

Proceedings of the Tennessee Academy of Science 2016

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Tennessee Academy of Science Executive Committee Meeting 15 April 2016

President Fred Matthews called the meeting of the Tennessee Academy of Science to order at 6:45 PM CDT in the Wedgewood Academic Center on the Campus of Belmont University in Nashville, Tennessee. Attendees were Past-President Gilbert Pitts, Treasurer Steve Murphree, Secretary Teresa Fulcher, Managing Editor Rachel Rigsby, Junior Academy of Science Director and AAAS Representative Preston MacDougall, Member-at-Large 2016–2018 J. Allyn Smith, Education and Research Committee Chairs Cindi Smith-Walters and Kim Sadler, Membership Committee Chairperson Karen Kendall-Fite, and State Department of Education representative Kelly Chastain, and guest Tony Johnston. President Matthews welcomed attendees and introduced new members of the Executive Committee and thanked Treasurer Murphree for organizing the meeting. Past President Gilbert Pitts made a motion to approve the minutes from the 19 November 2015 Executive Committee meeting. Cindi Smith-Walters seconded the motion and the motion carried.

Reports from Officers and Directors

Past President—Gilbert Pitts reported that letters had been sent to the President and Dean of Austin Peay State University inviting them to the 2016 TAS meeting, and that rooms had been reserved in Morgan University Center for the Executive Committee meeting on Friday evening 18 November 2016. Rooms have also been reserved for technical presentations and the plenary lecture on Saturday 19 November 2016. Past President Pitts has a tentative schedule for the meeting beginning with registration at 7:30 AM and technical sessions running from 1:00 PM until completion. It was suggested that arrangements be made for posters to remain on display through the luncheon.

President-Elect and 2016 Program Chair—Dan Swartling was not in attendance.

Treasurer—Steve Murphree presented the treasurer's report showing income from 7/1/2015 through 4/15/2016 of \$44,651.01 and expenses in that same period of \$42,907.11. Assets from the Star Fund total \$222,296.41. Treasurer Murphree noted that the Executive Committee had given permission for the Tennessee Academy of Science to support the Middle Tennessee Science and Engineering Fair (MTSEF) by serving as a temporary financial agent at no cost to the Academy. Treasurer Murphree also noted that he had recently requested and received from the

Internal Revenue Service the original letter granting the Academy 501(c)(3) status in 1966 to provide verification to Getty Images Science Photo Library. In response to questions regarding the unrealized gain and loss from the Star fund, Treasurer Murphree reported that we do receive two dividend checks per year from this fund, but the account balance fluctuates with the market. The value of the account over the past year has increased by approximately \$3,000.00. Cindi Smith-Walters made a motion to accept the treasurer's report. The motion was seconded by Kim Sadler and approved.

Managing Editor—Rachel Rigsby was not in attendance, but submitted a written report including information regarding a delay in publication of *JTAS* 90:3-4 due to problems with a vendor for Allen Press in India. *JTAS* 90:3-4 was published in March. Materials for *JTAS* 91:1-2 are in preparation and should be sent to the publisher within the next two weeks for publication in June. Rigsby's report also contained information on availability of *JTAS* in online databases. Managing Editor Rigsby received confirmation that our *Journal* is already included in EBSCOhost™ and EBSCO Discovery Service. Any library subscribing to these services will have access to *JTAS*. Additionally *JTAS* is available in several Gale databases including Expanded Academic ASAP. Rigsby also researched the ability to be added to the online database SCOPUS. *JTAS* appears to meet all requirements with the exception of publication ethics and malpractice statements, and Rigsby is investigating such statements from other scientific journals. Managing Editor Rigsby also included in her report a request for any information on archival collections of the *Journal* so that the Managing Editor collection could be completed. Members of the Executive Committee discussed the need to review student abstracts from collegiate meetings and the Annual meeting prior to publication. Member-at-Large Allyn Smith suggested adding an item on the abstract submission form in which the major professor would check to verify review of abstract. Past President Pitts recommended that all abstract submission forms contain a line in which the major professor (if applicable) signs that the abstract have been reviewed and contains only original information. Pitts also suggested this information be added the Operations Manual under Section Chair. Executive committee members also discussed the possibility of publishing abstracts in a regular "bulletin" rather than the *Journal* and agreed to continue this discussion at the November meeting.

Collegiate Division—Director Fred Matthews reported that Collegiate Division meetings were upcoming in the three divisions. Pellissippi State is hosting the Eastern Collegiate on 22 April 2016. Belmont University is hosting the Middle Division meeting on 16 April 2016.

