

PROCEEDINGS OF THE TENNESSEE ACADEMY OF SCIENCE 2009

TERESA L. FULCHER, SECRETARY TAS

*Pellissippi State Community College, Knoxville, Tennessee*TENNESSEE ACADEMY OF SCIENCE
EXECUTIVE COMMITTEE MEETING
17 APRIL 2009

President M. Gore Ervin called the meeting of the Tennessee Academy of Science (TAS) Executive Committee to order at 6:42 PM CDT in the Massey Board Room on the campus of Belmont University, Nashville, Tennessee. Attendees were Treasurer Steven Murphree, Secretary Teresa Fulcher, Managing Editor Stephen Stedman, Assistant Editor Christy Carter, Junior Academy of Science Director Jack Rhoton, Collegiate Division Director Fred Matthews, AAAS Section Y Representative Michael Redding, Education Committee Chairperson Kim Cleary Sadler, Publicity and Research Committee Chairperson Mandy Carter-Lowe, and Members-at-Large William Andrews of Oak Ridge National Laboratories and Gilbert Pitts of Austin Peay State University.

President Ervin called for introductions of Executive Committee members and welcomed new Member-at-Large Gilbert Pitts. President Ervin extended formal appreciation to Steve Murphree and Belmont University for hosting the spring TAS Executive Committee meeting. President Ervin reminded members of the Executive Committee that the minutes from the November meeting had been approved electronically 24 February 2009.

REPORTS FROM OFFICERS
AND DIRECTORS

Past President—Cindi Smith-Walters reported that Jeff Boles of Tennessee Technological University has agreed to accept the position of President-Elect for 2010 and will serve as President in 2011. He is active in bringing students to TAS meetings, has a record of excellent prior service through his work on the Executive Committee, and he will be President-Elect when the annual meeting of the Academy is hosted by Tennessee Technological University in 2010.

Treasurer—Steven Murphree discussed the treasurer's report showing a total income of \$27,976.95 from 07/01/2008 through 04/17/2009. Expenses during that same period totaled \$24,961.28. Treasurer Murphree reported that the Vanguard STAR Fund dropped during the last quarter, and as of 04/14/2009 was valued at \$135,116.26. Total Academy holdings as of 04/16/09 were \$152,286.97. Murphree reported that an upcoming expense included Volume 84:1-2 of *JTAS*. Murphree also reminded the Executive Committee that membership renewals in 2009 would be based on amounts approved at the 22 November 2008 annual business meeting of the

Academy and that the membership renewal form on the TAS website needed revision. Treasurer Murphree continues to investigate bonding. Murphree has been notified that due to changes in Internal Revenue Service (IRS) requirements for non-profit organizations, the Academy will not be required to file IRS Form 990. Michael Redding commented that the Academy can expect additional costs from the 2009 annual meeting, as there will be charges for using rooms at The University of Tennessee Conference Center. Fred Matthews made a motion to accept the Treasurer's report. Stephen Stedman seconded the motion. The motion carried.

Managing Editor—Stephen Stedman reported that since November 2008, three manuscripts had been submitted via the online manuscript submission and review program for the *Journal of the Tennessee Academy of Science (JTAS)*. During the period from March 2008 to November 2008, nine manuscripts were submitted. The current disposition of these 12 manuscripts is itemized below:

- 2 accepted and published in *JTAS* 83:3-4;
- 1 accepted and ready for inclusion in *JTAS* 84:3;
- 2 accepted with revisions needed, resubmitted with revisions, and under review by section editor;
- 3 under review;
- 4 rejected but encouraged to be resubmitted; one so far resubmitted and under review by section editor.

Since November 2008, one issue of *JTAS* (83:3-4) has been published. The issue for January-April 2009 (84:1-2) is about to be published; it is a long issue with meeting reports and abstracts. The second issue for 2009 (*JTAS* 84:3) will be a short issue containing several research articles; the last issue for 2009 (*JTAS* 84:4) will contain the collegiate abstracts and one or more research articles.

Managing Editor Stedman reported that the new Assistant Editor, Dr. Christy T. Carter, has made considerable contributions to the *Journal*, for which the managing editor is greatly appreciative. Especially important has been her work with the abstracts of the fall meetings and the collegiate meetings. The online manuscript submission and review program continues to be adjusted in minor ways, but it is performing its task reasonably well. The editors recommend continuation of the program during 2009. Steven Murphree moved to accept the managing editor's report. Cindi Smith-Walters seconded the motion. The motion carried.

Collegiate Division—Director Fred Matthews reported that the three Collegiate Division meetings had occurred in April 2009. The Western Division meeting was held at Rhodes College on 4 April 2009 with 29 paper presentations and six posters. Eight schools were represented at this meeting, which

was coordinated by Dr. David Kessler. The Eastern Division meeting was hosted at Lincoln Memorial University on 4 April 2009, and coordinated by Dr. Eugene DeSilva. Six schools were represented, and ten papers were presented. The Middle Division meeting was held at Belmont University on 18 April 2009 under the direction of Dr. Nick Ragsdale. Eight schools were represented and 52 papers were presented. Director Matthews thanked the members of the Executive Committee and the Academy for supporting the Collegiate Division meetings. The Academy provides a minimum of \$300, up to a maximum of \$600 (based on the number of abstracts submitted within one month of the meeting) to each Division to offset expenses of the meeting. The Academy also provides \$250 to each Division to be used for awards. Assistant Editor Christy Carter reported that abstracts and award winners from the Collegiate Division meetings are being reported.

