CONTENTS

Frank H. Barclay, Ph.D., 1965 President of the Tennessee Academy of Science ............................................. 42

News of Tennessee Science ......................................................................................................................... 42

Investigations of Miscellaneous Mineral Deposits in East Tennessee. Stuart W. Maher and Pratt Finlayson .................................................................................................................. 43

Some Sets of Integers, Eckford Cohen ........................................................................................................... 48

The Grass Flora of Shelby County, Tennessee. Jack L. Tayloe ..................................................................... 50

The Male Urogenital System in Cryptobranchus. Milton A. Ratcliff, Jr. ..................................................... 52

Quotes on Science and the Education of Scientists ...................................................................................... 58


Fifteenth Annual Meeting of the Collegiate Division of the Tennessee Academy of Science ...................... 72

Report of the Treasurer of the Tennessee Academy of Science. G. B. Pennebaker ........................................ 74

APRIL, 1965
JOURNAL
OF THE
Tennessee Academy of Science

EDITORIAL STAFF
GUSTAVE H. LUNDBERG, Editor, Vanderbilt University, Nashville
DONALD CAPLENO, Botany Editor, George Peabody College for Teachers, Nashville
JAMES B. DELANO, Engineering Editor, Arnold Engineering Development Center, Tullahoma
EDGAR D. EAVES, Mathematics Editor, University of Tennessee, Knoxville
ROBERT J. FLOYD, Geology-Geography Editor, Tennessee Division of Geology, Nashville
MRS. BURT FRANCIS, High School Science-Mathematics Editor, Isaac Litton High School, Nashville
HAROLD F. McDUFFIE, Chemistry Editor, Oak Ridge National Laboratory, Oak Ridge
RICHARD STEVENSON, News Editor, East Tennessee State University, Johnson City
JAMES T. TANNER, Zoology Editor, University of Tennessee, Knoxville
JOHN B. THOMISON, Medical Sciences Editor, School of Medicine, Vanderbilt University, Nashville
J. O. YOUNGHAUSE, Physics-Astronomy Editor, Oak Ridge National Laboratory, Oak Ridge

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 Station B, Box 1522, Vanderbilt University, Nashville, Tennessee.

The JOURNAL is sent to all members not in arrears for dues. The subscription price is $4.00 a year, invariably in advance. Single copies $1.00.

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
FRANK H. BARCLAY, President, East Tennessee State University, Johnson City
MELBURN R. MAYFIELD, President-Elect, Austin Peay State College, Clarksville
GUSTAVE H. LUNDBERG, Editor, Vanderbilt University, Nashville
JAMES L. WILSON, Secretary, Belmont College, Nashville
GORDON B. PENNABER, Treasurer, Tennessee Polytechnic Institute, Cookeville
CLINTON L. BAKER, Director of the Reelfoot Lake Biological Station, Southwestern University, Memphis

EXECUTIVE COMMITTEE
CLINTON L. BAKER, Southwestern University, Memphis
FRANK H. BARCLAY, East Tennessee State University, Johnson City
NORMAN CAMPBELL, University of Tennessee, Martin Branch, Martin
DONALD CAPLENO, George Peabody College for Teachers, Nashville
GUSTAVE H. LUNDBERG, Vanderbilt University, Nashville
MELBURN R. MAYFIELD, Austin Peay State College, Clarksville
GORDON B. PENNABER, Tennessee Polytechnic Institute, Cookeville
RICHARD J. RABIDE, Oak Ridge National Laboratories, Oak Ridge
RICHARD STEVENSON, East Tennessee State University, Johnson City
JAMES L. WARD, School of Medicine, Vanderbilt University, Nashville
JAMES L. WILSON, Belmont College, Nashville
ROBERT WILSON, University of Chattanooga, Chattanooga

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 typewritten, 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.

The style for the list of references should conform to the style used in recent issues of the Journal. This list should be headed Literature Cited. The following example illustrates the proper style to be used for references:
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 or 3 illustrations can be published only with the 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:

<table>
<thead>
<tr>
<th>Pages</th>
<th>2 pages</th>
<th>4 pages</th>
<th>8 pages</th>
<th>12 pages</th>
<th>16 pages</th>
<th>Ea. add.</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 copies</td>
<td>$12.00</td>
<td>$20.00</td>
<td>$38.00</td>
<td>$47.00</td>
<td>$56.00</td>
<td>2.00</td>
</tr>
<tr>
<td>200 copies</td>
<td>3.00</td>
<td>8.50</td>
<td>12.25</td>
<td>16.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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. We invite you to join our organization and take part in our activities.

The annual dues are $4.00 for members except teachers below the college level, whose dues are $2.00, and $10.00 for sustaining members. Dues may be sent direct with your application for membership to the Secretary.