

PROCEEDINGS OF THE TENNESSEE ACADEMY OF SCIENCE 2008

TERESA L. FULCHER, SECRETARY, TAS

Pellissippi State Technical Community College, Knoxville, Tennessee

TENNESSEE ACADEMY OF SCIENCE
EXECUTIVE COMMITTEE MEETING
18 APRIL 2008

President Cindy Smith-Walters called the meeting of the Tennessee Academy of Science (TAS) Executive Committee to order at 6:34 PM CDT in the Massey Board Room on the campus of Belmont University, Nashville, Tennessee. Attendees were President-elect Gore Ervin, Past President George Webb, Treasurer Steven Murphree, Secretary Teresa Fulcher, Managing Editor Stephen Stedman, Junior Academy of Science Director Jack Rhoton, Meeting Coordinator Michael Redding, Education Committee Chairperson Kim Cleary Sadler, Publicity and Research Committee Chairperson Mandy Carter-Lowe, and member-at-large William Andrews.

A motion to approve the minutes of the 15 November 2007 meeting of the Executive Committee was made by Michael Redding and seconded by William Andrews. The motion carried.

REPORTS FROM OFFICERS
AND DIRECTORS

Past President—George Webb recommended using Academy funds to hire a student to assist Electronic Communications Director Jim Howard with the web site, contingent on Howard's approval. Treasurer Murphree confirmed that an electronic form is available to requisition pay for student assistance in Academy work. George Webb also recommended that regular Academy members be encouraged to become sustaining or supporting members. Treasurer Murphree agreed to e-mail individuals with expiring memberships and encourage the upgrade. After a discussion regarding the dues for the different levels of membership, Michael Redding made a motion to propose to the full membership of the Academy at the November 2008 annual meeting an increase in the annual dues as follows: sustaining membership dues increase from \$35.00 to \$50.00, supporting membership dues increase from \$40.00 to \$100.00, and life membership dues increase from \$300.00 to \$400.00. William Andrews seconded the motion and the motion carried unanimously. If passed by the full membership in November, the increase would go into effect immediately. George Webb recommended that letters to acknowledge the additional contributions of members be sent by the President of the Academy.

President-elect and 2008 Program Chairperson—Gore Ervin described plans for the joint meeting with the Tennessee Science Teachers Association (TSTA) in November of 2008.

TSTA will host a mixer on Thursday November 20th from 6:00-8:00 PM. The TAS Executive committee will meet after that mixer. Two TAS workshops are planned for Saturday morning November 22nd: one workshop on nanotechnology and another workshop on teaching evolution led by Dr. Michael Gibson. The poster session is scheduled from 11:00 AM until 12:00 PM on Friday and lunch will be combined with TSTA. Governor Phil Bredesen is scheduled to deliver the address. Awards will be presented during the Friday lunch. The first round of technical sessions is scheduled for Friday afternoon and the second round will occur on Saturday morning. The TAS business meeting is scheduled for 8:15 or 8:30 on Saturday morning. President-elect Ervin noted that TAS must provide necessary audio-visual equipment to be used in the TAS technical sessions and that notices should be sent to section chairs informing them of this requirement. Meeting coordinator Michael Redding reiterated the need to fully negotiate the details of cost sharing with TSTA for this meeting. George Webb, Steve Murphree, and Michael Redding will meet with TSTA representative Barry Farris to work on an agreement. Expenses should be proportional based on the number of registrants.

Treasurer—Steven Murphree discussed the Treasurer's Report showing a total income of \$5,312.53 from 1 January 2008 through 4 April 2008 and expenses of \$9,130.86 for the same period. The checking account balance as of 18 April 2008 was \$19,981.34, with total assets at \$199,948.09. Michael Redding moved to accept the treasurer's report. Gore Ervin seconded the motion. The motion carried.

Managing Editor—Stephen Stedman reported that AllenTrack Essentials, a web-based manuscript submission, tracking, and peer-review software program, was activated in early March 2008. Since that time, three manuscripts have been submitted for review. These have already been sent to section editors. Editor Stedman reported that he is pleased with the technical support from Allen Press Inc. Editor Stedman reported that contents of the January-April issue (83:1-2) of the Journal of the Tennessee Academy of Science have been received and are ready for submission to Allen Press via AllenTrack Essentials.

