THE EIGHTY-THIRD MEETING OF THE TENNESSEE ACADEMY OF SCIENCE

NOVEMBER 16-17, 1973

VANDERBILT UNIVERSITY

The eighty-third meeting of the Tennessee Academy of Science was held November 16-17, 1973, at Vanderbilt University, Nashville, Tennessee. Dr. W. Thomas Pinkston, Professor of Astronomy at Vanderbilt, was Chairman of the Local Arrangements Committee, and Dr. Robert L. Amy, Professor and Chairman of the Department of Biology at Southwestern at Memphis, was Program Chairman.

Meeting registrations totaled about 330. Of these, 173 were university-college professors, 3 were from state departments, 3 were from ORNL, 1 free-lance consultant to industry, and about 150 students.

The General Session was held in room 4309 of the Stevenson Science Center on Friday morning beginning at 10:00 a.m. C.S.T. President J. Gerald Parchment chaired the session, and the welcome was given by Dr. Nicholas Hobbs, Provost of Vanderbilt University. The theme of the session was current topics of academic interest. Section meetings were held Friday afternoon; 80 papers were presented. The Annual Business Meeting was held in room 4309 of the Stevenson Science Center at 5:00 p.m C.S.T.

The Annual Dinner was held in the cafeteria of the Divinity Sc. ool. It was served buffet style from 6:30 to 7:30 p.m. C.S.T., Friday evening, Dinner ticket sales were 120, President J. Gerald Parchment presided, and the address was delivered by the Past-President, Dr. Arthur W. Jones, Department of Zoology, The University of Tennessee, Knoxville, who spoke on "Evolution in Tennessee.'

The Collegiate Division held its meeting on Saturday morning at 9:00 a.m. C.S.T. in room 4309 of the Stevenson Science Center. Dr. Richard J. Raridon, Director of the Collegiate Division, chaired the meeting, and 5 papers were presented by

Annual Business Meeting 1973

The Annual Business Meeting of the Tennessee Academy of Science was called to order by President J. Gerald Parcament at 5:00 p.m. C.S.T. in room 4309 of the Stevenson Science Center at Vanderbilt University in Nashville, Tennessee, on November 16, 1973. Seventy-three persons were present.

The Secretary reported that since last January, there were 31 new membership applications. During the annual meeting, there were 21 new memberships. Total Academy membership at this moment stands at 701. A motion was passed to approve all 1973 membership applications.

The reports of the Treasurer, Editor, and the Directors of the Junior Academy, the Collegiate Division and the Visiting Scientists Program were similar to those presented last evening at the Executive Committee Meeting except they were presented in summary form. All reports were accepted by a passed motion.

The Chairman of the Auditing Committee, Dr. Myron S. Mc-Cay, presented the following audit:

"The Treasurer's accounts and records were examined on Tuesday, November 13, 1973, and were found to be complete and accurate.

The Treasurer is to be commended for the clarity of the records and the prompt handling of his very extensive responsibilities.

The Audit Committee verified the receipts and disbursements of the following TAS accounts: (1) TAS operations; (2) Collegiate Division; (3) Junior Academy; (4) Visiting Scientist Program; and (5) Reelfoot Lake Project. It is understood that a professional audit will again be made at the close of the current fiscal year."

A motion was passed to accept the audit.

The Chairman of the Fellows Committee, Dr. Melburn R. Mayfield, presented the following report:

"The following people are hereby nominated as Fellows of the Tennessee Academy of Science:

Barbara Alsobrooks, Erin High School, Erin Robert B. Channel, Vanderbilt University, Nashville Joe A. Chapman, Carson-Newman College, Jefferson City Thomas P. Copeland, East Tennessee State University, Johnson

James X. Corgan, Austin Peay State University, Clarksville Frederick Culp, Tenn. Tech. University, Cookeville William T. Pinkston, Vanderbilt University, Nashville Gus Tomlinson, Peabody College, Nashville Raymond Tanner, Univ. of Tennessee, Medical Units, Memphis John F. Yegge, Oak Ridge Assoc. Universities, Oak Ridge" A motion was passed to accept the report and that those named be made Fellows of the Academy.

