Academy of Electrical and Computer Engineering (AECE)
Minutes of Annual Business Meeting
Thursday, April 16, 2015

Members Attending:

Max Anderson
Richard Arnold
Eric Aschinger
Mark Birk
Lloyd Brunkhorst
Thomas Dalton
Mike Emanuel
Kelvin Erickson
James Fricke
Mike Herron
William Hord
Leonard Laskowski
Dennis Leitterman
David McNabb

Steven McNabb
James Paunicka
Michael Perry
Neal Schaefer
George Schindler
Donald Shaw
John Skain
Keith Stanek
Paul Stigall
George Tomazi
Jon Vaninger
Roger Volk
Steve Watkins

The annual Meeting of the Academy of Electrical and Computer Engineering was held Thursday, April 16, 2015 and called to order at 8:00 a.m. The meeting was held in the Comfort Suites Conference Center. President Roger Volk chaired the meeting.

Dr. Daryl Beetner, Department Chair, welcomed the Academy members. Introductions were made.

Dr. Kurt Kosbar reported on behalf of the Scholarship Committee. He reported that the Academy awarded a total of eleven scholarships this year. Four scholarships were awarded from the endowed scholarship account. Each award was for $1,300. The AECE Board approved awarding an additional $800 from the operating budget so that all four students would receive $1,500 awards.   These scholarships are awarded to students who have completed a FASFA form (application for federal student financial aid) and have a combined household income of less than $40k. The recipients were: Rebecca Curtis, Michael Fanger, Brooke Greathouse, and Anthony Wellnitz. Six scholarships were awarded from the non-endowed account for $1,500 each. These scholarships are awarded to students based on need and academic performance (GPA of ≥3.25). The recipients were: Thomas Abbeg, Michael Bauer, Janell Branscum, Kyle Harper, Kyle Lundeen, and Dylan Yoder. One scholarship was awarded from the non-endowed account for $4,000. This scholarship was awarded to an incoming freshman based on need and academic performance. The recipient was Fei Lin.

Jason Northern, Development Officer, provided a campus update. He reported that the Hasselman Alumni House was dedicated at St. Pat's 2015, and that a good time was had by all. He invited everyone to join him today (April 16th) at 4:30 p.m. in the Toomey Hall Atrium for

the dedication service and celebration of the new lab enhancements across campus. Over 4,000 students in 70 different courses will benefit directly from the new enhancements.

Jason reported that there were two new funding opportunities. One is the $6M expansion to Butler-Carlton Hall with the new Advanced Construction Materials Laboratory (12,000 square feet) and the other being the $500,000 build-out of unused vacant space at the Kummer Student Design and Experiential Learning Center, which will offer 5,000 square feet of additional manufacturing and collaborative use space.

He reminded everyone that Homecoming will be held October 23-24 and OGS will be June 12-13 in Kansas City. Also, please remember to submit nominations for the Miner Alumni Association awards and for professional degrees.

Dr. Ian Ferguson, Vice Provost and Dean of the College of Engineering & Computing, then

Dr. Daryl Beetner gave a quick introduction of himself. He grew up in Edwardsville, IL and received his graduate degree at Washington University. He has been a faculty member at Missouri S&T for 16 years now. He was the first faculty member hired for the computer engineering department. He chose S&T because he enjoys both, teaching and research, and felt that he could excel at both of them here. He explained that now as department chair his first priority was to ensure student success. He also wanted to ensure that our department was producing world-class research while being a great place to learn, work and grow.

He then gave a department update, reporting that for fall 2014 the department had a total enrollment of almost 800 students, with approximately 480 undergraduates (190 CpE and 290 EE) and 320 graduate students (70 CpE and 250 EE). The off-campus student enrollment is at an all-time high with close to 80 students, almost 50 of those students are enrolled in our BS EE cooperative program at MSU. Research expenditures totaled almost $5.5 M.

The department had 30 faculty members and 6 teaching professors. He reported that the hiring of five new faculty members has been completed: Dr. Egeman Cetinkaya (CpE), Dr. Jhi-Young Joo (Power); Dr. Victor Khilkevich (EMC); Dr. Mish Cutitaru (CpE teaching faculty) and Dr. Amardeep Kaur (EE teaching faculty).