Editor Stedman also reported that James Huggins, one of two section editors for Zoology, has resigned his position. Until another section editor is named, Karl Joplin will assume all manuscript review duties for Zoology. Editor Stedman received boxes of past issues of the *Journal*, and created two archival sets. These sets will be kept with the Managing Editor and additional copies of past issues of the *Journal* have been given to Treasurer Steven Murphree for distribution based on requests for back issues.

President Walters received a request from Shelia Laing of EBSCO Publishing to include *The Journal of the Tennessee Academy of Science* in the Academic Search Complete database. There are no costs associated with inclusion. Michael Redding made a motion to accept the offer of EBSCO to include *The Journal of the Tennessee Academy of Science* in a database that would be available on-line, pending careful review of the three-year contract. Kim Cleary Sadler seconded the motion and the motion carried. Kim Cleary Sadler and Stephen Stedman agreed to read the contract carefully and report to President Walters.

Michael Redding discussed revisions to the annual meeting abstract submission form to include the full name and mailing address for each presenter and to clearly identify student presenters. Redding recommended that specific information regarding student winners be sent directly to Publicity and Research Chairperson Mandy Carter-Lowe. Carter-Lowe would then submit names and titles of student winners to Managing Editor Stephen Stedman. Member-at-large William Andrews suggested using Adobe Acrobat to create an on-line registration form and agreed to examine the cost and benefit of conversion to Adobe. President-elect Gore Ervin presented the possibility of using AllenTrack Essentials for the development of on-line forms. Michael Redding is also revising the criteria for judging student presentations to increase the weighting of the scientific quality of the paper.

Collegiate Division—Director Fred Matthews was not in attendance, but submitted a report on Collegiate Division meetings that had occurred. The Western Division meeting was held on 5 April 2008 at The University of Memphis. Dr. Charles Biggers served as coordinator and 23 papers and four posters were presented. The Middle Division meeting was held on 12 April 2008 at Belmont University. Dr. Nick Ragsdale served as coordinator and approximately 46 papers were presented. The Eastern Division meeting was held on 12 April 2008 at Lincoln Memorial University. Dr. Eugene DeSilva coordinated the meeting with 14 paper and 17 poster presentations. Director Matthews reported to Treasurer Steven Murphree that the West Tennessee Division had requested \$600.00 to assist with the cost of the meeting and \$250.00 for awards. It was noted that at the 20 April 2007 meeting of the TAS Executive Committee, reimbursement up to \$600.00 for expenses and \$250 for awards had been appropriated for Collegiate Division meetings, payable upon submission of abstracts for publication in the *Journal*. Michael Redding suggested that the abstract submission form for the Collegiate Division programs be standardized to match that of the annual meeting.

Electronic Communications—Director Jim Howard was not in attendance but submitted a report indicating that the website was current with meeting information. Members of the Executive Committee discussed the possibility of posting the title page of each issue of the *Journal* on the website and agreed to make this recommendation to Director Howard. Junior Academy of Science Director Jack Rhoton made a motion to post a selected article from the most recent issue of the *Journal of the Tennessee Academy of Science* on the website. The article would be selected at the discretion of the Managing Editor and should change no less than each year. Michael Redding seconded the motion and the motion carried.

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

“The 2008 spring meeting of the Tennessee Junior Academy of Science (TJAS) met Friday, April 18, 2008, on the campus of Belmont University. A total of twenty-four students were invited to present their research papers. This year ninety students were involved in TJAS research, from throughout the state. The top eight TJAS research papers will be published in the 2008 *Handbook and Proceedings of the Tennessee Junior Academy of Science*. The winners of the top two papers each received \$500 and the six other top winners each received \$200.

