

PROCEEDINGS OF THE TENNESSEE ACADEMY OF SCIENCE 1982

DIANE R. NELSON, *Secretary*

East Tennessee State University

EXECUTIVE COMMITTEE MEETING
APRIL 23, 1982

The Executive Committee Meeting of the Tennessee Academy of Science was called to order by the President at 7:15 p.m. C.S.T. in the President's Conference Room of Tennessee State University, Nashville, on April 23, 1982. Members present were S. K. Ballal, President; Gordon Morris, President-Elect; A. Paul Wishart, Past-President; Diane R. Nelson, Secretary; Robert L. Wilson, Treasurer; Gus Tomlinson, Journal Editor; Richard J. Raridon, Director of the Collegiate Division; William N. Pafford, Director of the Junior Academy; Bernard Benson, Director of the Visiting Scientists Program; Edward Burke, James X. Corgan, and David Yarborough, Members-at-Large.

The Minutes of the November 1981 Executive Committee Meeting and the Annual Business Meeting were published in the April 1982 issue of the Journal. They were approved as printed by a motion passed unanimously.

The Treasurer's report was published in the April 1982 issue of the Journal. Discussion was postponed until the budget proposal was discussed under New Business.

The Editor, Gus Tomlinson, presented the following report:

"A complete report on 1981 activities, including a list of manuscripts received, published and rejected for the year, was given at the November meeting and published in the JTAS in April, 1982. These data will not be repeated in this report. Instead, this report represents an updating of the November data plus business notes and plans for the coming year.

The January issue 1982 was published on schedule and included five manuscripts in the basic sciences (zoology, botany, medical sciences) plus excerpts from Kirkley Mather's manuscript on the Scopes Trial and its Aftermath. The Collegiate Meetings in the east, middle and west regions of the State, the 1982 Annual TAS Meeting at UTM, updating of Editorial Staff, TAS Officers and Executive Committee were highlighted on the covers and news and events sections. The annual printing of the Statement of Ownership, Management and Circulation of JTAS, which is required by the Post Office for TAS to maintain its 2nd Class postage permit, was also included.

The April 1982 issue is being mailed to subscribers. The issue features the new President of TAS, annual proceedings from the November meeting, new member lists for 1981, abstracts of research reports which were given at the annual meeting and seven scientific manuscripts in the areas of zoology, ecology, medical sciences and chemistry. The 1982 Tennessee Junior Academy of Science Meeting at Glencliff High School in Nashville and the 1982 Annual TAS Meeting at UTM at Martin were included in the news.

The Editor will make brief oral comments on the annual field station report, annual general address summaries, TAS outstanding teacher awards and other matters pertaining to the Journal at the April meeting of the TAS Executive Committee.

In conclusion, fourteen new manuscripts have been received since the November report was made. In the absence of any directive to the contrary, the Editor has been processing manuscripts, including acceptance of ten, as if publication of JTAS will continue. Any change in the status of JTAS which might be precipitated by financial considerations should be announced well in advance so that commitments to contributors can be honored."

The Editor stated that the annual field station report, annual general address summaries, and outstanding teachers awards were not submitted for publication this year by the respective persons involved in those aspects of the Academy activities. The Editor's report was accepted.

The Director of the Visiting Scientists Program, Bernard Benson, presented the following report:

VSP PROGRESS REPORT

	1980-81	1981-82 (To date)
1. Number of visits completed.	28	35
2. Number of visits in progress.		17
3. Number of students participating.	2401	2540
4. Number of teachers and principals participating.	120	73
5. Number of classes contacted.	70	68
6. Number of visits requested.	31	59

Dr. Benson stated that the increase in the number of visits requested was attributable to the mailing of a new roster at the beginning of the school year. No honorarium was given to the scientists due to the lack of funds. Methods to reward scientists who make multiple visits were discussed and will be examined further. (Suggestions: letter to the Dean and/or College President, publication of an Honor Roll in the Journal.) The Director's report was accepted.