Electronic Communications—Director Jim Howard was not in attendance but submitted a written inquiry as to the names of current officers and committee chairs for inclusion on the TAS website. Director Howard also reported that information regarding Collegiate Division meetings had been updated. Steven Murphree reported that he would be sending Director Howard updated membership forms for inclusion on the website. Kim Cleary Sadler asked that the Executive Committee reconsider allowing links to the TAS website. After discussion, Michael Redding made a motion that the Academy provide links only to professional organizations or to the university or college websites of institutional members. Links will not be provided for specific individuals or departments. Kim Cleary Sadler seconded the motion, and the motion carried. President Ervin agreed to convey this information to Electronic Communications Director Jim Howard. The Executive Committee discussed the importance and expectations of electronic communication in today's digital age. The Executive Committee agreed that it would be helpful if the TAS domain name (currently www.mtsu.edu/~tnacadsc/) was more intuitive. William Andrews volunteered to investigate available domain names and notify Executive Committee members by e-mail of options. Teresa Fulcher made a motion to authorize the purchase of a domain name and Christy Carter seconded the motion. The motion carried. Michael Redding noted that it would be valuable to look at websites of other State science academies. He recommended looking at the New York Academy of Science website. It was suggested that the Education Committee and the Research and Publicity Committee solicit input from members on the type of information that should be included on the TAS website.

Junior Academy of Science—Director Jack Rhoton submitted the following report:

"The 2009 spring meeting of the Tennessee Junior Academy of Science (TJAS) met Friday, April 19 on the campus of Belmont University. A total of 24 students were invited to present their research papers. This year, 116 students were involved in TJAS research from throughout the state. The top TJAS research papers will be published in the 2009 issue of the *Handbook and Proceedings of the Tennessee Junior Academy of Science*. The winners of the top two papers will receive \$500 each, and the six other top winners will each receive \$200.

"During the April meeting, a plaque and small honorarium (\$100) were presented to an outstanding secondary science teacher from each region of the state: East, Middle, and West. Recipients of this year's awards are: Kelley F. Schultz (High

School Physics Teacher), David Crockett High School, Jonesborough; Anna E. Bryant (High School Chemistry, Physics, and Physical Science Teacher), Stone Memorial High School, Crossville; and Mary C. Saxon (High School Chemistry and Physical Science Teacher), Clarksville Academy, Clarksville. These TAS awards recognize teachers for their outstanding contribution to science teaching and for stimulating and inspiring students to an active interest in science.

"In addition, TAS supports four \$100 awards to science fair winners in the Upper East Tennessee Science Fair. This year's science fair is scheduled for Thursday, April 30, on the campus of ETSU. Two recipients will be recognized in the biological sciences category and two in the physical science category."

Kim Cleary Sadler commented on the value of the Junior Academy and suggested that Middle Tennessee State video production students could film and produce a story on the Junior Academy that could be sent to high schools to encourage participation in student research.

Visiting Scientist Program—Director Michael Daley was not in attendance but submitted a written report stating that the number of visits for 2008 had totaled 25, an improvement over the previous year. Director Daley attributes that improvement to advertising and brochure distribution by the Tennessee Science Teachers Association (TSTA). Director Daley reported that he intends to utilize this publicity resource again. Director Daley suggested in his report that regional coordinators should be identified and established for the Visiting Scientist Program. Regional coordinators would facilitate communication between the scientists and the requesting classroom teachers.

REPORTS FROM COMMITTEES

Education Committee—Chairperson Kim Cleary Sadler reported on multiple initiatives and changes in science education in Tennessee: Teach Tennessee, American Diploma Project, new math and science standards for the 2013 high school graduating class, and available STEM (Science, Technology, Engineering and Mathematics) conferences. Chairperson Cleary Sadler suggested that significant potential exists for improved TAS visibility, possible grant funding and establishing connections with county science instructional supervisors through a partnership with the Visiting Scientists program. Cleary Sadler also reported that she would like to see the membership of the Education Committee increased with representatives from each section of the State, community colleges and private colleges.

Fellows Committee—No nominations were submitted from the Fellows Committee. Secretary Fulcher had sent Executive Committee members a listing of TAS Fellows. It was noted that the list was not current. Secretary Fulcher agreed to update and redistribute the list prior to the November meeting.

Financial Oversight—Dr. Thomas C. Wooten, Associate professor of Accounting at Belmont University, will continue to conduct an unofficial audit of TAS finances.

Local Arrangements Committee—Dr. Al Hazari was not in attendance.