“During the April meeting, a plaque and a small honorarium (\$100) was presented to an outstanding secondary science teacher from each region of the state. Recipients of this year’s awards are: Jeannie Long (AP Biology, Scientific Research, Environmental Science), Cleveland High School, Cleveland; Dr. Chand Desai (AP Biology, Scientific Research, Honors Biology), Martin Luther King Magnet School, Nashville; and Kim Harris (Biology, Chemistry Teacher), Camden Central High School, Camden. These TAS outstanding secondary science teacher 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 will support four \$100 awards to science fair winners in the Upper East Tennessee Science Fair, scheduled April 24, 2008, on the campus of ETSU. Two recipients from the biological sciences category and two recipients from the physical science section will be honored.”

Visiting Scientist Program—Director Michael Daley was not present but submitted the following report: “The Visiting Scientist Program Digest was updated with the names of new volunteers who signed up at the November meeting. Only one visit by a scientist has been made to date this semester. However, I think there may have been more who did not participate in setting up the contact. As a future action item, I suggest that we ask Barry Farris, TSTA treasurer, to email the electronic brochure to the TSTA membership again in early August.”

State Department of Education—Science Consultant Linda Jordan did not submit a report.

AAAS Section Y Representative—Michael Redding submitted the following report:

“Representing the TAS, I attended the Annual Meeting of the American Association for the Advancement of Science in Boston on February 15-17, 2008. The following comments summarize my activities and information deemed pertinent to the TAS.

“The National Association of Academies of Science Assembly of Delegates was held on February 15. Ohio Academy of Science representative, Mr. Lynn Elfner, presided and presented a draft policy resolution formulated at a meeting October 15-16, 2007, in Irvine, California, entitled “State Science and Technology Policy Advice: Issues, Assets, and Opportunities; Convocation #1 Energy, Environment, Economic Competitiveness.” In brief, the resolution advocates:

- 1) the formation of coalitions within states to provide S&T advice to local and state government entities,
- 2) active cooperation with existing S&T policy mechanisms and organizations,
- 3) urging the National Academies of Science (Sciences, Engineering, and Medicine) and the American

Association for the Advancement of Science to encourage their members to become involved in state level coalitions for the purpose of providing advice on S&T matters. This resolution passed without dissent.

“The NAAS acknowledged the representative of the newly formed Washington Academy of Science. This new state academy is notable because it is funded directly by the state legislature specifically for the purpose of providing a source of information and advice to the legislature, somewhat akin to the original formation and mission of the National Academies of Science.

“Other NAAS business matters were presented and accepted by the delegates present, including financial accounting and discussion about the annual meeting of the American Junior Academy of Science, whose organization is the major function of NAAS.

“The Section on General Interest in Science and Engineering (Section Y) held its annual business meeting on February 16. Lynn Elfner, President of the section, chaired the meeting. Section Secretary JoAnn Valenti announced that the theme of the 2009 AAAS meeting would be “Our Planet and Its Life: Origins and Futures”. There followed a discussion about potential Section sponsored symposia for the 2009 AAAS meeting.

“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.

“Section Y representatives heard a short presentation by former AAAS President Gil Omann and two of his colleagues who have made substantial progress toward the creation and operation of an online library of thousands of Power Point presentations on various topics, entitled Supercourse. Presently the library is focused on topics relating to global health and epidemiology. The organizers expect the topical content of the library to grow as its existence and usage become known to the academic community worldwide. These presentations have been donated largely by university professors and are based on course material they have generated. It is somewhat akin to the free online encyclopedia, Wikipedia, as a repository for information provided by many different sources. However, unlike Wikipedia, there is some oversight relating to the credentials of contributors to ensure accuracy of the material, and moreover, editorial changes are restricted to the author of the presentation. Many of the presentations have been translated into non-English languages. This ongoing effort is available free of charge at www.pitt.edu/~super1/ and is administratively managed from the Library of Alexandria in Egypt, symbolically important as the world’s first library system.”

Managing Editor Stephen Stedman moved to link the Supercourse online library of PowerPoint presentations to the TAS website as soon as possible. Teresa Fulcher seconded the motion, and the motion carried.