Tennessee Junior Academy of Science—Director Preston MacDougall reported that the Tennessee Junior Academy of Science (TJAS) meeting was held 15 April 2016 at Belmont University. MacDougall reported that 52 papers were submitted and 26 were accepted for presentation. Winners were William L. Roussell from Hillsboro High School in Nashville, Naureen Azeez, Duncan Broadie, Kenneth Liao and Vamsi Subraveti from the School for Science and Math at Vanderbilt, and Vinila Baljepally from Bearden High School in Knoxville (participating for the first time). Kim Sadler reported that video footage from two successive years of Junior Academy meetings exist. Director MacDougall said that he is still working toward purchase of a Go-Pro camera to use to record Junior Academy events. Director MacDougall announced that winners of the Junior Academy meeting receive a \$500 award with runners up receiving \$200, but asked the Executive Committee to formalize travel stipends for winners that could attend the American Junior Academy of Science (AJAS) meeting. Past President Pitts made a motion to fund registration and travel for the winner(s) of the TJAS to attend the AJAS meeting up to \$1000.00 per team (normally 2 teams). If a winning team does not use the funds, then the money can defer to a runner up. The motion was seconded by Preston MacDougall. In further discussion, it was determined that this motion has no impact on the current TJAS prize money and that the TJAS could endorse up to 7 teams to attend the AJAS (at their own expense). The motion carried. Director MacDougall also thanked judges: Dr. Joel Harp, Dr. Carmen C Greenberg, and Dr. M. Gore Ervin for assisting with the TJAS meeting.

Electronic Communications—Director Gilbert Pitts reported that he has completed the migration of the *Journal of the Tennessee Academy of Science* website over to the TAS Midphase site. He is still moving old pdf journal issues. Individual articles published 2007–2010 have been added, but other issues are being scanned and broken up by article and include the title page for each issue. Director Pitts also reported that migration of the TJAS information from Jack Rhoton on the ETSU server has been completed. He has also completed updates of officers, Executive Committee members, operating procedures and any additional information as requested by Executive Committee members. Director Pitts provided data showing increased traffic on the website. He noted that *Journal* articles were being viewed and specifically mentioned searches from Yale.

Visiting Scientist Program—Director Daniel Swartling was not in attendance but had requested that the Academy seek to replace him as Director of the Visiting Scientist Program as he begins his 3 year presidential cycle. The Executive Committee discussed the importance of the Visiting Scientists program in linking research scientists with the K-12 educators. Treasurer Steve Murphree made a motion to name Tony Johnston as Visiting Scientist Director. The motion was seconded by Electronic Communications Director Pitts. Tony Johnston graciously accepted the appointment and was congratulated by Executive Committee members.

Annual Meeting Coordinator—Eugene De Silva was not in attendance.

Reports from Representatives

State Department of Education Representative—Kelly Chastain was welcomed to the Academy Executive Committee

meeting. Representative Chastain reported that Tennessee did not adopt the Next Generation Science (NGS) standards and a second round of review was in progress for the state specific Tennessee science standards. A vote will potentially occur in October with standards going into effect in 2018–2019 along with new books and testing. Chastain reported that the standards under consideration represent a paradigm shift and implementation will require significant training. Chastain said that over 30,000 comments were submitted during the public comment period. Executive Committee members asked about the teacher certification process and degree requirements which make it difficult for students to meet essential subject specific course requirements. Representative Chastain noted the shortage of certified physics teachers and Member-at-Large Allyn Smith reported that Austin Peay had dropped the Physics teaching degree due to curricular concerns. Representative Chastain agreed to provide additional information for science teaching certification requirements to Electronic Communications Director Pitts for inclusion on the TAS webpage.

AAAS Section Y Representative—Preston MacDougall attended the AAAS meeting, including Section Y (General Interest) in Washington D.C. in February 2016. The 2017 meeting will be held in Boston. Representative MacDougall reported that the AAAS is requesting proposals for symposia on advancing science policy through science festivals.

Reports from Committees

Financial Oversight—Belmont University Professor of Accounting Dr. Tommy Wooten, who assists with Auditing and Financial Oversight, submitted no report for the current cycle.

Local Arrangements Committee—Gilbert Pitts provided an overview of preparations for the 2016 meeting including lunch options, room reservations, and registration form revisions. The Executive Committee agreed to keep premium boxed lunch options for members at \$12.00 each. Austin Peay will provide beverage service for the meeting. Director Pitts stated that the Dean of the College of Science and Math, and the Chairs of Chemistry and Biology were offering support for the meeting. Pitts confirmed that ample parking will be available. The Riverview Inn is close to campus and will honor the government rate. Pitts noted the need to place the registration form on line and to communicate with President-Elect Swartling regarding the call for papers. Pitts provided a tentative schedule including a time for committee meetings in the morning and arrangements for increased poster viewing. Posters must be manned between 8:30–9:45 AM, but should remain on display until 1:00 PM. Posters will be displayed in the same location as lunch. Chairperson Sadler suggested that the Executive Committee develop a standard template or checklist of procedures as a guide for local arrangements committees. Secretary Fulcher agreed to work on this checklist. Executive Committee members noted the success of on-site certificate printing and agreed that the consolidated registration and certificate distribution area was advantageous. Pitts said they would try to arrange for Tri-Beta members to assist with packet stuffing and registration. All Executive Committee members were encouraged to distribute information on the 2016 meeting to their departments and professional societies to which they belong.