Long-range Strategic Planning Committee—Chairperson Cindi Smith-Walters reported on the locations for future TAS meeting as follows:

2009—The University of Tennessee, Knoxville	(East Tennessee)
2010—Tennessee Technological University	(Middle Tennessee)
2011—The University of Tennessee Space Institute	(Middle Tennessee)

Mandy Carter-Lowe agreed to visit The University of Tennessee Space Institute and report on facilities at the November 2009 Executive Committee meeting. The 2012 meeting should be held in West Tennessee. The location is not confirmed, but Union University in Jackson has expressed interest. Alternate locations are Rhodes College or The University of Memphis. Committee Chairperson Smith-Walters reminded the Executive Committee that Fisk University has graciously offered to host the meeting at a future date. Smith-Walters also asked the Executive Committee to consider and gauge interest in a possible joint Tennessee-Kentucky Academy of Science meeting in the near future.

Membership Committee—Chairperson Karen Kendall-Fite was not in attendance.

Publicity and Research Committee—Chairperson Mandy Carter-Lowe reported that certificates had been distributed to student winners from the November meeting. She also requested that any photos from the November meeting be copied to her for archival purposes.

AAAS Section Y Representative—Michael Redding, representing the TAS, attended the annual Meeting of the American Association for the Advancement of Science (AAAS) in Chicago on February 12–15, 2009, and submitted the following report.

“The National Association of Academies of Science Assembly of Delegates was held on February 13. Other than the pro forma activity reports, the principle item of discussion was the creation of a paid position for the Director of the American Junior Academy of Science. Currently this position is held on a volunteer basis; however, the responsibilities of the job have grown beyond what is reasonable to expect from a volunteer, especially with respect to the task of raising funds to defray the expenses of the Junior Academy. All in attendance supported this change, and Lee Brogie, a long-time supporter of the AJAS and a high school teacher from Nebraska, was elected as the new Director to serve a three-year term. Peter Faletra assumes the Presidency of NAAS for 2009. Peggy Connolly, a long-time and active member of the NAAS was elected as President-Elect.

“The Section on General Interest in Science and Engineering (Section Y) held its annual business meeting on February 14. Barbara Gastel, Chair-Elect of the section, chaired the meeting. Section Secretary JoAnn Valenti solicited suggestions for symposia to be sponsored by the Section at the 2010 AAAS Meeting. A list of “hot topics” was circulated and diverse discussion ensued.

“State academies of science again were asked to promote efforts to increase affiliation with Section Y by AAAS members who do not already specify a primary affiliation with a particular section. Affiliations may be designated during annual renewal or at any time via the member services options on the AAAS website.

“Kate Sullivan was identified as the 2009 Chair-Elect.”

OLD BUSINESS

President Ervin reported that the position of Meeting Coordinator remains unfilled, but he is in conversation with a potential candidate. Michael Redding agreed to assist the new Meeting Coordinator and to keep the printing functions in Cookeville this year. The next official function for the Meeting Coordinator is the call for papers in June. The primary workload includes corresponding with section chairs regarding the meeting, and compiling and printing the program.

Member-at-Large William Andrews inquired as to interest in a tour of Oak Ridge National Laboratories in conjunction with the 2009 November annual meeting at The University of Tennessee, Knoxville. Andrews agreed to investigate the possibility of an ORNL bus and will communicate with Michael Gibson or Michael Redding regarding details.

NEW BUSINESS

Assistant Editor Christy Carter discussed with the Executive Committee the draft of a policy stating that no duplicate titles or abstracts of previous presentations would be printed in the *JTAS*. Assistant Editor Carter had noted duplicates of abstracts submitted from both Collegiate Division and Academy annual meetings, and reported that currently there is no process for tracking abstracts other than editor memory. She asked the Executive Committee to consider such issues as whether students should submit identical works at multiple venues, and whether oral and poster presentations, or Collegiate and Academy annual meeting presentations are viewed similarly or differently. She also pointed out that duplicate publication of abstracts could be confusing to researchers reading the *Journal*, and potentially damaging to the *Journal's* reputation. Collegiate Director Fred Matthews expressed concerns about the perception of the Collegiate Division as preparatory for the annual meeting, and doesn't support the practice of students presenting similar work at both. Treasurer Murphree emphasized the importance of allowing students with quality research the opportunity to present, and suggested that students be given permission to present at both the spring Collegiate and fall annual meeting, but their duplicate presentation not be recorded in the *Journal*. Following considerable discussion, William Andrews made a motion to add a check box to the abstract submission form for both the Collegiate Division and the annual meeting asking the author to verify whether the abstract has been previously submitted for publication, with a notation that duplicate abstracts from Collegiate and annual meeting will not be published in the *Journal*. Abstracts from the original presentation will be published. Only the title will be published from duplicates, with a statement that the full abstract has been published in a previous issue of the *Journal*. Kim Cleary Sadler seconded the motion. The motion carried.

Managing Editor Stephen Stedman brought to the attention of the Executive Committee inconsistencies in the language of the TAS Constitution and the established membership of the Executive Committee. President Ervin stated that individuals in active Academy positions are voting members of the Executive Committee. Secretary Fulcher agreed to investigate minutes from past meetings to identify any changes related to the Academy Constitution and By-laws that have been approved since 1993. President Ervin and Secretary Fulcher will contact

individuals to serve as a subcommittee to investigate possible revisions to the TAS Constitution.