REPORTS FROM COMMITTEES

Auditing and Financial Oversight Committee—Treasurer Steve Murphree reported that the cost for an annual audit

would be approximately \$2000. President Walters will inquire with Robert Grammer as to his willingness to continue as Chairperson of the Auditing and Financial Oversight Committee. This committee presents an annual report to the Executive Committee regarding the findings of the audit conducted by an independent agent. The current audit is being conducted under the supervision of Thomas C. Wooten Ph.D., Associate Professor of Accounting, Belmont University. Treasurer Murphree will investigate bonding the amount of \$20,000 prior to the November meeting. Treasurer Murphree also mentioned that the TAS might need to file form 990 with the IRS for private, non-profit agencies. This form is not required unless annual receipts exceed \$25,000.

Education Committee—Chairperson Kim Cleary Sadler reported that she is working on recruiting additional members to the Education Committee and assisting the Visiting Scientist program with brochure development and distribution. She is considering setting up a table at the joint TAS/TSTA meeting to provide information to teachers on the Visiting Scientist program. Other areas of interest that the committee will be examining are high school science redesign, STEM education, and dual enrollment issues. Chairperson Sadler indicated that she would like to see TAS have a presence as an organization in statewide decision making regarding science education. Junior Academy Director Rhoton reminded members of the STEM conference scheduled at ETSU and invited all to participate.

Long-range Strategic Planning Committee—Chairperson George Webb inquired as to whether there was interest in pursuing another joint meeting with the Kentucky Academy of Science. Members of the Executive Committee agreed that this would not be a priority for the near future. Chairperson Webb presented potential sites for future TAS meetings. The University of Tennessee is the potential host for the 2009 meeting and Tennessee Technological University will host in 2010. President Webb recommended consulting with The University of Tennessee Space Institute as a potential host for the 2011 meeting. The 2012 meeting would be in west Tennessee. Possible locations include Rhodes College or The University of Memphis. Chairperson Webb also indicated that altering the traditional date of the TAS meeting is under consideration to avoid scheduling conflicts with the TSTA.

Publicity and Research Committee—Chairperson Mandy Carter-Lowe reported that she had worked to create and distribute certificates and notification of the complimentary TAS one-year membership to student winners from the November annual meeting. She encountered issues of some second authors requesting certificates. Michael Redding agreed to clarify that one membership would be awarded to the senior author as he revises the abstract submission form. Chairperson Carter-Lowe has digital photos of the meeting and will distribute them to Managing Editor Stephen Stedman for *Journal* use and to Electronic Communications Director Jim Howard for the website. Carter-Lowe will be working with TSTA representative Barry Farris on publicity for the November 2008 meeting. Carter-Lowe inquired as to the status of official letterhead. President-elect Gore Ervin offered to forward his file with the TAS official logo to Carter-Lowe.

OLD BUSINESS

Junior Academy of Science Director Jack Rhoton reported that the EPSCOR proposal would not be funded during this cycle, but Dr. David Hercules indicated plans to resubmit.

NEW BUSINESS

After additional discussion as to the time scheduled for the November Executive Committee meeting, President-elect Ervin agreed to investigate the possibility of scheduling the meeting for Friday night November 21st rather than Thursday November 20th.

President-elect Gore Ervin moved to adjourn the 18 April 2008 meeting of the Executive Committee of the Tennessee Academy of Science. Jack Rhoton seconded the motion, and the motion carried. President Walters adjourned the meeting at 9:08 PM CDT.

TENNESSEE ACADEMY OF SCIENCE EXECUTIVE COMMITTEE MEETING 21 NOVEMBER 2008

President Cindi Smith-Walters called the meeting of the Tennessee Academy of Science (TAS) Executive Committee to order at 7:02 PM CST in the Hunter's Parlor of the Music City Sheraton in Nashville, Tennessee. Attendees were President-elect M. Gore Ervin, Past President George Webb, Treasurer Steven Murphree, Secretary Teresa Fulcher, Managing Editor Stephen Stedman, Assistant Editor Christy Carter, Junior Academy of Science Director Jack Rhoton, Meeting Coordinator Michael Redding, Education Committee Chairperson Kim Cleary Sadler, Publicity and Research Committee Chairperson Mandy Carter-Lowe, Tennessee Collegiate Division Director Fred Matthews, Visiting Scientist Director Michael Daley, Member-at-large Jeff Boles, Member-at-large Kent Wallace, Local Arrangements Chair for 2009 meeting Al Hazari of The University of Tennessee, and guest Wayne Wofford of Union University.