The Chairman of the Research Committee, Dr. Sara Wood

presented the following report:

NAME	TITLE	AMOUNT
Katrina Langford	A Nation-wide Survey to Investigate Offerings in Science	\$35 (5/11/73)
Frank Baggett	The Path of Phosphorous in Photosynthesis	\$10 (5/11/73)
Judith M. Bowen	A Comparative Study of Varying Radiation Dosages on Planaria <i>Maculata</i> and <i>Velata</i> .	\$15 (5/11/73)
Brian Haase	Electrostatic Motor Driven by the Earth's Electro- static Field	\$15 (5/11/73)
Robert Link, Jr.	RNAase Enzymes Effect on the Memory Process of the Planarian Worm	\$15 (5/11/73)
Jeana Peeler	Effects of Anxiety-Reducing Drugs on Cyclic Adenosine Monophosphate Pnosphedieterase	\$15 (5/11/73)
Mark T. Satterly	Growth and Effect of Crown Gall Tumor In- duced on Sunflower by Agrobacterium Tumefa- ciens Strain B ₀	\$ 8 (5/11/73)
Ricky Lynn Smith	Comparative Studies of Electrophoresis Analysis of Blood Serums	\$20 (5/11/73)
Tyrene White	The Effects of Bacteria on the Chemical Degradation of Various Forms of Hy- drocarbons	\$15 (5/11/73)
Larry M. Williams	A Study of the Effects of Thermal Water Pollution on a Simulated Ecologi- cal Balance	\$10 (5/11/73)
	16 Nov. 1973 Balance	\$120

A motion was passed to accept the report.

The Chairman of the Resolutions Committee, Dr. Robert T. Swindell, presented the following resolutions:

WHEREAS The Tennessee Academy of Science, including the Collegiate division, is enjoying a most pleasant, profitable, and well organized series of meetings at Vanderbilt University,

WHEREAS the success of these meetings has resulted from the recognition given by various news media, from the efforts of the officers and sponsors of these organizations: the chairmen of the respective sections, the members of the committee on local arrangements, Thomas W. Pinkston, chairman, and from the generous hospitality of our host institution.

THEREFORE, BE IT RESOLVED that the Tennessee Academy of Science expresses its gratitude and sincere appreciation to these and all others who have contributed to the success of these meetings.

The Chairman of Botany Section I, Dr. James T. Murrell, reported that a resolution was passed at the Botany Section meeting and that the persons at that meeting further request that the membership present also pass the resolution which is as

The Tennessee Academy of Science wishes to commend the Tennessee Division of Forestry for its action in setting aside a tract of 1043 acres in the Cedars of Lebanon State Forest as a Natural Area, Class II. The cedar glade ecosystem is a unique biological resource that we value for the educational and research opportunities it affords. The great diversity and sporadic distribution of its endemic flora suggest, however, that the larger the area preserved, the more complete will be the survival of the cedar glade ecosystem. We request, therefore, that thought be given to expanding the presently conserved area and/or to assigning other such tracts to the Natural Area category.

Respectfully submitted, James T. Murrell, Chairman, George Peabody College, Nashville.

Carbon copies to: The Honorable Winfield Dunn, Governor of Tennessee; The Honorable Granville Hinton, Commissioner of State Department of Conservation; Mr. Tim McCall, Director of Natural Areas; and Mr. Max Young, State Forester.

The Journal Editor, Dr. Gus Tomlinson, proposed another resolution:

"That the Academy proceed to examine the feasibility of compiling a cumulative index of all papers in the journal as time and money allows, and that is compilation should be acted upon by the Executive Committee at its next meeting."

A motion was passed to approve all resolution.