President Ervin announced that the next meeting of the Executive Committee would be held Thursday 29 October 2009 prior to the 30 October 2009 annual meeting at The University of Tennessee. Member-at-Large Gilbert Pitts made a motion to adjourn. Cindi Smith-Walters seconded the motion, and President Ervin adjourned the meeting at 9:30 PM CDT.

Respectfully Submitted,
Teresa Fulcher
Secretary, TAS
Pellissippi State Community College

TENNESSEE ACADEMY OF SCIENCE EXECUTIVE COMMITTEE MEETING 29 OCTOBER 2009

President M. Gore Ervin called the meeting of the Tennessee Academy of Science (TAS) Executive Committee to order at 7:25 PM EDT in the Parkview Room of the Four Points Sheraton Knoxville Cumberland House Hotel. Attendees were President-Elect Michael Gibson, Treasurer Steven Murphree, Secretary Teresa Fulcher, Managing Editor Stephen Stedman, Assistant Editor Christy Cater, Junior Academy Director Jack Rhoton, Education Committee Chairperson Kim Cleary Sadler, Local Arrangements Committee Chairperson Al Hazari, member-at-large Andy Andrews, and guest Jeff Boles. President Ervin extended formal appreciation to Al Hazari and The University of Tennessee College of Arts and Sciences for hosting the Executive Committee and the 2009 TAS Annual Meeting. President Ervin reminded members of the Executive Committee that the minutes of the April meeting had been sent by e-mail. Junior Academy Director Jack Rhoton made the motion to approve the minutes from the April meeting. Michael Gibson seconded the motion and the motion carried. President Ervin introduced Dr. Jeff Boles from Tennessee Technological University.

REPORTS FROM OFFICERS AND DIRECTORS

Past President—Cindi Smith-Walters was not in attendance.

President-Elect and 2009 Program Chair—Michael Gibson reported on attendance for the 2009 meeting. The total number of presentations scheduled for the fall meeting is 104 (61 oral and 43 poster), which is typical for a meeting held in either the eastern or western region of the State. The 2005 meeting in Memphis had 101 presentations. The three most recent meetings in the middle region had presentation totals of 126 (Austin Peay, 2006), 162 (Volunteer State, 2007) and 148 (joint meeting with Tennessee Science Teachers Association in Nashville, 2008). Local Arrangements Chairperson Al Hazari added that a hospitality table will be set up with refreshments. Meeting attendees will be provided with information folders with the program addendum. Arrangements have been made for University guests to have web access while on campus and to park in the University Center garage for \$5.00 with a validation sticker. Dr. Hazari reported that University Center personnel have been very helpful in getting projectors, microphones, and other equipment ready for the meeting.

The posters will be set up in the morning in Rooms 223-224, and graduate students from the College of Arts and Sciences will assist with that set-up. At 9:00 AM, Dr. Hazari will introduce Chancellor Dr. Jimmy G. Cheek, and Michael Gibson will introduce the speaker, Dr. Henri D. Grissino-Mayer.

Treasurer—Steven Murphree indicated that the 2009 dues increase transition has gone relatively smoothly and reported on efforts to develop an e-mail distribution list of all Academy members using Microsoft Outlook. Secretary Teresa Fulcher volunteered to assist Treasurer Murphree in this effort. Treasurer Murphree distributed the report from the informal financial review conducted by the Belmont Principles of Auditing Class under the direction of Dr. Thomas C. Wooten. Recommendations are as follows:

1. "We noticed that occasionally the support for expenditures is limited to e-mail documentation. We recommend that, when possible, expenditures be supported by invoices. If invoices are not available, then a member of the Executive Committee other than the treasurer should approve the expenditure before payment.
2. "We noticed inconsistencies in reimbursement of travel and lodging expenses. We recommend that the Executive Committee develop and adopt policies regarding when and how much will be reimbursed for mileage, hotel, meals, etc. We recommend that the travel expenses be approved by someone other than the person submitting the reimbursement.
3. "We had several occasions where it was difficult to find the supporting documentation for certain expenditures. We recommend that the treasurer maintain a folder for each expense line item on the profit & loss statement. This will allow for easier verification and recall of the supporting documents for expenditures."

Treasurer Murphree encouraged members of the Executive Committee to submit invoices with additional documentation for reimbursements if possible. Executive Committee members were reminded of the policy for travel reimbursement adopted in 1995 stating that Executive Committee members were encouraged to seek outside funding for travel, but expenses could be reimbursed at the current State reimbursement rate. Treasurer Murphree discussed the treasurer's report, which shows overall income for 2008–2009 of \$28,411.95. Expenses for the same period were \$33,908.94 resulting in a deficit of \$5,496.99. Treasurer Murphree indicated that much of that deficit results from reduced income from Vanguard dividend payments and costs of the *Journal* publication. Academy total assets are approximately \$149,000.00. The full treasurer's report follows.

After a brief discussion on cost-saving measures related to publication of the *Journal*, the consensus was to continue with the traditional and current format. Executive Committee members remarked on the possibility of posting 2 or 3 selected articles from the *Journal* on the Academy website. It was noted that this action had been approved previously. The potential for selling advertisements in the *Journal* and/or hosting vendors at the annual meeting was discussed with no action taken. The current library subscription rate is \$50.00 per year. President-Elect Michael Gibson made a motion to accept the Treasurer's report. Member-at-large Andy Andrews seconded the motion and the motion carried.