President Smith-Walters thanked members of the Executive Committee for their attendance and work, and introduced new member-at-large Kent Wallace from Fisk University and guest Wayne Wofford. Stephen Stedman moved to waive the reading of the minutes. George Webb seconded the motion, and the motion carried.

REPORTS FROM OFFICERS AND DIRECTORS

President-Elect and 2008 Program Chairperson—Gore Ervin thanked everyone for a great meeting and great job.

Meeting Coordinator—Michael Redding distributed a table showing the number of oral and poster presentations over the last seven years. With a total of 148 presentations, the 2008 meeting, Redding noted, represents the highest number of oral presentations since 2003, and one of the best Academy meetings in the last seven years. Redding also noted that one of the health and medicine posters was improperly categorized.

Treasurer—Steven Murphree discussed the Treasurer's report provided below:

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|--|------------|
| TAS INCOME AND EXPENSE | |
| 1/1/2008 THROUGH 11/20/2008 | |
| CASH BALANCE - JANUARY 1, 2008 | 23,799.67 |
| INCOME | |
| Annual Meeting Income | 1,325.00 |
| Div Income | 51.37 |
| Gift Received | 55.00 |
| Library Journal Subscriptions | 840.00 |
| Meeting Registration | 1,800.00 |
| Membership Dues | 11,835.00 |
| Page Charge for Journal | 3,780.00 |
| Vanguard Dividend Payment | 5,574.22 |
| TOTAL INCOME | 25,260.59 |
| TOTAL CASH AVAILABLE | 49,060.26 |
| EXPENSES | |
| Annual Meeting | 4,366.91 |
| Bank Charge | 10.00 |
| Collegiate Division | 1,450.00 |
| Dues and Fees | 1,007.90 |
| Executive Committee Meetings | 419.25 |
| Journal | 760.00 |
| Journal printing | 13,021.65 |
| Junior Academy of Science | 7,470.92 |
| Misc. Expenses | 351.54 |
| Renewal Fee | 360.00 |
| Science Fair | 1,590.00 |
| Travel Expenses of Executive Committee | 1,756.78 |
| Treasurer | 35.09 |
| TOTAL EXPENSES | 32,600.04 |
| CASH BALANCE - NOVEMBER 20, 2008 | 16,460.22 |
| Income | 25,260.59 |
| Expenses | 32,600.04 |
| Cash Decrease | 7339.45 |
| BREAKDOWN OF HOLDINGS - NOV. 20, 2008 | |
| Checking Account, US Bank | 16,460.22 |
| US Postal Service, Cookeville, TN | 164.77 |
| US Postal Service, Lawrence, KS | 348.07 |
| TAS HOLDINGS - November 20, 2008 | 16,973.06 |
| TJAS TRUST FUND (Vanguard Star Fund) | |
| (9,002.839 shares 11/20/08) | |
| Account Value - 11/20/08 | 119,917.82 |
| TOTAL VALUE OF HOLDINGS - | 136,890.88 |
| NOVEMBER 20, 2008 | |

Treasurer Murphree noted that the Vanguard Star Fund had dropped from \$175,000 to approximately \$120,000 over the past several months and that the Academy had a \$7,000 deficit of expenses over income despite additional institutional memberships. Managing Editor Stephen Stedman commented that the \$13,000 *Journal* printing costs may have contributed to the deficit since printing costs for 2008 included printing of a 2007 *Journal* issue. Treasurer Murphree reported that the Academy will be charged by The United States Postal Service for mailing of the *Journal* with an invalid address. Treasurer Murphree informed the Executive Committee that approximately 400-500 Academy members receive the *Journal*, with 75-100 library subscribers and minimal additional complimentary copies. Treasurer Murphree recently purged Academy rolls of members that had not paid dues in two years; this purging delay enabled those inactive members to receive all

volumes of the *Journal* from the period of their active membership.