Dr. Beetner reported on the numerous student awards from the last year. They included:
- HKN Outstanding Chapter Award
- ASNT Engineering Undergraduate Award – Matt Horst
- Guest editor and feature author of HKN Bridge – Keenan Johnson
- Outstanding Undergraduate Poster, ASEE Midwest Conference – Mason Marshal and Benjamin Miller
- 1st Place, IEEE St. Louis Section paper competition – Justin Hoyt
- 2nd Place, IEEE St. Louis Section Black Box competition
- IEEE St. Louis Section Outstanding Student Member – Trevor McCasland
- Finalist for the 2014 National IEEE- HKN Outstanding Student Award – Kaitlyn Schikore
- EMC Society James Kouda Memorial Scholarship – Ben Toby

- Microwave Theory and Techniques Undergraduate Scholarship – Thomas Roth
- 2015 WISE Program – Devin Cornell
- Selected for NSF/ASEE Workshop on *Transforming Undergraduate Education in Engineering* – Emily Hernandez

Faculty awards were given to: Dr. David Pommerenke and Dr. Rosa Zheng - IEEE Fellow; Dr. Chengshan Xiao - Humboldt Research Award; Dr. Jun Fan - Faculty Research Award; Dr. Kristen Donnell - Faculty Teaching Award; Dr. Jonathan Kimball and Dr. Yiyu Shi - Faculty Excellence Awards; Dr. Yiyu Shi - IEEE St. Louis Chapter Outstanding Educator Award; Dr. Jonathan Kimball – MACADA Outstanding Advisor; Dr. Tayeb Ghasr (IEEE-IM Outstanding Young Engineer and J. Barry Oakes Advancement Awards; Dr. Reza Zoughi (President of IEEE Instrumentation and Measurement Society; four outstanding teaching awards and seven teaching commendations.

Dr. Beetner reported he had five new planned initiatives for the department.
They are:
- Hire an Advising and Recruiting Specialist
- Increased focus on distance education
- Increased us of blended learning
- Improved feedback and focus on outstanding teaching
- Improved senior design experience

New initiatives include:
- Cooperative Program with MSU
  - Originate courses from MSU in Spring 2014
- Blended learning courses
  - Incorporate in-class and online content
  - Circuits II is established
  - Microcontrollers began in Summer 2013
- Sophomore-Level Labs
  - Searching for NTT faculty
- Controls Laboratory Equipment
  - New required controls lab
  - New motion control course/lab
  - $140K total - $70K from gifts
  - Have approached companies for funding
  - AECE can help

Dr. Steve Watkins, Associate Chair for EE Undergraduate Studies, made a presentation to the Academy regarding current curriculum and degree program updates. He explained the renumbering structure of the 3-digit course number to the new 4-digit course numbers. He highlighted some of the current and upcoming curriculum changes and reviewed the minor program, emphasis areas, honor program and co-op program.

Dr. Jagannathan Sarangapani, ECE Department Chair Search Committee Chair, briefed the Academy on the current search for the new department chair. He explained that the committee's responsibility was to solicit applications for the position and recommend finalists for consideration by the Provost and Chancellor. The search will be nationwide but open to internal candidates. The finalist shall be eligible for tenure and hold the rank of full professor. The committee will submit an unranked list of acceptable candidates to the Provost by April 28th. Dr. Derald Morgan, Academy member, served on the search committee and AECE President, Roger Volk and AECE Vice President, George Schindler both met with the candidates for dinner. It is assumed that the selected person will commence their duties as Department Chair on or about August 1st.

Roger Volk called the business meeting to order by welcoming the new inductees that were present.

Don Shaw made a motion to approve the minutes from the April 2013 meeting. Dennis Leitterman seconded the motion. Motion carries.

Roger Volk explained the Treasurer's reports. Leonard Laskowski made a motion to accept the financial reports as prepared. John Skain seconded the motion. Motion carried.

