CONTENTS

Leaf Epidermal and Gross Morphological Adaptations in *Salix nigra* Marsh. (Salicaceae) in Relation to Environmental Pollution.  
*G. K. Sharma* ................................................................. 73

Estimating Relative Abundance of Stream Macroinvertebrates with an Electrofishing Sampler. *Jerry W. Nagel* ................................................................. 77

Effective Energy Output Per Cord of Air-dried Wood in Five Native, American Hardwoods from a Typical Tennessee Woodpile.  
*Cevert L. Walker, Jr.* .......................................................... 79

Synthesis of Flavonols Analogous to Quercetin Employing the Baker-Venkataraman Reaction. *Rama I. Mani, Parris F. Powers,* and *Landson Drummond* .................................................. 83

Stratigraphy, Depositional Setting, and Paleocology of the Thompson Farm Fossil Bed Exposure (Coon Creek, Cretaceous) near Enville, Tennessee.  
*Stan P. Dunagan and Michael A. Gibson* .................................. 87


JULY 1993
Tennessee Academy of Science

EXECUTIVE COMMITTEE

President
George Murphy
Dept. of Biology
Middle Tennessee State Univ.
Murfreesboro, TN 37132

Past-president
Michael L. Kennedy
Dept. of Biology
Memphis State Univ.
Memphis, TN 38152

President-elect
Wilburn A. Sliger
Dept. of Biological Sciences
Univ. of Tennessee, Martin
Martin, TN 38238-5014

Treasurer
John W. Harris
Dept. of Biology
Tennessee Tech. Univ.
Cookeville, TN 38505

1993-1995 Member-at-large
David N. Lunsford
Dept. of Geological Sci.
Memphis State Univ.
Memphis, TN 38152

1992-1994 Member-at-large
D. M. S. Bhatia
Dept. of Geology
Austin Peay State Univ.
Clarksville, TN 37044

Meeting Coordinator
Betty Davis
Univ. School, Box 21460A
East Tennessee State Univ.
Johnson City, TN 37614

Director, Junior Academy
Jack Rhoton
East Tennessee State Univ.
Box 23020A
Johnson City, TN 37614

Director, Visiting Sci. Program
Wayne Stevenson
Univ. Programs Division
Oak Ridge Associated Labs.
Oak Ridge, TN 37830

Editor
Phyllis K. Kennedy
Dept. of Biology
Memphis State Univ.
Memphis, TN 38152

Geology and Geography
Stuart W. Mahler
505 E. Broadway
Kenvil, Inc.
Maryville, TN 37801

Physics and Astronomy
Martha Weller
Dept. of Chemistry and Physics
Middle Tennessee State Univ.
Murfreesboro, TN 37132

Botany
James D. Caponetti
Dept. of Botany
Univ. of Tennessee
Knoxville, TN 37916

History of Science
Phillip J. Lorenz
Dept. of Physics
Univ. of the South
Sewanee, TN 37375

Science and Math Teachers
Sarah F. Barlow
Dept. of Biology
Middle Tennessee State Univ.
Murfreesboro, TN 37132

Chemistry
Martin V. Stewart
Dept. of Chemistry and Physics
Middle Tennessee State Univ.
Murfreesboro, TN 37132

Math and Computer Science
Kirk Mense
Dept. of Math and Computer Sci.
Austin Peay State Univ.
Clarksville, TN 37044

Zoology I
David H. Kesler
Dept. of Biology
Rhodes College
2000 North Parkway
Memphis, TN 38112

Zoology II
Phyllis K. Kennedy
Dept. of Biology
Memphis State Univ.
Memphis, TN 38152

EDITORIAL BOARD

The TENNESSEE ACADEMY OF SCIENCE was founded in 1912 at Nashville, Tennessee. 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. Annual dues are $20 for members and fellows, except students and emeritus members whose dues are $10. Life membership is $200. Applications for membership should be addressed to the Treasurer.

Affiliated societies of the Academy are: American Association for the Advancement of Science (AAAS); Barnard Astronomical Society, Clarence T. Jones Memorial Observatory, Chattanooga; Barnard-Seyfert Astronomical Society, Nashville; National Association of Academies of Science; Tennessee Association of Science Department Chairs; Tennessee Junior Science and Humanities Symposium; Tennessee Ornithological Society, Nashville; Tennessee Psychological Association; and Tennessee Science Teachers' Association.

The JOURNAL OF THE TENNESSEE ACADEMY OF SCIENCE (ISSN 0040-313X) is published quarterly at the Department of Biology, Memphis State University, Memphis, TN 38152, by the Tennessee Academy of Science for all members not in arrears for dues. Each subscription rate is $20 per year. Single copies of recent issues are $10. Whole sets of back issues on microfilm are available from AMS Press, Inc., 56 E. 13th Street, New York, NY 10003. Send address changes to Tennessee Academy of Science, c/o Dr. Phyllis K. Kennedy, Department of Biology, Memphis State University, Memphis, TN 38152.

This Journal is abstracted by Biological Abstracts, Chemical Abstracts, and Nuclear Abstracts and is indexed by Science Citation Index and Agricola Citations.