Collegiate Division Director Fred Matthews inquired regarding expenses from the three spring Collegiate Division meetings. Treasurer Murphree agreed to verify those expenditures. Treasurer Murphree noted that the Academy would be required to file form 990 for organizations exempt from income tax with the Internal Revenue Service for 2008 since our income exceeded \$25,000.00. Members of the Executive Committee expressed concern over the financial situation of the Academy. Managing Editor Stephen Stedman noted that while the Executive Committee had voted at the April 2008 meeting to propose increases to the sustaining, supporting and life memberships, no recommendation of an increase to the regular membership was made. After discussion, Director Michael Daley moved to propose to the full membership of the Academy at the 22 November 2008 annual business meeting, an increase of annual dues for regular members from \$30.00 to \$40.00, to take effect in 2009. The motion was seconded by Jeff Boles and passed unanimously. Secretary Fulcher reviewed the full proposal. The Executive Committee of the Tennessee Academy of Science will propose to the full membership of the Academy at the annual business meeting on 22 November 2008 increases in dues (effective 2009) as follows: regular member dues from \$30.00 to \$40.00, sustaining member dues from \$35.00 to \$50.00, supporting member dues from \$40.00 to \$100.00, and life membership from \$300.00 to \$400.00. Treasurer Murphree reported to the Executive Committee that Dr. Robert Grammer had declined the request to continue as Chairperson of the Auditing and Financial Oversight Committee. Treasurer Murphree recommended that Dr. Thomas C. Wooten, Associate Professor of Accounting at Belmont University, serve as Chairperson of that Committee. The Executive Committee had no objections. Bonding of the treasurer is still being investigated. Treasurer Murphree recommended that the annual meeting registration form be removed from the website about 10 days prior to the meeting. On-site registrants must use NCR (no carbon required) forms to create additional copies. Meeting Coordinator Michael Redding moved to accept the treasurer's report. President-elect M. Gore Ervin seconded the motion, and the motion carried.

Managing Editor—Stephen Stedman introduced newly appointed Assistant Editor Christy T. Carter of Tennessee Technological University to the Executive Committee. Editor Stedman also reported that nine manuscripts have been submitted on-line through AllenTrack Essentials and recommended that the Academy continue with Allen Press during 2009. Editor Stedman reported that Drs. Charles Biggers and Karl Joplin had resigned as section editors for Cell and Molecular Biology and Zoology, respectively. They have been thanked for their service to the Academy, and the latter has agreed to serve as a reviewer whenever needed. Drs. Chad Brooks and Chris Brown were recommended as replacement section editors for Cell and Molecular Biology and Zoology. Managing Editor Stedman also noted that there is no current section editor for Ethics in Science and Technology. Michael Redding made a motion to accept Dr. Chad Brooks as editor for Cell and Molecular Biology and Dr. Chris Brown as Zoology editor. Jeff Boles seconded the motion, and the motion carried. Michael Redding commented that there hasn't been an active Ethics in Science and Technology section since the Academy annual meeting at Columbia State in 2004, and

he moved to abolish that section. Gore Ervin seconded the motion, and the motion carried. Editor Stedman presented the Executive Committee with information on the Allen Press on-line abstract submission service; it was deemed too expensive to meet the Academy's needs at this time. However, abstract submission in multiple formats continues to be problematic in preparing both the program for the Annual meeting and the *Journal*. Stronger language in the abstract submission instructions was recommended. The Managing Editor reported that two incomplete archival sets of the *Journal of the Tennessee Academy of Science* are currently housed at Tennessee Technological University. In addition, back issues are being converted to printable document format (PDF) files and are being sent to EBSCO Publishing for inclusion in the Academic Search Complete database.