The Director of the Collegiate Division, Richard J. Raridon, presented the following report:

"The Collegiate Division met at Austin Peay State University on November 21, 1981, in conjunction with the annual TAS meeting. Eight papers were presented. Two of the students, Terry Lee Puckett from Bryan College, and Ashley A. Rogers from Austin Peay were nominated for AAAS honorary memberships.

Regional CD meetings have been scheduled for Spring 1982 in spite of the lack of funds for travel, postage, and printing. It is hoped that these programs will be able to continue."

As delegate to the Association of Academies of Science and to Section X of AAAS, Richard J. Raridon presented the following report:

"I attended the AAAS Meeting in Washington on Jan. 3-8, 1982. NAAS co-sponsored a two-part symposium on Science and Belief which explored the issues involved with the teaching of creationism as science. The symposium was dedicated to Kirkley Mather. AAAS has tapes of the symposium for sale and will publish the papers later. The papers will not be included in the NAAS Proceedings this year. Several of the speakers stressed that the issue of creationism should concern all scientists, not just biologists and geologists.

At the NAAS Business Meeting, Lee Bolen, Prof. of Physics at Ole Miss., was chosen President-elect, to succeed Frank Starr of Iowa. Delegates from several academies expressed their concern that the new meeting time for AAAS starting in 1983 (Memorial Day weekend) will have an adverse effect on attendance by faculty and students. The 1983 meeting will be in Detroit."

The reports by Dr. Raridon were accepted.

The Director of the Junior Academy, William N. Pafford, presented the following report:

"During 1980-81 total expenditures of the Junior Academy were \$2836.18. This includes the cost of the annual *Handbook and Transactions*.

Arrangements are now being finalized for the spring meeting of the Junior Academy which is scheduled for April 23 at Glencliff High School in Nashville. All members of the Tennessee Academy of Science are invited to attend. Papers will be presented during the times of 9:30-11:30 a.m. and 1:00-3:00 p.m. We are indebted to Bob Bryson, Nashville Metro Science Coordinator, and Tony Beasley, Glencliff High School Science Department, for assisting with arrangements for the meeting.

A total of 50 papers from 12 different schools was received this year. We have invited 16 students to present their papers. They will be reimbursed for a portion of their expenses.

The Junior Academy of Science has received a grant of \$500 from Tennessee Eastman Company this year. Additionally, Commissioner McElrath has stated that the State Department of Education will provide \$750 to be used for funding of the spring meeting. Two other industries have stated earlier that they would contribute, but have not done so as of this date. It is my feeling that they are unlikely to do so during this year.

A copy of my recent letter to Commissioner McElrath was sent to each member of the Executive Committee. During the past year I have expended a great deal of time and effort attempting to raise money to continue the Junior Academy program. It was hoped that either (1) the State Department of Education would decide to fund the program, or (2) a company or an association, such as the Tennessee Manufacturers Association, would assume responsibility for the program. Based on my conversation with Commissioner McElrath, it is highly unlikely that we can expect assistance from that source next year. The Tennessee Manufacturers Association turned down a proposal to fund the program last fall. I believe that the Association would benefit from funding the Junior Academy; the Association President, Mr. Carter H. Witt, was sympathetic to my proposal but their Executive Committee did not approve it.

The \$1250 which has been received this year from external sources will be depleted when expenses for the spring meeting are paid. It seems to me that the State Department has made a decision not to provide necessary funding for the Junior Academy. If at all possible, I will have printed on campus a modified *Handbook and Transactions* this year (xeroxed, loose-leaf arrange-

ment) but the Junior Academy program is essentially over unless a minimum of \$2500 is forthcoming for 1982-83 from some external source."

The Director's report was accepted.