Roger Volk gave a report for the Membership Committee on behalf of Mike Perry. He reported that seven new members would be inducted into the Academy this year and reminded everyone to send in their nominations for next year.

Roger Volk then presented the Nominations committee report on behalf of Jim Fricke. Roger asked for a vote by acclamation for Mike Emanuel and John Skain (3 year term) to fill the two vacant board seats, motion carried. He then asked for a vote by acclamation for David McNabb to fill the vacant Secretary/Treasurer (one year term) position, motion carried.

George Schindler gave an overview of the Chancellor's Academy Presidents Forum. He highlighted the topics covered and emphasized what an important position this forum puts the Academy in.

Roger Volk then reviewed the endowed scholarship accounts that the Academy holds.

George Schindler gave a brief overview of meeting expenses. He explained that meeting expenses generally exceed revenue by an average of $1,800 per year which is taken from the general operating revenue. He explained that the board had discussed ways of closing this gap. Some of the possibilities include: charging more, reducing the number of complimentary meals, or offering the membership the opportunity to sponsor a student or inductee. The membership discussed these and decided that all could be implemented as needed.

Roger Volk then addressed the Academy in regards to the future of the Academy. He explained that contributions vary each year and to address this issue the Academy established the current endowed scholarships. He then explained that the intent of the current endowment was to be able to fund eight scholarships at $1,500 each. Once they reach this level the membership will

need to make a decision as to whether to fund additional scholarships or increase the amount given. Roger made the motion to continue to provide students with the same level of scholarship funding. James Leonard seconded the motion. Motion carried.

He then spoke about the need of lab upgrades and how this has been needed for years and was one of the things that the Chairmen candidates even suggested. The state currently has matching funds available for labs. The board would like the membership to consider beginning to set aside funds for a lab endowment. Minimum funds to begin an endowment are $25,000. The spending of the endowment account would be in the control of the Academy.

Roger then spoke to the membership about annual giving. He reported that over the last seven years the average gift made to the Academy was $500, but that a very small portion of the membership donated regularly. The board has discussed the possibility of sending out a notice to the entire membership asking for $500 annually. The letter would explain all the things the Academy was currently doing and would explain what they would use the funds for. The membership agreed that this would be a good thing and suggested allowing the donor to notate specific uses for the funds and to allow the donor to select from a range of donation amounts.

Roger presented the proposed budget for the 2014-2015 operating year. Donald Shaw made a motion to accept the budget as presented. Leonard Laskowski seconded the motion. Motion carried.

Roger reported that the next meeting of the AECE would take place on Thursday, April 16th, 2015.

Dr. Pourya Shamsi, the newest electrical engineering faculty member, then presented to the Academy. Dr. Shamsi received his BS from the University of Tehran, Iran in 2007, his MS at the University of Texas at Arlington, TX in 2010, and his PhD at the University of Texas-Dallas in 2012. His research interests include applications of power electronics, applications of power electronics in microgrids, and uncertainty engineering. His current instructional focuses are Power Systems Analysis and Design and Advanced Theory of Electrical Machines.

The Academy members then heard a presentation by members of the Robotics Design Team. The team is currently working to finish the robot for competition in Michigan at the end of May. Members from the Mechanical Division, Electrical Division and Computer Science Division all gave brief overviews of what each were doing to prepare the new robot. The team plans to work hard over the summer to streamline their process and begin working on a new robot for next year.

Roger Volk presented the Academy with the opportunity to fund two new display cases for the department. Some of the faculty have been cleaning out labs and ran across quite a bit of old equipment. They thought it would be nice to display it in the hallway of the department. Leonard Laskowski made the motion to fund the two display cases. David Wang seconded the motion. Motion Carried.

Ron Willoughby made the motion to adjourn the meeting at 3:30 p.m. David Wang seconded the motion. Motion carried.

Minutes submitted by David McNabb   May 1, 2014

The next AECE Meeting and Banquet of the Academy of Electrical and Computer Engineering will be _Thursday, April 16, 2015_. Mark your calendars and plan to attend.