TAS Income/Expense Report: 7/1/2008 through 6/30/2009

CASH BALANCE— JULY 1, 2008			16,989.53
Category Description	7/1/2008— 12/31/ 2008	1/1/2009—6/ 30/2009	OVERALL TOTAL
INCOME			
Annual Meeting Income	1,740.00	0.00	1,740.00
Dividend Income	10,188.57	0.00	10,188.57
Gift Received	60.00	15.00	75.00
Library Journal Subscriptions	1,110.00	360.00	1,470.00
Meeting Registration	3,870.00	75.00	3,945.00
Membership Dues	11,690.00	1,380.00	13,070.00
Other Income	0.00	165.83	165.83
Page Charge For Journal	1,890.00	450.00	2,340.00
Vanguard Dividend Payment	2,196.69	3,358.06	5,554.75
TOTAL INCOME	32,745.26	5,803.89	38,549.15
TOTAL CASH AVAILABLE			55,538.68
EXPENSES			
Annual Meeting	3,563.57	2,752.64	6,316.21
Bank Charge	6.00	6.00	12.00
Collegiate Division	600.00	1,357.99	1,957.99
Dues and Fees	167.90	20.00	187.90
Executive Comm. Meetings	784.02	490.45	1,274.47
Journal	150.00	495.00	645.00
Journal printing	7,732.70	3,815.27	11,547.97
Junior Academy of Science	2,881.26	1,764.38	4,645.64
Misc. Expenses	328.84	400.00	728.84
Printing and Reproduction	77.48	0.00	77.48
Renewal Fee	360.00	0.00	360.00
Science Fair	0.00	790.00	790.00
TJAS Award	500.00	2,600.00	3,100.00
TJAS Research Grant	300.00	0.00	300.00
Exec. Comm. Travel Expenses	633.68	940.40	1,574.08
Treasurer	35.09	0.00	35.09
Unrealized Loss on Star Fund	50,631.97	8,456.51	59,088.48
Visiting Scientist Program	356.27	0.00	356.27
TOTAL EXPENSES	69,108.78	23,888.64	92,997.42
CASH BALANCE— JUNE 30, 2009			6,755.85
TJAS TRUST FUND (Vanguard Star Fund)—JUNE 30, 2009			143,102.97
TOTAL VALUE OF HOLDINGS— JUNE 30, 2009			149,858.97

TAS Income/Expense Report: 7/1/2009 through 10/28/2009

CASH BALANCE— JULY 1, 2009			6,755.85
Category Description	7/1/2009— 10/28/ 2009		OVERALL TOTAL
INCOME			
Gale Group Dividend Income	105.19		105.19
Gift Received	50.00		50.00
Library Journal Subscriptions	60.00		60.00
Meeting Lunch	384.00		384.00
Meeting Registration	960.00		960.00
Membership Dues	7,480.00		7,480.00
Page Charge For Journal	1,260.00		1,260.00
Vanguard Dividend Payment	1,681.91		1,681.91
TOTAL INCOME	11,981.10		11,981.10
TOTAL CASH AVAILABLE			18,736.95
EXPENSES			
Annual Meeting	1,805.98		1,805.98
Bank Charge	4.00		4.00
Collegiate Division	300.00		300.00
Dues and Fees	160.70		160.70
Journal	100.00		100.00
Journal printing	3,703.16		3,703.16
Junior Academy of Science	1,897.50		1,897.50
Misc. Expenses	50.00		50.00
Renewal Fee	185.00		185.00
Science Fair	400.00		400.00
TJAS Award	500.00		500.00
Treasurer	10.96		10.96
TOTAL EXPENSES	9,117.30		9,117.30
CASH BALANCE— OCTOBER 28, 2009			9,619.65
TJAS TRUST FUND— OCT. 28, 2009			159,734.11
TOTAL VALUE OF HOLDINGS—OCT. 28, 2009			169,353.76

Managing Editor—Stephen Stedman submitted the following report: “Since late April 2009, five manuscripts have been submitted via the online manuscript submission and review program; prior to that, during the period from January 2009 to April 2009, four manuscripts were submitted—three via the online manuscript submission and review program and one via the manuscript processing efforts of the previous managing editor. The disposition of these nine manuscripts as of 26 October 2009 is itemized below:

- GE-07-008 (Biology) published in *JTAS* 84-3
- SS-09-001 (Zoology) accepted pending major revision
- SS-09-003 (Zoology) in first round of review (262 days)
- SS-09-004 (Math) rejected
- SS-09-005 (Chemistry) in first round of review (151 days)

- SS-09-007 (Zoology) in first round of review (118 days)
- SS-09-008 (Physics) accepted pending major revision; revised manuscripts submitted and being reviewed
- SS-09-009 (Math) in first round of review (69 days) [new version of SS-09-004]
- SS-09-010 (Zoology) in first round of review (48 days) but reviewers yet to be assigned

“The disposition of eight manuscripts processed during 2008 follows, to provide comparison with the 2009 submissions (as of 26 October 2009):

- SS-08-002 (Zoology) about to be published in *JTAS* 84-4
- SS-08-003 (Zoology) published in 83-3/4
- SS-08-004 (Medicine) published in 83-3/4
- SS-08-005 (Zoology) to be published in *JTAS* 85-2
- SS-08-007 (Zoology) about to be published in *JTAS* 84-4
- SS-08-008 (Zoology) published in *JTAS* 84-3
- SS-08-009 (Medicine) published in *JTAS* 84-3
- SS-08-010 (Medicine) rejected

“Since April 2009, two issues of *JTAS* (84-1/2 and 84-3) have been published. The issue of *JTAS* for October 2009 (84-4) should be published and mailed during November 2009; it is a short issue that includes two research articles.