Mr. John Bennett, the representative from the State Department of Education, was not present and did not submit a report. The Secretary reported that two requests to Mr. Bennett for the Distinguished Teacher Awards remained unanswered. The President reported that the State Commissioner of Education had indicated he had no record of what the Academy did for the State Department of Education and that the representatives Roger Bynum and John Bennett were evidently not transmitting information about Academy activities to the Commissioners.

No reports were received from the Standing Committees.

OLD BUSINESS

Dr. Ballal reported his efforts to solicit advertising in the Journal have not yet been successful but will continue.

NEW BUSINESS

1. Dr. Gordon Morris, Program Chairman, reported on arrangements for the 1982 Annual Meeting to be held November 18-19, 1982, at the University of Tennessee at Martin. The Science Association of Tennessee (S.A.T.) will meet in conjunction with the Academy. The Missouri Academy of Science and the Kentucky Academy of Science will be contacted by President S. K. Ballal and invited to attend and present papers. The general session will be on earthquakes. Future meetings will be at Volunteer State in 1983 and UT-Knoxville in 1984.

2. Travel expenses incurred by the members of the Executive Committee for April and November 1982 meetings will not be reimbursed due to the lack of funds.

3. Efforts to obtain funding from the legislature, State Department of Education, industries, and foundations will continue.

4. The following budget, based on the legislature's exclusion of \$15,000 from the State Department of Education, was adopted:

President's Office	\$ 0.00
Secretary's Office	100.00
Editor's Office	1500.00
Treasurer's Office	1000.00
Printing-Mailing Journal	6200.00
Auditor's Fee	30.00
Programs of the Academy	
Collegiate Division	\$ 0.00
Visiting Scientists	100.00
Junior Academy	0.00
	100.00
	\$8930.00

Projected Income

Tennessee Department of Education	\$ 0.00
Membership Dues	5000.00
Journal Subscriptions	1800.00
Checking and Savings Accounts	2400.00
	\$9200.00

Without the grant from the Tennessee Department of Education, the Tennessee Academy of Science does not have adequate funds for its programs. Without additional funding, the activities of the Academy will be curtailed.

5. A motion to publish only two issues of the Journal per year until financial circumstances improve was passed unanimously. Volume 57, Issues 3 (July) and 4 (October) will be combined and published in October. Volume 58, Issues 1 (January) and 2 (April) will be combined and published in April 1983. A motion to present to the membership an amendment to the Constitution, Article VI, Section 1, was approved unanimously. The proposed amendment is "The official publication of the Academy shall be called Journal of the Tennessee Academy of Science." (Delete: and shall be published quarterly in January, April, July, and October.)

6. A motion to endorse the resolution on "Forced Teaching of Creationist Beliefs in Public School Science Education," adopted by the AAAS Council, January 7, 1982, was passed, with one abstention.

7. The meeting was adjourned at 10:15 p.m. C.S.T.

**EXECUTIVE COMMITTEE MEETING-
TENNESSEE ACADEMY OF SCIENCE**

November 18, 1982

The meeting was called to order at 7:10 P.M. by President S. K. Ballal in Room 208 of the University Center at the University of Tennessee-Martin. Present Past-President; Robert L. Wilson, Treasurer; Gus Tomlinson, Journal Editor; William N. Pafford, Director of the Junior Academy; James X. Corgan, Member-at-Large; and David W. Yarborough, Member-at-Large. In the absence of the Secretary, William Pafford recorded the minutes.

The minutes of the April 1981 meeting were approved as written and distributed by mail by the Secretary, Diane R. Nelson.

The Treasurer, Robert L. Wilson, presented his audited report, which appears elsewhere in these proceedings along with the report of the Auditor. Both reports were accepted by a motion passed unanimously.

Gus Tomlinson presented the following Editor's report.