Collegiate Division—Director Fred Matthews announced the location and dates of the 2009 Collegiate Division meetings: Eastern Division, April 4, 2009, at Lincoln Memorial University with Dr. Eugene de Silva as coordinator; Middle Division, April 18, 2009, at Belmont University with Dr. Nick Ragsdale as coordinator; and Western Division, April 4, 2009, at Rhodes College with Dr. David Kesler as coordinator. This information has been submitted to Electronic Communications Director Jim Howard for inclusion on the Academy website. Director Matthews has notified Collegiate Division meeting coordinators of the availability of \$300-\$600 to assist with expenses of the meeting and a \$250 award budget. Director Matthews requested assistance from Publicity Chairperson Mandy Carter-Lowe in standardizing the awards for the Collegiate Division meetings.

Electronic Communications—Director Jim Howard was not in attendance but submitted a written inquiry for consideration of the Executive Committee regarding the TAS policy to provide links to other websites from the TAS web page. After discussion, the Executive Committee suggested that the webmaster be allowed to exercise his own discretion on whether or not to enable links to the TAS site. Creation of a special page for links of interest, including a one-sentence disclaimer indicating that The Tennessee Academy of Science does not necessarily endorse the content on those websites, was recommended.

Visiting Scientist Program—Director Michael Daley reported that participating scientists had made more than twelve visits to school classrooms in the past year. The Visiting Scientist Program digest, listing participating scientists, and the Visiting Scientist Program brochure have been distributed via the Tennessee Science Teachers Association. Teachers are encouraged to directly contact any visiting scientist volunteer within their region, or Director Daley, to discuss a potential classroom visit. Jack Rhoton agreed to link an electronic copy of the Visiting Scientist Program brochure to his website. Executive Committee members were encouraged to contact Director Daley for a template of the brochure. Director Daley commented that he would like to develop a method for obtaining feedback on the effectiveness of the program from participating teachers.

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

"The 2008 annual meeting of the Tennessee Junior Academy of Science (TJAS) was held on Friday, April 18, 2008, at Belmont University in Nashville. A total of twenty-five students were invited to present their research papers. This

year, 81 students were involved in TJAS research from throughout the state. Prior to the April 18 meeting, a panel of readers selected twenty-five 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 Charlie Xie, Martin Luther King Magnet School, Nashville. The title of King's paper was 'Electromagnetic Levitation: A Digital Control System.' Mr. Xie's paper was titled 'A Study of Mechanisms of Amphetamine of the Dopaminergic Pathway.' Both papers were published in the 2008 *Handbook and Proceedings of the Tennessee Junior Academy of Science*, along with eight other papers of the top ten winners. Also, an abstract of each of the presenters at the annual meeting was printed in the Handbook. A copy of the *Handbook* was sent to all 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 2008 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 of April 10, 2008. The science fair was held on the campus of East Tennessee State University. The recipients in the biological sciences category were Andrew Bible, C. Hal Henard Elementary School, Greeneville; and Rosemary McVeigh, University School, Johnson City. The recipients in the physical science category were: Brittany Steagall, Shady Valley Elementary School, Shady Valley; and Alex Wheelock, Indian Trail Middle School, 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 2008 TJAS meeting, a framed certificate and a small honorarium (\$100) was presented to the following recipients: Dr. Chand Desai, AP Biology and Chemistry teacher, Martin Luther King Magnet School, Nashville; Jeanie Long (AP Biology Teacher), Cleveland High School, Cleveland; Renee Wyatt (biology and Chemistry Teacher), Camden Central High School, Camden. These outstanding secondary science teaching awards recognize teachers for their outstanding contribution to science teaching and for stimulating and inspiring students to an active interest in science.

"Ms. Sarah Elizabeth Millsap has been named the recipient of the 2008 Tennessee Academy of Science Distinguished Science Teacher Award. Sara teaches chemistry at Blackman High School in Murfreesboro. She will receive the award on November 21, 2008 during the joint meeting of the Tennessee Academy of Science and the Tennessee Science Teachers Association Conference (Sheraton Music City in Nashville). 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. Millsap will receive from TAS a \$500 cash award, a plaque and certificate. 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:

Alan Redmond 1997 John Sevier Middle School, Kingsport, TN

Linda Phelps 1998 Camden Central High School, Camden, TN

Jane Whitaker 1999 Lenoir City High School, Lenoir 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 John Paul 11 High School, Hendersonville, TN

Ronnie L. Nixon 2007 Greenbrier High School, Greenbrier, TN

Sarah Elizabeth Millsap 2008, Blackman High School, Murfreesboro, TN"

REPORTS OF COMMITTEES

State Department of Education Science—Consultant Linda Jordan was not in attendance and submitted no report.