“During 2010 four issues (85-1, 85-2, 85-3, 85-4) of *JTAS* are planned. *JTAS* 85-1 will be a long issue that includes minutes of the 2009 meetings of the Executive Committee and the minutes of the 2009 annual meeting, as well as abstracts of papers and posters presented at the annual meeting. *JTAS* 85-2 will be a short issue containing several research articles, one of which has already been accepted and is ready for publication. *JTAS* 85-3 will be a longish issue containing the 2010 collegiate abstracts and perhaps one or more research articles. *JTAS* 85-4 will be a short issue with two or more research articles. There is some prospect that at least one of these issues will be mailed in the month that is on the cover of that issue.

“The original online manuscript submission and review program (AllenTrack Essentials) will be upgraded to a newer program (PeerTrack Essentials) effective January 2010. It is expected that the newer program will not only enable faster and more accurate processing of manuscript for review, but it will also provide cost savings to the Academy as long as the number of submitted manuscript remains in the vicinity of 8–10 per year.

“ProQuest, a student research database products company, has requested to make PDFs of articles published in *JTAS* available via its services. A contract was provided to the managing editor; this contract will be reviewed by the Executive Committee prior to implementation of an agreement.

“Mr. Bob Fulcher, Director of the Cumberland Trail in Tennessee, has asked to make PDFs of some articles formerly published in *JTAS* available via the Cumberland Trail website; the Managing Editor approved this request, contingent on the concurrence of the TAS Executive Committee.

“At the April 2009 TAS Executive Committee meeting, approval was granted to modify the TAS website to include boxes in which abstract writers could indicate if their abstract had been or had not been formerly published in *JTAS*. This change to the TAS website has been implemented. Guidelines for preparation of manuscripts submitted to *JTAS* were sent to the *JTAS* section editors, as well as other TAS personnel; these

will be published in *JTAS* 84-4.” Expansion of the part of Editor Stedman’s website devoted to *JTAS* matters will be put forward as a topic of discussion by the members of the Executive Committee.

The Executive Committee discussed the ProQuest request. Junior Academy Director Jack Rhoton expressed some familiarity with ProQuest and indicated that they do provide royalties to journal publishers based on PDF (print document format) requests. Secretary Teresa Fulcher made a motion to authorize Managing Editor Stedman to proceed with the contract with ProQuest after clarifying potential financial obligations. Treasurer Murphree seconded the motion and the motion carried.

The Cumberland Trail request for permission to post PDF versions of *JTAS* articles on their website was discussed. The issues of author reprints, article copyright ownership, and possible impact on *Journal* subscriptions were discussed. Member-at-large Andy Andrews made a motion to approve Bob Fulcher’s request to post PDF versions of *Journal* articles that are five years old or older on the Cumberland Trail website. Education Committee Chairperson Kim Cleary Sadler seconded the motion. The motion carried.

Assistant Editor—Christy Carter reported that she had completed the guidelines for abstracts.

Collegiate Division—Director Fred Matthews was not in attendance and no report was submitted.

Electronic Communications—Director Jim Howard was not in attendance but submitted a brief report indicating that the website had been updated with information regarding the TAS annual meeting and that the membership database was functional but not completely up to date.

Junior Academy of Science—Director Jack Rhoton submitted the following report:

“The 2009 annual meeting of the Tennessee Junior Academy of Science (TJAS) met on Friday, April 17, 2009, at Belmont University in Nashville. A total of twenty-four students were invited to present their research papers. This year, 115 students were involved in TJAS research from throughout the state. Prior to the April 17 meeting, a panel of readers selected twenty-four of the student papers for presentation at the annual meeting. The panel of judges at the annual meeting selected two top presenters. They are Chris King, Creek Wood High School, Charlotte, and Hala Zein-Sabatto, The School for Science and Math at Vanderbilt, Nashville. The title of King’s paper was “Fine Control of Electromagnetic Levitation: A Second Year Study.” Ms. Zein-Sabatto’s paper was titled “Adipose Tissue and Nutrition: A Possible Influence on Fertility.” Both papers were published in the 2009 *Handbook and Proceedings of the Tennessee Junior Academy of Science*, along with eight other papers of the top ten winners. Also, abstracts of each paper presented at the annual meeting were printed in the *Handbook*. A copy of the *Handbook* was sent to high school science departments in Tennessee as identified by the Tennessee State Department of Education’s Directory of Public Schools. All students and teachers who participated in the 2009 TJAS program received a copy of the *Handbook*.