"Since the annual meeting in November of 1981, three issues of JTAS have been published and mailed to subscribers. The July issue was combined with the October issue due to budget restraints. In addition to the regular inclusions such as proceedings, abstracts, news events, etc., 21 regular manuscripts were published. The breakdown by subject area for the 1982 inclusions in JTAS is as follows:

Zoology	9
Botany	2
Chemistry	2
Geology-Geography	1
Medical Sciences	4
Environmental Sciences	1
Mathematics	1
Historical.....	1
	TOTAL 21

Thirty-three new manuscripts were received during the past year. With the reduction in published manuscripts as a consequence of reducing the number of issues, the backlog of unpublished manuscripts is again beginning to accumulate. As of this date, eight manuscripts are in review, thirty-six (many quite old now) are in author revision status and twelve have been accepted but not published. With omission of the January 1983 issue (i.e. combined with April 1983 as approved), the backlog can be expected to increase. This will be expedited by the fact that the April issue will obligatorily include the proceedings, etc., which will occupy much of the total space in the issue.

If it meets with executive committee approval, I plan to review all manuscripts which are currently in author revision status for the purpose of returning each manuscript which has been in this status more than one year without any communication from the author. Any manuscript may then be updated and resubmitted as a new manuscript if the author is really serious about continuing with his paper. This will clear the files of old manuscripts and render the backlog number closer to a real representation of "live" manuscripts that are in *bona fide* author revision status.

The breakdown by subject area for the thirty-three new manuscripts which have been received this year are:

Zoology	16
Botany	7
Chemistry	2
Geology	1
Medical Sciences	1
Environmental Sciences	2
General Sciences	2
Science Education	1
Historical.....	1

It is clear from these data that zoology manuscripts continue to be the most frequent in number with almost half of the new papers being in this area.

Operating costs at the Editor's office averaged \$179/month during the year. This figure is down from \$298, in 1981. The reduction is due to budget limitation and publication of three issues instead of four. Since page cost revenues are sent directly to the Treasurer, it is assumed that his report will include these JTAS related revenues.

In summary, thirty-three new manuscripts were received, twenty-one were published (3 issues) and twelve have been accepted but not published as of this date."

The Editor's report was accepted. In view of the current budget restraints

and a reduction in the number of yearly issues of the Journal from 4 to 2, the number of manuscripts which can be published annually will be greatly reduced. The Editor therefore moved that priority be given to papers submitted by members of TAS for publication in the Journal. The motion was seconded by Bob Wilson and was passed unanimously.

The following report of the Director of the Visiting Scientists Program was presented by Bob Wilson in the absence of Bernie Benson, the Director:

"The following represents a summary of the 1981-82 academic year and a progress report on the 1982-83 academic year.

- 1) A data summary for the 1981-82 academic year is attached. This profile also contains data for the 1980-81 year as a basis for comparison. To date, 14 visits have been requested for the 1982-83 academic year.
- 2) The Academy received funding from the State of Tennessee to support the Visiting Scientist Program for the 1982-83 academic year. This funding was not received in time to complete an update of the Visiting Scientist Roster. Correspondingly, all schools were sent notification early in September that the Visiting Scientist Program would be operational during this school year. Rosters were sent only upon request. It should be noted that in 1980-81 when rosters were not sent at the beginning of the school year requests for visits declined significantly. It is anticipated that the number of visits actually completed during the 1982-83 school year will be no more than the number completed during the 1980-81 school year.
- 3) There has been a gradual decline in the number of visiting scientists participating in the program over the past few years. This is due to a natural attrition rate. It is proposed that an effort be made this year to increase the number of visiting scientists involved in the program. In the roster for the Visiting Scientist Program it states that the visiting scientists are selected by the Director and an advisory committee appointed by the president of the Academy. I would like to ask that the Board of Directors serve as this advisory committee. I am proposing that all active members be solicited during January or February 1983 for the purpose of participating in the Visiting Scientist Program. Applications so received will be reviewed by the Advisory Committee. When soliciting the members of the Academy, I will emphasize the need to identify scientists who have research and interests academic that would be especially appropriate to present to high school students. I feel that such an approach would result in, to some extent, a self-selected process. Yet, I do feel that the advisory committee should maintain the right of approval of all such candidates. Action on this proposal is requested.
- 4) The revised roster would be printed and made ready for mailing during the 1982-83 fiscal year. It was suggested by Mr. John Bennett, science consultant for the State of Tennessee, that the State would provide for the printing of the Visiting Scientist Roster at no expense to the Academy.
- 5) It would greatly facilitate the continued operation of the program if we had some sense of continued support from the State of Tennessee for this program.

