739

#### **BOARD OF EDITORS**

Carl H. Brubaker, Jr. Ernest R. Davidson Ernest Grunwald

Jack Halpern **Emil Thomas Kaiser** Robert W. Parry Barry M. Trost

Regitze R. Vold Robert L. Vold Peter J. Wagner

Peter A. S. Smith, Book Review Editor

#### EDITORIAL ADVISORY BOARD

Stephen J. Benkovic Elkan R. Blout John I. Brauman F. Albert Cotton

Philip J. Elving Christopher S. Foote Roald Hoffmann Robert E. Ireland

Josef Michl Earl L. Muetterties Koji Nakanishi Paul v. R. Schleyer **Howard Simmons** Franz Sondheimer Jacob Szmuszkovicz Kenneth N. Trueblood Robert Ullman

## Published by the AMERICAN CHEMICAL SOCIETY BOOKS AND JOURNALS DIVISION

D. H. Michael Bowen, Director Marjorie Laflin, Assistant to the Director

Journals Department: Charles R. Bertsch, Head; Marianne C. Brogan, Associate Head; Eileen B. Segal, Production Editor; Fern S. Jackson and Deborah A. Wilson, Associate Editors; Andrew J. D'Amelio, Editorial Assistant; Judith A. Bennison, Production Assistant

Magazine and Production Department: Bacil Guiley, Head

Research and Development Department: Seldon W. Terrant, Head

Advertising Office: Centcom, Ltd., 25 Sylvan Road South, Westport, Conn. 06880

© Copyright, 1979, by the American Chemical Society. Permission of the American Chemical Society is granted for libraries and other users to make reprographic copies for use beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law, provided that the copying organization pay the appropriate percopy fee through the Copyright Clearance Center, Inc. Educational institutions are generally granted permission to copy upon application to Office of the Director, Books and Journals Division, at the ACS Washington ad-

Published biweekly by the American Chemical Society at 20th and Northampton Sts., Easton, Pennsylvania 18042. Second class postage paid at Washington, D.C., and at additional mailing offices.

#### **Editorial Information**

Instructions for authors 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, Cheves Walling, at his Salt Lake City address. Correspondence regarding accepted papers and proofs should be directed to the Journals Department at the ACS Easton

Page charges of \$40.00 per page may be paid for papers published in this journal. Payment does not affect acceptance or scheduling of papers. Bulk reprints or photocopies of individual articles are available. For information write to Business Operations, Books and Journals Division 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.

#### **Subscription and Business Information**

1979 subscription prices, printed or microfiche, including postage. Microfiche by air mail, printed by surface mail. Printed edition air mail or air freight rates available from Membership & Subscription Services at the ACS Columbus address.

	U.S.	Foreign
Members	\$42.00	\$58.00
Nonmembers	168.00	184.00
Supplementary	35.00	50.00
material (available		
in microfiche only)		

New and renewal subscriptions should be sent with payment to the Office of the Controller at the ACS Washington address. 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.

Microfilm and microfiche editions of all the ACS primary publications, by single volume or back issue collection, are available. For additional price and subscription information, contact Microforms Program at the ACS Washington address, or call (202) 872-4554

To order single issues or back volumes of the printed edition, contact Special Issues Sales at the ACS Washington address, or call (202) 872-4365. Current year single issue \$6.50. Prior year single issue \$7.00. Back volume \$175.00. Foreign postage additional.

Supplementary material is noted in the Table of Contents with a . See supplementary material notice at the end of article for number of pages. Orders over 20 pages are available only on 24× microfiche. Orders must state photocopy or microfiche and give complete title of article, names of authors, journal, date, and page numbers. Prepayment is required and prices are subject to change.

	U.S.	Foreign
Microfiche	\$3.00	\$4.00
Photocopy		
1-8 pages	5.50	7.00
9-20 pages	6.50	8.00

Single microfiche or paper copies of supplementary material may be ordered from Business Operations, Books and Journals Division, at the ACS Washington address. Supplementary material also appears in the microfilm edition.

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

Membership & Subscription Services American Chemical Society P.O. Box 3337 Columbus, Ohio 43210 (614) 421-7230

Journals Department

American Chemical Society 20th & Northampton Sts. Easton, Pennsylvania 18042 (215) 258-9111