The Chairman of the Necrology Committee, Dr. Floyd M. Ford, read the names of three members whose death came to the Secretary's attention during the year:

Dr. Frederic L. Conover, Nashville Dr. Charles W. Holland, Murfreesboro Dr. George D. Swingle, Knoxville

Dr. Ford asked if any member of the audience knew of other deaths. There being no others, he asked the audience to rise and observe a moment of silent prayer.

A motion was passed to accept the Committee's report. The Chairman of the Nominating Committee, Dr. William H. Ellis, presented the following nominating report:

The nominating committee proposes a slate of officers of the Tennessee Academy of Science for 1974 as follows: President-Dr. Robert L. Amy, Department of Biology, Southwestern at Memphis

President-elect-Dr. Albert L. Myers, Chemistry Department, Carson-Newman College

Secretary-Dr. James D. Caponetti, Department of Botany, University of Tennessee at Knoxville Treasurer-Dr. Robert L. Wilson, Department of Geology and

Geography, University of Tennessee at Chattanooga Since Drs. Amy, Caponetti and Wilson are already well known to the Academy, I will only give a short biographical statement

about Dr. Myers. Dr. Myers is a native of Church Hill, Tennessee. His public education came from the schools of Nashville and Jefferson City, Tennessee. He received his B.S. degree from Carson-Newman College; his M.S. degree from the University of

Georgia; and his Ph.D. degree from Purdue University. His experience includes the manufacture of military high explosives with Trojan Powder Company at Allentown, Pennsylvania and Sandusky, Ohio. He worked in Oak Ridge during the latter part of World War II and has taught at Quachita College, Furman University, Houston Baptist College, and Carson-Newman College. He is currently Professor of Chemistry and Chairman of the Chemistry Department of Carson-Newman. a post held since 1967. Other experience includes summer research at Oak Ridge National Laboratory, Humble Oil Company and University of Texas Medical Branch at Galveston.

Dr. Myers has ample experience in professional organizations, especially in the Tennessee Academy of Science. He has been a long-standing member and is a Fellow. He served as Chairman of the Chemistry Section 1954-56; as Sponsor of the Collegiate Division 1956-63; and was an Executive Committee member

1968-70. Membership in other organizations includes the American Chemical Society, American Association for the Advancement of Science (Fellow), American Institute of Chemists (Fellow), Sigma Xi, Phi Lambda Upsilon, Texas Academy of Science, American Association of University Professors, and the Tennessee Education Association.

Dr. Myers is a Baptist, a Civitan and is married to the former Katherine Bass. They have three sons: John, Bill, and Jim.

I feel that the Academy will benefit from this distinguished slate of officers and therefore place their names in nomination for the respective positions.

President Parchment asked for further nominations from the floor; there were none. Committee Chairman Ellis moved to bring further nominations to a close, and that the Secretary cast one vote which would represent the unanimous election of each candidate to his respective office. The motion passed.

OTHER BUSINESS

1. President Parchment announced that the Executive Committee had passed a motion to amend the revised dues structure of last year to allow a dues reduction for retired members. The new rates for these members would be \$4.00 if they wish to continue receiving the Journal, or \$1.00 if they do not want the

A motion was passed to amend the proposed change.

2. Dr. Robert Martin reminded the President to announce that the Executive Committee had passed a motion putting the Academy on record as supporting the testing of the constitutionality of the new state evolution law in the courts. The membership present concurred by a passed motion.

3. President Parchment announced that the Executive Committee had accepted the invitation from The University of Tennessee Medical Units at Memphis to hold the 1974 annual meeting on November 22-23, 1974, subject to the circumstances explained in the Executive Committee Meeting report.

The Annual Business Meeting was adjourned at 5:55 p.m.