SUMMARY DATA

	1980-81	1981-82
1. Number of visits completed	28	44
2. Number of students contacted	2401	3058
3. Number of teacher and principals contacted	120	101
4. Number of classes contacted	70	85
5. Number of visits requested	31	58

The report was accepted with minor editorial changes dealing with historical background.

The following report of the Director of the Collegiate Division, Dick Raridon, was presented by Gordon Morris in the absence of the Director:

"Three regional meetings were held during the Spring of 1982. The Eastern Regional Meeting was held at Lincoln Memorial University on April 17. Twelve papers were presented by students representing 6 schools. The Middle Regional Meeting was held at Tennessee Technological University on April 17, and fifteen papers were presented, with all but one being given by TTU students. The Western Regional Meeting was held May 1 at Christian Brothers College. Fourteen papers were given by students

from four different schools. Thanks are due Regional Sponsors Drs. Robert G. Ziegler, LMU, and James X. Corgan, APSU. Thanks are also due Bro. Dominic Dunn of CBC for hosting the meeting there."

The report was accepted.

The following report was submitted by the Director of the Tennessee Junior Academy of Science, William Pafford:

"The Tennessee Junior Academy of Science annual spring meeting was held on April 23, 1982, at Glenciff High School, Nashville, Tennessee. Fifty papers were submitted by high school students throughout the state in 1982. From this total, a panel of readers selected sixteen for presentation at the spring meeting.

Judges for student presentations were Dr. Jean Nicholson and Ms. Eulalia Vaughn, Nashville Metro Schools, and Dr. Gus Tomlinson, Tennessee State University. The top ranked presentation was by Mr. Patrick Sullivan of Webb School of Knoxville. The title of his presentation was "Immunological Assays of Thrombopoietin."

Funding for the Junior Academy has been provided by the Tennessee State Department of Education in the amount of \$2000. Additional support has been obtained from Tennessee Eastman Company (\$500.) and the Alcoa Foundation (\$300.). The Junior Academy program should be able to operate at about the same level as in years prior to 1981-82. The *Handbook and Transactions* is being duplicated in-house this year, with only the cover being prepared by a commercial printer. Some savings should result with a very slight reduction in quality.

On behalf of the Tennessee Academy of Science, thanks and appreciation were extended to Glenciff High School and to Metro Schools for hosting the annual meeting of the Junior Academy. Special thanks are due Mr. Tony Beasley and Mr. Bob Bryson for handling local arrangements."

The report was accepted.

A report was submitted by S. K. Ballal for Dick Raridon, the delegate to Section X of AAAS and NAAS to the effect that these two organizations have not met since the last executive meeting.

The report was accepted.

The representative from the State Department of Education was not able to attend the meeting.

President Ballal presented standing committee reports from the respective chairpersons as follows:

1. Auditing Committee. The Chairman, H.G. McDowell, sent the following report:

"The auditing committee has examined the records of income and disbursements and find them in order for the period beginning May 13, 1981 and ending June 30, 1982."

The committee's report was accepted.

2. Fellows Committee. The Chairman, Raymond L. Tanner, sent the following nominations for Fellows:

"Listed below are the names of five Academy members the Fellows Committee wishes to nominate to the Executive Committee for Fellowship in the Tennessee Academy of Science:

Dr. David Loebbaka, U.T. Martin
 Dr. Robert R. Marchini, Memphis State University
 Dr. R. Dean Blevins, E.T.S.U.
 Dr. D.M.S. Bhatia, A.P.S.U.
 Mrs. Irma G. Marks, Memphis State University

The Committee met by phone and considered these individually, examined their credentials (and support letters for Blevins and Bhatia), and unanimously approved of their nominations."

