

Education and Student Activities Committee (ESAC)

Minutes of the Annual Meeting

Austin, TX

August 17, 2009

The meeting was called to order by Chairman Tom Jerse at 7 am and the attendees introduced themselves to the group. A conflicting TC-1 meeting reduced attendance.

iNARTE

Brian Lawrence, executive director of iNARTE, discussed a new initiative: Associate Programs that make available Associate Engineer Certificates and Associate Technician Certificates. Because nine years of engineering work are required to achieve full certification as an EMC engineer, iNARTE is now enabling graduates of a four-year bachelor degree program and whose studies have included EMC, ESD, or product safety engineering course to obtain Associate Engineering status to demonstrate their interest in the field until they have worked a sufficient number of years to achieve full certification. A similar Associate Technician Certificate is now available to graduates of two-year diploma programs

Experiments Manual

Ed Wheeler of Rose-Hulman Institute of Technology updated the group on the experiments manual. He is expecting new experiments this year from several professors. The experiments manual is now published exclusively online. Dick Ford discussed his role in video taping experiments and the problems that can arise.

University Grant

Tom Jerse presented the results of the 2008 University Grant program. There were two winners: \$10K to Wuhan University of Technology in China (Xiaoying Xu) and \$5K to the University of Split in Croatia (Antonio Sarolic). The 2009 Call for Proposals will be released on September 1, 2009 with the awardee chosen by early December. This year we have only \$5K to give away in a single grant.

Student Papers

Randy Jost reported that a large number of submissions were received this year. The review process was not fully in place, so he and Larry Cohen reviewed them near the deadline and selected the Best Student Paper and the winner of the Baranek Travel Award. Randy said that he is working with the 2010 TPC to improve the software to handle student papers more effectively.

Student Design Project

This competition did not happen this year. The project that has been used for many years and the individuals who ran the competition and donated considerable time to administer it and evaluate the submitted entries are no longer available. ESAC needs to identify new people to lead this effort and to come up with at least one new project for the competition. Ideally, there could be more than one so that projects could be rotated to avoid having the same project every year.

Symposium Experiments and Demonstrations

Unlike most years, ESAC did not take a role in this area for the Austin Symposium. Collin Brench graciously took the lead along with Michael Vrbanak to assemble 18 demonstrations (9 hardware and 9 software). ESAC will work with the Ft. Lauderdale TPC to determine a course of action for 2010.

ESAC Website

Randy Jost, the current website master, said that Shannon Archambeault will be doing the site.

Procedures Manual

Randy Jost volunteered to send out the ESAC procedures manual (rules for committee operation) to the membership after the minutes are sent out. This action is with an eye to having the committee review and a possibly amend the manual at a future meeting.

K-12 Outreach

Elya Joffe introduced Dr. Joungho Kim from KAIST Korea who has been making an effort in this area in his country. Ed Wheeler and Jianjian Song of Rose-Hulman discussed their institution's Operation Catapult which has a long history of introducing engineering material to high school students. Elya agreed to lead an exploratory committee and Jianjian and Vignesh Rajamani (Oklahoma State) volunteered to be on it along with Joungho Kim.

Tutorials

Daryl Beetner reported on the success of the EMC Fundamentals tutorial given on Monday of the Symposium.

ESAC Meetings

Elya Joffe proposed adding at least one more ESAC meeting per year. Tom Jerse agreed to see what could be done coincident with the March 2010 BOD meeting in San Diego.

IEEE Expert Now

ESAC will be looking to identify a topic and an instructor for the EMCS participation in making a video for the IEEE Expert Now program. This activity is put on hold because the BOD eliminated the funding for this item in these challenging times.

EMC Academy

Kimball Williams has suggested a 2 to 3 year EMC Academy with a structured curriculum that leads up to Global University. Tom Jerse said that a sequence of courses, as is already done in a university, requires careful curriculum planning with careful attention to the linkages between the courses. Randy Jost suggested that an educational vision for the EMCS be written up. Elya suggested that an ESAC member be included in the TAC so that technical advancements can be folded into education. Elya would like to see Randy and Tom draft a proposal to the BOD on TAC and ESAC working together.

Student Ethics Competition

Elya Joffe discussed an ethics training course that was part of a workshop. He proposed having a Student Ethics Competition administered by ESAC. Dick Ford submitted that ethics training doesn't belong in ESAC. Tom Jerse mentioned the success of the annual Student Ethics Competition at IEEE Southeastcon (Region 3 conference). Randy Jost discussed how Utah State students are taught ethics. A motion was made and passed by voice vote for Elya to pursue developing an ethics competition.

Faculty Workshop

Tom Jerse discussed the possibility of ESAC developing a workshop for training faculty members who would like to teach EMC, but may not have sufficient experience. Such workshops have been proposed a couple of times before, but have never been accepted by a Symposium TPC. No immediate action is planned at this time.

Educator Awards

Elya Joffe proposed creating two EMCS awards for educators with outstanding accomplishments—one for those involved in continuing education (professional level) and one for those in academia. Randy Jost said that the awards would be most beneficial if they encourage younger educators instead of giving them to those who are already well recognized. Elya and Randy said that they could start exploring this by exchanging emails. Elya said that any awards established by May could be given at the Ft. Lauderdale Symposium.

Adjournment

The meeting was adjourned at 8:56 am.

Attendees

Tom Jerse	The Citadel
Randy Jost	Utah State University
Kathy Lawrence	iNARTE
Brian Lawrence	iNARTE
Dick Ford	NRL
Chuck Bunting	Oklahoma State University
Bogdan Adamczyk	Grand Valley State Univeristy
Mark Steffka	GM, University of Michigan Dearborn, UM-D
Ed Wheeler	Rose-Hulman Institute of Technology
Jianjian Song	Rose-Hulman Institute of Technology
Larry Cohen	NRL
Jerry Meyerhoff	JDM Labs
Vignesh Rajamani	Oklahoma State University
Elya Joffe	KTM Project Engineering
Ralph Showers	Consultant
Joungho Kim	KAIST