REPORT OF THE TREASURER OF THE TENNESSEE ACADEMY OF SCIENCE JULY 1, 1972 THROUGH JUNE 30, 1973

ROBERT LAKE WILSON, TREASURER

University of Tennessee at Chattanooga			
Cash in Bank, July 1, 1972 Less: Outstanding Check, July 1, 1972	\$ 7,296.71 30.00		
Cash Balance, per books, July 1, 1972 Cash Receipts:	\$ 7,266.71		
Membership Dues \$ 4,093.00			
Journal Subscriptions 1,491,00			
Journal Sales			
AAAS Grant 213.00			
Tenn. Dept. of Education 15,000.00			
Contributions 14.00	\$21,004,25		
Total Cash Available	\$28 270 96		
Cash Disbursements:	940,410.90		
Editor's Office \$ 1,950.00			
Treasurer's Office			
Secretary's Office 400.21			
Printing & Mailing Journals 5,427.46			
AAAS Conference 155.74			
AAAS Grant 356.00			
AAAS 1973 Assessment 41.25			
Annual Meeting Expenses & Travel 765.40			
Tech Aqua Scholarships 1,143.00 Miscellaneous (returned check) 3.00			
Programs of the Academy:			
VSP\$2,500.00			
Jr. Academy 2.900.00			
Collegiate Div. 2,000.00			
Tech Aqua 1,500.00 8,900.00	\$20,589.19		
Book Balance, June 30, 1973	\$ 7.681.77		
Add: Outstanding check, June 30, 1973	15.00		
Cash in Pioneer Bank, June 30, 1973	\$ 7,696.77		
Chattanooga Federal, Savings Account, 6/30/73	\$ 5,450.36		

REPORT OF THE AUDITOR

To the Tennessee Academy of Science:

I have examined the Treasurer's Report of cash receipts and disbursements, operations account, for the period, July 1, 1972 to June 30, 1973.

In my opinion, on the basis of information made available to me, the statement fairly present the transactions of these accounts.

> Sincerely Rayford J. McLaurin Auditor Chattanooga, Tennessee

NEW MEMBERS TAS 1973-74

Dr. Ralph M. Addington East Memphis Family Clinic 3550 Park Ave Memphis, Tenn. 38111

Dr. Douglas W. Albaugh Box 153 George Peabody College Nashville, Tenn. 37203

Dr. Benjamin Ray Allen Box 1043 Union University Jackson, Tenn 38301

Vincent J. Aloyo Dept. of Biochemistry UT Med. Units Memphis, Tenn. 38163

Lloyd N. Baker Tenn. Div. Geology G-5 State Office Bldg. Nashville, Tenn. 37219

William Ralph Butler Dept. of Physics David Lipscomb College Nashville, Tenn. 37203

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Joe M. Cisneros 4982 Edmondson Pike Apt. A-7 Nashville, Tenn. 37211 Billy Dean Cole Austin Peay State Univ. Clarksville, Tenn. 37041

Dr. Mary C. Dunn Box 344 MTSU Murfreesboro, Tenn. 37130

Harvill C. Eaton Box 797 Station B Vanderbilt University Nashville, Tenn. 37235

Dr. David E. Fields Computer Science Division 4500 N Rm. D 2 ORNL Oak Ridge, Tenn. 37830

Michael D. Filson 413 Highland Circle Clarksville, Tenn. 37040

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Charles R. Hinkle Graduate Ecology Program University of Tennessee 408 10th St. Knoxville, Tenn. 37916

Jason D. Hofman Dept. of Botany University of Tennessee Knoxville, Tenn. 37916

Dr. Duane F. Houck Biology Department SMC Collegedale, Tenn. 37315

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Dr. Philip M. Mathis Box 578 Middle Tenn. State Univ. Murfreesboro, Tenn. 37130

Vada Maxey P. O. Box 5991 Tenn. Tech. Univ. Cookeville, Tenn. 38501

Ernest Maynard 1101 So. 3rd Monroe, La. 71201

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Alexander McGregor 205 Barnhardt Circle Ft. Oglethorpe, Ga. 30741

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Dr. Frederick Petty Brain Research Institute 865 Poplar Avenue Memphis, Tenn. 38105

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Dr. Wintfred L. Smith Dept. Biology Science Univ. of Tenn. at Martin Martin, Tenn. 38237

Dr. Carl Stedman Dept. Science Education Austin Peay State Univ. Clarksville, Tenn. 37040

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