A motion was passed to approve the nominees as Fellows of the Academy and to present them to the membership at the annual Business Meeting.

3. Membership Committee. The Chairperson, Lois Beach, sent the following report:

"The membership committee has continued to work toward increasing the membership of the Tennessee Academy of Science. New membership applications and an up-to-date listing of department heads were acquired from Dr. Diane Nelson, Secretary to the Tennessee Academy of Science. These were mailed out during the summer and early fall. The effects of this effort cannot be determined at this time; however, it is estimated that an increase should occur.

The chairman wishes to express her appreciation to the members of this committee: Burton W. Bordine, Ernest W. Blythe, and James L. McPherson."

The committee's report was accepted.

4. Necrology Committee.

The Necrology Committee report, Albert Myers, Chairman, was received with no deaths reported at the time the report was prepared. Since that time, word has been received of two deaths which will be reported to TAS members at the business meeting.

5. Nominating Committee. The Chairman, Paul Wishart, presented the

following proposed slate of officers for next year:

- President-elect-Dr. Robert Lake Wilson, University of Tennessee-Chattanooga
- Secretary-Dr. Diane Nelson, East Tennessee State University
- Treasurer-Dr. R. K. Fletcher-Tennessee Technological University
- Editor-appointed by Executive Committee

The proposed slate of officers was approved unanimously and will be presented to TAS members at the business meeting.

6. Research Committee. The Chairman, Prem Kahlon, sent the following report:

"The Research Committee submitted a proposal to AAAS requesting \$500 for secondary school students. A check of \$500 was sent to the Academy by AAAS on July 6, 1982.

The Research Committee advertised the availability of funds and requested that application be sent by November 15, 1982. The announcement was done in the following manner:

- a. Announcements were sent to District Coordinators of Science Fairs:—Chattanooga, Cookeville, Jackson, Knoxville, Memphis, and Nashville.
- b. Availability of funds was advertised in the Journal of the Tennessee Academy—October, 1982 issue.
- c. Notices were sent to the following newspapers:
The Banner
The Tennessean
Chattanooga Times
Knoxville News Sentinel
Memphis Commercial Appeal, Jackson Sun and Memphis Press Scimitar

Distribution of funds: A total of five applications were received requesting \$516.28. The awards were recommended as follow:

Name	H/S (Hometown)	Request	Award
a. Jenette Cooper Route 4, Box 416 Crossville, TN 38555	Cumberland County High School	\$220.00	\$204.00
b. Carrie Demers The Farm High School 156 Drakes Lane Summertown, TN 38483	The Farm High School	75.00	75.00
c. Lisa T. Chenon The Farm High School 156 Drakes Lane Summertown, TN 38483	The Farm High School	125.00	125.00
d. Susie Hathcox 74 Reynolds Jackson, TN 38301		53.03	53.00
e. Megan McCoy Rt. 2, Box 148 Scotts Hill, TN 38374		43.00	43.00
TOTAL		\$516.28	\$500.00

Experience over the past few years has shown that the number of applications has been disappointingly small in spite of efforts to advertise in many different ways."

The committee's report was accepted.

7. Resolutions Committee. The report is to be submitted at the Business Meeting.

8. Local Arrangements Committee.

Gordon Morris, Program Chairman, presented a report on plans for the annual meeting. A relatively large number of papers have been received. U.T. Martin has assisted with funding to obtain well-known speakers and panelists. Arrangements have been made for parking in lots 2 and 5.

The report was accepted and thanks were extended to the Program Chairman for his excellent planning and organization.

OLD BUSINESS

S. K. Ballal reported on contacts with possible advertisers for the Journal. He will continue these contacts and will quote a price of \$500. per page. A motion to that effect was passed by the Committee.

