JOURNAL

OF THE

Tennessee Academy of Science

VOLUME XLIV

NUMBER 3

CONTENTS

1 ugo	
Factors Affecting the Oxidation of Benzaldoxime by Ceric Ammonium Nitrate. R. T. Swindell, N. L. Ford, and D. Tsau	
Electromotive Force Studies in Aqueous Solutions at Elevated Temperatures. XI. The Thermodynamic Properties of HCL-LiCl Solutions. M. H. Lietzke and R. W. Stoughton	
Germination and Dormancy in Cedar Glade Plants. IV. Isanthus brachiatus, Panicum capillare, Cyperus inflexus, Eragrostis spectabilis and Ruellia humilis. Carol C. Baskin and Jerry M. Baskin	
News of Tennessee Science	
Age and Growth of Largemouth Bass in Darbonne Pit, St. Landry Parish, Louisiana. Arthur R. Shay and R. P. Ward	
The Tettigoniidae (Orthoptera) of Tennessee. Vernon N. Powders and James T. Goodwin	
Seasonal Life History and Control of the Peach Tree Borer, Sanninoidea exitiosa (Say), in Tennessee. W. G. Russell and W. W. Stanley	
A Preliminary Study of the Ferns on the Limestone Bluffs of Norris Lake. John Kermit Bailey	

JULY 1969

JOURNAL

OF THE

Tennessee Academy of Science

EDITORIAL STAFF

DONALD CAPLENOR, Editor, Tenn. Tech. Univ., Cookeville 38501

JAMES D. CAPONETTI, Botany Editor, University of Tennessee, Knoxville 37916

Frederick L. Culp, *Physics-Astronomy Editor*, Tenn. Tech. Univ., Cookeville 38501

James B. Delano, Engineering Editor, Arnold Engineering Development Center, Tullahoma 37388

ROBERT J. FLOYD, Geology-Geography Editor, Tennessee

Division of Geology, Nashville 37203

MARK M. Jones, Chemistry Editor, Vanderbilt University,
Nashville 37203

Nashville 37203

Mrs. G. H. Lundberg, High School Science-Mathematics Editor, Peabody Demonstration School, Nashville 37203

Editor, Peabody Demonstration School, Nashville 37203 ROBERT E. MARTIN, News Editor, Tenn. Tech. Univ. RONALD SIRCY, Mathematics Editor, Tenn. Tech. Univ., Cookeville 38501

John B. Thomison, Medical Sciences Editor, School of Medicine, Vanderbilt University, Nashville 37203

R. P. WARD, Zoology Editor, Peabody College, Nashville 37203

All articles and communications for publications, books, and publications for review, should be addressed to the Editor.

New subscriptions, changes of address and applications for membership should be addressed to the Secretary. Personal items news of events in the scientific world, and other notes suitable for the "News of Tennessee Science" department should be addressed to the News Editor.

Published quarterly, in January, April, July and October, by the Tennessee Academy of Science at Box 186A, Tennessee Technological University, Cookeville, Tennessee 38501.

The JOURNAL is sent to all members not in arrears for dues. The subscription price is \$5.00 a year, invariably in advance. Single copies \$1.25.

Second Class Postage Paid at Nashville, Tennessee.

THE TENNESSEE ACADEMY OF SCIENCE

(Founded 1912, at Nashville, Tennessee)
Affiliated with the American Association
for the Advancement of Science

Affiliated Societies

Tennessee Ornithological Society, Nashville, Tennessee Barnard Astronomical Club, Nashville Tennessee Science Teachers' Association Tennessee Psychological Association

Officers

Gus Lundberg, President, Austin Peay State University, Clarksville 37040

James L. Wilson, *President-elect*, University of Tennessee Nashville Center, Nashville 37203

Donald Caplenor, Editor, Tenn. Tech. University, Cookeville 38501

JAMES D. CAPONETTI, Secretary, University of Tennessee, Knoxville 37916

ROBERT WILSON, Treasurer, University of Chattanooga, Chattanooga 37403

WILLIAM F. NELSON, Director of the Reelfoot Lake Biological Station, University of Tennessee at Martin, Martin 38237

Executive Committee

ROBERT AMY, Southwestern College, Memphis 38112 JOHN H. BAILEY, East Tennessee State University, Johnson City 37602

Donald Caplenor, Tenn. Tech. University, Cookeville 38501

JAMES D. CAPONETTI, University of Tennessee, Knoxville 37916

Gus Lundberg, Austin Peay State University, Clarksville 37040

Albert Meyers, Carson-Newman College, Jefferson City 37760

WILLIAM F. NELSON, University of Tennessee at Martin, Martin 38237

RICHARD J. RARIDON, Oak Ridge National Laboratories, Oak Ridge 37831

ROGER RUSK, University of Tennessee, Knoxville 37916

JAMES L. WILSON, University of Tennessee Nashville Center, Nashville 37203

ROBERT WILSON, University of Chattanooga, Chattanooga 37403

NOTICE TO AUTHORS

Papers submitted for publication in the JOURNAL may be sent to any member of the editorial staff. Manuscripts must be approved by the Editor and the appropriate Section Editor before publication. Manuscripts should be type-written, double or triple spaced, with wide margins, and with legends for figures typed on a separate page. Recent issues should be consulted with regard to matters of style. Each table should be placed on a separate sheet. Footnotes should not be used except very rarely. Greek letters and symbols should be avoided as much as possible.

Each paper should be supplied with an abstract not to exceed 250 words.

Photographs (black and white glossy prints) may be accepted as illustrations; however, line drawings and diagrams are preferable. Drawings should be made in India ink on white paper or Bristol Board. An article containing more than 2 illustrations can be published only with financial cooperation of the author.

A per page charge of \$10.00 will be made to industrial contributors.

A blank form for ordering reprints from the printer is enclosed with the galley proof. The cost of reprints is as follows:

 100 copies
 \$12.00
 \$20.00
 \$38.00
 \$47.00
 \$56.00

 Ea. add. 100
 2.00
 3.00
 8.50
 12.25
 16.00

The Tennessee Academy of Science is very anxious to include in its membership all teachers and professors of science, research workers in science both in educational institutions and industrial establishments, and all others who are interested in some phase of science.

The annual dues are \$5.00 for members except teachers below the college level, whose dues are \$3.00, and \$10.00 for sustaining members. Dues may be sent direct with your application for membership to the Secretary.