Membership Committee Chairperson Karen Kendall-Fite encouraged Executive Committee Members to notify her of items to include in the electronic newsletter.

Publicity and Research Committee—Chairperson Mandy Carter-Lowe submitted the following report:

"Press releases were sent via email to daily newspapers, radio stations, and TV stations in Tennessee announcing the 118th annual meeting to be held at the Music City Sheraton in conjunction with the Tennessee Science Teachers Association. In addition press releases were sent to Nashville Public Radio, WSMV-Channel 4, WTVF-Channel 5, and WKRN-Channel 2. Two boxes of certificate paper and one package of gold seals were ordered by Mandy Carter-Lowe and reimbursement has been received from Steven Murphree in the amount of \$78.84. A request for certificates was received from Eugene DeSilva (Lincoln Memorial) for student winners in the East Tennessee TAS Collegiate Division. The committee would like to request any pictures taken at the annual meeting be sent to Mandy Carter-Lowe for compilation onto one CD-ROM to be archived and/or used by the website or other publications."

Necrology Committee—President Smith-Walters announced that Dr. George Murphy of Middle Tennessee State University has agreed to serve as chair of the Necrology Committee. It was reported that Dr. Bill Nelson, herpetologist and biologist from the University of Tennessee at Martin, had died in 2008.

Resolutions Committee—Chairperson Sallie Noel from Austin Peay State University submitted electronically a Resolution of Appreciation to be read at the 2008 annual business meeting.

Nominating Committee—Chairperson George Webb presented the following slate of officers for 2009 for approval by the Executive Committee: President: M. Gore Ervin, Middle Tennessee State University; President-elect: Michael Gibson, The University of Tennessee at Martin; Treasurer: Steven Murphree, Belmont University; and Secretary: Teresa Fulcher,

Pellissippi State Technical Community College. Michael Redding made a motion to accept the slate of officers presented by the Nominating Committee. Teresa Fulcher seconded the motion, and the motion carried.

NEW BUSINESS

Dr. Al Hazari of The University of Tennessee reported that the administration of The University of Tennessee will be favorable regarding hosting the 2009 meeting of The Tennessee Academy of Science. Dr. Hazari did request assistance in defining specific responsibilities of the local arrangements committee. Michael Redding, M. Gore Ervin, and Jack Rhoton agreed to meet and communicate with Dr. Hazari regarding details involved in planning the meeting. Michael Gibson confirmed that as President-elect he will arrange for the plenary session speaker. Past President George Webb announced that the Academy has tentative arrangements for our 2010 meeting at Tennessee Technological University. The Academy has received an invitation letter from the Tennessee Technological University Provost. Dr. Webb also reported that the University of Tennessee Space Institute has expressed interest in hosting the 2011 meeting of the Academy. Dr. Webb is investigating the feasibility of that location. Wayne Wofford of Union University reported that the Provost at Union has

invited the Academy to meet there in 2012, and Kent Wallace agreed to investigate the possibility of meeting at Fisk University in 2013.

President Cindi Smith-Walters announced the resignation of Dr. Michael Redding as Meeting Coordinator. She joined the Executive Committee in thanking Dr. Redding for his many years of service in this capacity. President Smith-Walters asked the Executive Committee to begin considering the replacement for this position.

Information regarding nomination of Academy Fellows was discussed, and Secretary Teresa Fulcher agreed to distribute a list of Academy Fellows to all Executive Committee members.

President Cindi Smith-Walters thanked member-at-large Jeff Boles of Tennessee Technological University for three years of service to the Academy and welcomed Kent Wallace from Fisk University as he begins his term as member-at-large.

M. Gore Ervin made a motion to adjourn the meeting. Fred Matthews seconded the motion, and President Cindi Smith-Walters adjourned the meeting at 9:30 PM CST.

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