NEW BUSINESS

Paul Wishart moved that the President of TAS be empowered to select a liaison person at appropriate institutions in Tennessee to promote TAS activities. The motion was seconded and passed unanimously.

A letter has been received by President Ballal from Dr. Sam Ingram, President, MTSU, inviting TAS to meet there in 1985. The 1983 meeting will be at Volunteer State Community College in Gallatin, and the 1984 meeting will be at U.T.-Knoxville. The Committee voted unanimously to accept Dr. Ingram's offer.

The spring meeting of the Executive Committee will be on April 22 in the Nashville area.

The Committee adjourned at 10:00 P.M., Central Standard Time.

**THE NINETY-SECOND MEETING OF THE
TENNESSEE ACADEMY OF SCIENCE
NOVEMBER 19-20, 1982
The University of Tennessee at Martin**

The annual meeting of the Tennessee Academy of Science, Inc., was held November 19-20, 1982, at the University of Tennessee at Martin. Dr. Gordon Morris was Chairman of the Local Arrangements Committee and served also as Program Chairman.

The General Session was held in the University Center Ballroom on November 19 at 10:00 A.M., Dr. Gordon Morris presiding. The Academy was welcomed by Dr. Charles E. Smith, Chancellor of the University of Tennessee at Martin. The theme of the session was "Earthquakes in Western Tennessee and the Mississippi River Valley." Speakers were Francis McKeown, United States Geologic Survey, Denver, Colorado; Richard G. Stearns, Vanderbilt University; and Arch C. Johnson, Tennessee Earthquake Information Center, Memphis. Section meetings were held on Friday afternoon in the University Center. The annual Business Meeting was held in Room 206 of the Student Center at 5:00 P.M.

The Annual Banquet was held in the University Center Ballroom at 7:00 P.M., President S. K. Ballal presiding. The speaker was Dr. Winifred L. Smith, Biology Department, the University of Tennessee at Martin. His topic was "Reelfoot Lake: Past, Present, Future."

Collegiate Division papers were given on Friday along with section papers. On Saturday, November 20, however, the Science Association of Tennessee met at the University of Tennessee at Martin. All in attendance on Friday were encouraged to attend the Saturday sessions.

**ANNUAL BUSINESS MEETING
November 1982**

The Annual Business Meeting of the Tennessee Academy of Science, Inc., was called to order by President S. K. Ballal at 5:00 P.M. in Room 206, University Center, the University of Tennessee at Martin on November 19, 1982.

The reports of the Secretary, Treasurer, Editor, and Directors of the three educational programs were similar to those presented the previous evening at the Executive Committee Meeting. All reports were approved by passed motions and will be recorded in the Minutes.

Reports of the standing committees were presented the previous evening at the Executive Committee Meeting. All reports were approved by passed motions and will be recorded in the Minutes.

The names of the Fellows nominees were presented to the membership by the Executive Committee. A motion was passed that the nominees be elected Fellows of the Academy.

The Chairman of the Necrology Committee, Albert L. Myers, presented the names of members of the Academy who had passed away:

Dr. Gordon Pennebaker, formerly of Tennessee Technological University.

Dr. B.C. Moneymaker, formerly a Geologist with TVA

Dr. Myers asked the audience to stand in tribute. A motion was passed to accept the report.

Dr. Paul Wishart presented the report of the Nominating Committee. The President asked for further nominations from the floor; there were none. A motion was passed to accept the nominees, and the Secretary was instructed to cast one vote which would represent the unanimous election of Gordon Morris as President, Robert L. Wilson as President-Elect, Diane R. Nelson as Secretary, and R. K. Fletcher as Treasurer.