“In addition, TAS supported four \$100 awards to science fair winners in the Upper East Tennessee Science Fair on April 9, 2009. The science fair was held on the campus of East Tennessee State University. The recipients in the biological sciences category were: Kerri Harris, Unicoi Middle School,

Erwin; and Richie Lowery, DeBusk School, Greenville. The recipients in the physical science category were: Hannah Denton, University School, Johnson City; and Quinn Pilkey, Ashley Academy, Johnson City.

"It is customary each year for the Tennessee Junior Academy of Science to recognize three outstanding science teachers, one from each region of the state. During the spring 2009 TJAS meeting, a framed certificate and a small honorarium (\$100) were presented to the following recipients: Kelly F. Schultz, Chemistry and Physics teacher, David Crockett High School, Jonesborough; Anna E. Bryant, Chemistry teacher, Stone Mountain High School, Crossville; Mary C. Saxon, Biology and Chemistry teacher. These outstanding secondary science-teaching awards recognize teachers for their contribution to science teaching and for stimulating and inspiring students to an active interest in science.

"Ms. Laura Robertson has been named the recipient of the 2009 Tennessee Academy of Science Distinguished Science Teacher Award. Laura teaches seventh grade science at University School, Johnson City. She will receive the award on October 30, 2009, during the annual meeting of the Tennessee Academy of Science, University of Tennessee, Knoxville. Begun in 1997, the awards program is designed to recognize individuals who demonstrate excellence in science teaching. This award is given annually to one Tennessee science teacher who has made significant contributions to the teaching and learning of science. In addition to the recognition, Ms. Robertson will receive from TAS a \$500 cash award, a plaque and certificate. A press release has been prepared and submitted to local newspapers. The criteria for the award are based on the candidate's contributions to the teaching profession, education record, involvement in professional organizations, special awards or special recognition, and letters of support.

"Past and current recipients of the TAS Distinguished Science Teacher Award follow:

Alan Redmond (1997) John Sevier Middle School, Kingsport, TN
 Linda Phelps (1998) Camden Central High School, Camden, TN
 Jane Whitaker (1999) Lenior City High School, Lenior City, TN
 Pat Carpenter (2000) McDonald School, Mohawk, TN
 Gary Barrigar (2001) Elizabethton High School, Elizabethton, TN
 Kathryn Gemmer (2002) University School, Johnson City, TN
 Constance Brown (2003) McEwen High School, McEwen, TN
 Jan Coley (2004) Jefferson County High School, Dandridge, TN
 Marion Pitts (2005) Westview High School, Martin, TN
 Jennifer Dye (2006) Pope Paul 11 High School, Hendersonville, TN
 Ronnie L. Nixon (2007) Greenbrier High School, Greenbrier, TN
 Sarah Elizabeth Millsap (2008) Blackman High School, Murfreesboro, TN
 Laura Robertson (2009) University School, Johnson City, TN"

Director Rhoton extended sincere thanks to President Ervin, Treasurer Murphree, and Belmont University for continued support of the Junior Academy. Managing Editor Stedman made a motion to approve the Junior Academy report. Kim Cleary Sadler seconded the motion. The motion carried.

Visiting Scientist Program—Director Michael Daley was not in attendance, but reported in writing that brochures and the digest of visiting scientists were distributed through Barry Farris to members of the Tennessee Science Teachers Association (TSTA). Director Daley has received one request to date. Plans are being made to work through county science instructional supervisors to provide teachers with information on the Visiting Scientist Program. Director Daley's report also suggested that the Visiting Scientist Program could benefit from identifying regional coordinators, and he plans to investigate the feasibility of this in the western region.

REPORTS FROM COMMITTEES

Nominating Committee—Past President and Nominating Chair Cindi Smith-Walters was not in attendance, but submitted the following slate of Academy officers for 2010: President-Elect, Jeff Boles; Treasurer, Steven Murphree; Secretary, Teresa Fulcher. Stephen Stedman made a motion to accept the Nominating Committee's slate. Kim Cleary Sadler seconded the motion. The motion carried. President Ervin noted that the full membership would vote on this presentation of officers at the Annual Business meeting.

Education Committee—Chairperson Kim Cleary Sadler announced that pending President Ervin's approval, Peter Zhao from East Tennessee State University would join the Education Committee. Chairperson Cleary Sadler solicited input from the Executive Committee on additional Education Committee members to represent each section of the state, community colleges, and private colleges. She discussed ideas for partnering with the Visiting Scientist Program and noted the potential for obtaining grant funding through this collaboration. Based on Executive Committee discussion at the April 2009 meeting, Chairperson Cleary Sadler has made arrangements with the Middle Tennessee State University (MTSU) Video Services to work with the Junior Academy of Science to produce a short video on some of the student research projects. It was noted that students and parents would be required to sign releases and MTSU Video Services uses such standard documentation. Based on the Executive Committee request from the April 2009 meeting to solicit input from members on the type of information that should be included on the TAS website, the Education Committee and Publicity committee has developed a survey to be distributed to the full membership inquiring about website items recently accessed, ease of website navigation, attractiveness of website, and suggestions for improvement.

Fellows Committee—Fellows Chairperson Charles McGhee presented no nominations to the Executive Committee.

Financial Oversight—Chairperson Tommy Wooten's report was discussed in conjunction with the Treasurer's report.