Nominating Committee—Past President Gilbert Pitts reported that the committee was considering candidates for positions and a slate of nominees would be presented at the November

Executive Committee. Members of the Executive Committee noted the importance of recruiting for future leadership positions.

Long Range Strategic Planning Committee—Chairperson Gilbert Pitts stated that the goal was to have locations established for meetings two years out. Based on current rotation, the 2017 meeting would be held in the west, 2018–2019 would be held in the middle, and 2020 would move to the east. Western locations discussed included Southwest Community College, and the University of Memphis Lambuth. Middle locations discussed included Lipscomb, and the Franklin campus of Columbia State. President Matthews suggested that prior hosts for the Collegiate Division meetings be considered.

Research and Education Committee—Cindi Smith-Walters and Kim Sadler reported that the Tennessee Science Teacher Association (TSTA) meeting was held in Nashville in conjunction with the National Science Teacher Association (NSTA) and thanked the Academy for providing \$300.00 financial support for the event. Kim Sadler attended as TAS representative. Smith-Walters encouraged Executive Committee members to participate in the Science Standards review process and provided the website address. After discussion on ways to make the Academy more visible to TSTA, Past President Gilbert Pitts made a motion to send Tony Johnson as Director of the Visiting Scientist program to the next TSTA meeting in Murfreesboro December 1-3, 2016 as a TAS exhibitor and to pay any associated fees. Cindi Smith-Walters seconded the motion and the motion carried.

Publicity Committee—Chairperson Mandy Carter-Lowe was not in attendance, but submitted a written report. Her report included information on the success of on-site certificate printing and distribution from the 2015 meeting, but mentioned that arrangements for a portable printer need to be made. A few certificates had to be mailed to section chairs for distribution, but most were presented at the meeting. Carter-Lowe has previously notified student winners of their one-year complimentary Academy membership in letters sent along with certificates and suggested that an alternate method of notification be developed. Carter-Lowe also reported that she is working with Collegiate Division coordinators to provide them with the tools necessary for on-site certificate production and has offered links to tutorials on how to merge certificate information and has provided information on vendors of certificate paper and folders.

Membership Committee—Chairperson Karen Kendall-Fite reported that she has obtained a list of all new members from Treasurer Murphree and plans to reach out to those new members encouraging them to participate on committees or meeting planning. She inquired as to whether the Academy would support her with postage for a mailing to new members and this expense was authorized. Member-at-Large Smith

inquired as to the possibility of a quarterly email describing happenings in the Academy to keep the society fresh in member minds. Member-at-Large Smith offered assistance.

Old Business

Treasurer Murphree reported that he would work on developing an Academy budget for the 2017 year based on past expenses. Executive Committee members again discussed the possibility of setting up registration and annual membership renewal credit card payments on the TAS website. Action on this issue was deferred until additional information can be obtained regarding costs to the Academy and security requirements. A motion was made by Kim Sadler to authorize purchase of a device (possibly an I-Pad with card scanner) that could be used to accept credit card payments onsite using *Square™* and a portable printer to belong to the Academy and be used for on-site certificate printing. The motion was seconded by Cindi Smith-Walters, and the motion carried.

President Matthews emphasized the importance of establishing a protocol for transportation of equipment to meeting sites along with a log noting the location of specific equipment. It was agreed that collapsible easels would need to be purchased to replace easels lost at Walters State. Wooden easels purchased by Walters State are unusable and cannot be returned. In general, it was established that signage and poster display equipment should move from the host institution to the future meeting site with the upcoming local arrangements chairperson. Secretary Fulcher will be responsible for maintaining a log of equipment.

President Matthews updated the Executive Committee on the dispute with License Compliance Services (LCS) regarding a photo image that appeared in a Junior Academy of Science paper. The image used was cited, and the student's home school library had a subscription with Britannica allowing for use of images for educational purposes. Information regarding the 501(c) (3) status and educational mission of the Academy, along with verification of the user's subscription with Britannica have been provided to LCS, and President Matthews considers this matter closed.

New Business

Secretary Fulcher had received a nomination for the Distinguished College University Teacher award, and nomination supporting materials were distributed to Executive Committee members. No action was taken on the nomination.

Treasurer Murphree made a motion to adjourn. The motion was seconded by Gilbert Pitts and at 10:45 PM CDT President Matthews adjourned the meeting.