The following Resolution Committee report was received and was accepted by the committee:

RESOLUTION OF APPRECIATION

"WHEREAS, the Tennessee Academy of Sciences, including the Collegiate Division, is enjoying a most pleasant, profitable, and well-organized series of meetings at the University of Tennessee at Martin, and

WHEREAS, the success of these meetings has resulted mainly from the efforts of the officers of the Academy; the Chairpersons of the respective sections; the Local Arrangements Committee representing the University of Tennessee at Martin, composed of Betsy Berry, Ernest Blythe, Charles Graham, David Pitts, J. M. Wakim, Dr. Maurice Field, and Dr. Gordon Morris, Chairman; the Program Chairman, Dr. Gordon Morris; from the cooperation of the Science Association of Tennessee, Dr. Maurice Field, Coordinator, in scheduling its meetings to follow those of the Academy; from the recognition given the meetings by the press, television, and radio stations; and from the general hospitality of the host institution, the University of Tennessee at Martin and its Chancellor, Dr. Charles E. Smith,

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

NEW BUSINESS

Future meetings will be held at Volunteer State, 1983; UT-Knoxville, 1984; and MTSU, 1985.

The meeting was adjourned at 5:30 P.M. C.S.T.

TENNESSEE ACADEMY OF SCIENCE
OPERATIONS ACCOUNT
TREASURER'S REPORT
May 13, 1981 through June 30, 1982

Cash Transferred from Pioneer Bank	\$ 7,093.15	
Cash Receipts from:		
Membership Dues	\$6,312.00	
Journal Subscriptions	1,990.00	
Registration Fees & Exhibitors.....	800.00	
AAS.....	161.43	
Transferred in from Programs	3,934.50	
Page Charges	1,080.00	
Contributions	2,105.00	
Transferred in from Savings Account	5,451.63	
Interest on checking account.....	406.05	
Miscellaneous-refunds.....	49.20	22,289.81
Total Cash Available		\$29,382.96

Cash Disbursements:

Editor's Office	\$ 3,696.50	
Secretary's Office.....	486.42	
Treasurer's Office.....	2,286.49	
Journal (Printing and Mailing).....	15,341.43	
Annual Meeting Expense.....	2,901.83	
AAS.....	439.00	
Programs:		
Visiting Scientist	\$1,155.99	
Junior Academy	1,702.53	
Collegiate Division	-0-	
Total Programs	2,858.52	28,010.19
Balance per books, June 30, 1982		\$1,372.77
Add: Outstanding Checks, June 30, 1982.....		4,056.58
Cash in Commerce Union Bank, June 30, 1982		<u>\$5,429.35</u>

REPORT OF THE AUDITOR

Executive Committee
Tennessee Academy of Science

I have examined the statement of Cash Receipts and Disbursements, Operations Account, for the period May 13, 1981 to June 30, 1982. My examination was limited to the Commerce Union Bank account transactions and included such test of the accounting records and such other procedures as I considered necessary in the circumstances.

In my opinion the above mentioned statement presents fairly the cash receipts and disbursements, Operations Account, Commerce Union Bank, Chattanooga, for the period May 13, 1981 to June 30, 1982.

Sincerely,

Rayford J. McLaurin
Accountant
Chattanooga, Tennessee

1982-83 Contributors to TAS

THE FOLLOWING INDIVIDUALS MADE UNSELFISH CONTRIBUTIONS TO THE ACADEMY DURING THE PAST YEAR.
MONETARY GIFTS RANGED FROM \$2 TO \$100 FOR A TOTAL OF \$1068.

Dr. Jerry Baskin
Conrad W. Bates
Dr. Lois Beach
Dr. Edmund W. Benz
Ronald R. Bingham
Wm. Barry Brawley
Leslie Dodd Brown
Dr. Frank J. Bulow
Dr. Calvin L. Calhoun
Dr. David Bennett Camp
Dr. James D. Caponetti
Dr. Donald Paul Chance
Roger Joseph Cloutier
T. P. Copeland
Robert James Cowie
Dr. Ralph W. Dimmick
Dr. Mary C. Dunn
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