Long-Range Strategic Planning—Chairperson George Webb was not in attendance but reported through President Ervin that the 2010 meeting of the Academy has been scheduled at Tennessee Technological University. A local arrangements committee chair is needed. Investigation of The

University of Tennessee Space Institute (UTSI) as a possible location for the 2011 meeting is still underway. Guest Jeff Boles reported that he was familiar with UTSI. He said that its proximity to the Arnold Engineering Development Center (AEDC) would provide the potential for keynote speakers involved with the National Aeronautics and Space Administration (NASA). Limiting factors would be availability of hotels and restaurants. The Executive Committee agreed to request that Publicity Chairperson Mandy Carter-Lowe request a tour of the facilities and report in April. No location has been established for the 2012 meeting. Executive committee members noted that 2012 would mark the 100th anniversary of the Academy and the potential of meeting in Nashville, site of the first 1912 meeting, should be investigated.

Membership—Chairperson Karen Kendall-Fite was not in attendance and did not submit a report.

Necrology—Chairperson George Murphy reported to President Ervin that the following Academy members had died: Dr. C. Wymer Wiser, Department of Biology, Middle Tennessee State University; Dr. Walter R. Herndon, Department of Botany, The University of Tennessee; Dr. Joseph C. White, a life member from Middle Tennessee State University; and Dr. William Dillon, Department of Biology, The University of Tennessee, Martin.

Publicity and Research—Chairperson Mandy Carter-Lowe was not in attendance but submitted the following report:

"Press releases were sent via email to daily newspapers, radio stations, and television stations in Tennessee announcing the 119th annual meeting to be held at the University of Tennessee in Knoxville. A request for certificates was received from Eugene DeSilva (Lincoln Memorial University) for student winners in the East Tennessee TAS Collegiate Division. No requests were received for certificates from the Middle and West Tennessee Collegiate Division.

"The publicity and research chair worked with the chair of the Education Committee on a survey pertaining to input on the TAS website, as requested by the executive committee at the spring 2009 meeting. The survey will be distributed at the University of Tennessee, Knoxville, meeting and a box will be available for submitting completed surveys. The two committees will work together on compiling results of the survey and will report findings at the spring 2010 executive committee meeting.

"UTSI has been discussed at previous Executive Committee meetings as a possible site for the 2011 annual meeting. At one point in discussions, I was provided contact information for Scott Van Zandbergen by George Webb. We were not able to coordinate our schedules this fall for a tour before the annual meeting. If the Committee still wants to pursue UTSI as a potential site, I can schedule a tour and report my findings at the spring 2010 Executive Committee meeting. Mr. Van Zandbergen noted it would be helpful to know with whom TAS spoke concerning a meeting in preparing for future discussions with UTSI."

Resolutions—President Ervin noted that long time Resolutions Chairperson Sallie Noel had retired. President Ervin expressed appreciation from the Academy for Noel's long

years of service. Secretary Fulcher prepared the Resolution of Appreciation to be read at the Annual Meeting on October 30, 2009. Dr. David Pitts from The University of Tennessee Martin agreed to assume Chairmanship of the Resolutions Committee.

Department of Education Liaison—Linda Jordan was not in attendance.

OLD BUSINESS

President Ervin reminded the Executive Committee of the open Meeting Coordinator position. Secretary Fulcher circulated the duties of the Meeting Coordinator, which were originally published in the *Journal* in the 2002 Proceedings of the Academy.

Member-at-large Andy Andrews had been authorized at the April 2009 Executive Committee meeting to investigate the availability of domain names for the Academy. He reported that the following names were available: www.tennessee-science.org, www.tennesseeacademyofscience.org, www.tennsci.org, www.tennacadsci.org, and www.sciencetennessee.org. The Executive Committee again authorized Andrews to purchase a couple of these domain names and redirect traffic to the <http://frank.mtsu.edu/tnacadsci/> site. Member-at-large Andrews noted that his three-year term was expiring and offered his future assistance to the Academy.

NEW BUSINESS

Managing Editor Stephen Stedman has developed a homepage for the *Journal of the Tennessee Academy of Science* to expedite delivery of information regarding abstract and manuscript submission. Managing Editor Stedman requested permission to link the *Journal* homepage at his TTU website to the TAS website. Member-at-large Andy Andrews made the motion to allow direct links from the TAS website to websites used exclusively for Tennessee Academy of Science business. Kim Cleary Sadler seconded the motion and the motion carried. The *Journal* website address follows: <http://iweb.tntech.edu/sstedman/JtasHomePage.htm>.

Members of the Executive Committee discussed appropriate ways to commemorate the 100th anniversary of the Academy. President-Elect Michael Gibson recommended putting together a committee of Past Presidents, compiling a history of the Academy and requesting a proclamation from the Governor. Secretary Fulcher, President Ervin, and President-Elect Gibson agreed to communicate and present ideas at the April Executive Committee meeting.

Education Chairperson Kim Cleary Sadler made a motion to adjourn the meeting. Christy Carter seconded the motion, and the meeting was adjourned at 10:30 PM EDT.

Respectfully Submitted,

Teresa L. Fulcher

Secretary, TAS

Pellissippi State Community College