

**FIE 2015**  
**ERM Business Meeting**  
**Thursday, October 22<sup>nd</sup>, 2015**  
**2:30 – 4:00 PM**  
**Camino Real Hotel & Conference Center - Boardroom**

Monica Cardella brings meeting to order

Round of introductions

40 people in attendance (no official attendance taken)

Notes taken by Jean Mohammadi-Aragh for absent Secretary-Treasurer Adam Carberry.

1. Consent Agenda

Motion to accept consent agenda (Jim Morgan); second (Maura Borrego)

Discussion:

- Short discussion about what a great job everyone at this conference is doing
- Short discussion of FIE Impact factor: FIE will submit a health report each year / Impact factor is going to drive future decisions for FIE (do things in a way that raises our impact factor). This means that we may have less work-in-progress papers, for example.

Unanimous acceptance of consent agenda

2. Opportunities to Volunteer

Discussion of opportunities to volunteer

- Nominating committee
- Helen Plants Award Committee – Marissa Orr described role to recruit volunteer
- Interdivisional Cooperation Committee: Elliot Douglas discussed the purpose of the committee and need for a volunteer. Alan Cheville volunteered but would step aside in the event someone else wants to volunteer
- FIE chair for special sessions and panels (program chair light)
- Co-chair for FIE New Faculty Fellows (and then take it on for two years)
- Program chair commitment may also become a two-year commitment (mentee first year and mentor second year). Discussions appears to be positive in response to this. (Not finalized)

3. Diversity and Inclusion

Julie Martin is an at-large director for ERM related to Diversity and Inclusion. Julie Martin email read to attendees. Suggestion that ERM include a diversity and inclusion statement in their bylaws. Julie Martin will work with ERM to revise the bylaws and then she will serve on the ASEE-wide diversity committee. Discussion was positive. Monica Cardella will begin the process to put the bylaw amendment up for a membership vote.

4. FIE 2017

Discussion of upcoming conference. Marriot in Indianapolis. Conference space is on a single floor. Reception at the Idle George Museum (walkable from the hotel). Discussion of favorites from FIE (suggestions for FIE 2017). Suggestion that FIE include postcard sessions. No miniworkshops. Let Bill know if you have more ideas for FIE 2017.

## 5. PEER Network

Overview of PEER Network given by Micah. PEER Network is asking if ERM would support this as a more formal post-ASEE workshop, supported by ERM. Support would be to help find a location or to be able to charge a fee for participation. Alan Cheville suggests public libraries as an inexpensive location.

Discussion: building networking especially among young faculty members is important. Comments were positive for having ERM serve as the administration front or even to provide some financial backing.

Some questions regarding logistics, but overall the membership is positive. Micah will follow up with Lisa.

## 6. Strategic Plan Discussion and Brainstorming Skipped

## 7. New Business

Email from Donna Riley: ABET approved the changes that they were discussing - effective October 2016. This is a year of discussion but there is no process for how public comments will be addressed. ABET is listening to the professional societies and have created a diversity committee. Discussion follows.

Ask Monica on behalf of ERM to reach out to industry committee within ASEE. Monica suggested an at-large-director could lead and coordinate ERM effort on this. The interdivisional cooperation committee will plan a townhall meeting to talk about ABET changes at ASEE 2016. There is a push from some divisions to only have to assess six things. If we want to keep things in, we need to bring a strong argument about why we want to “add” extra work.

Discussion: What can ERM do in our ASEE 2016 program? ASEE has an industry day.

Alan volunteered to serve as an at-large director to work on Goal 5, and will work with Archie (goal 3).

## 8. Closing comments

Monica reminded us of five goals

- 1) Ensure that ERM is a welcoming community
- 2) Promote and disseminate high quality research
- 3) promote and disseminate empirical teaching methods
- 4) promote and develop workshops
- 5) develop mechanisms to promote broad policies to support engineering education.

## CONSENT AGENDA - ERM OFFICER REPORTS

### ERM Chair Report – Monica Cardella

New officer appointments/ volunteers since the ASEE Conference:

- Julie Martin, At-Large Director, appointed to focus on promoting diversity and inclusion
- Nadia Kellam, Chair of the Apprentice Faculty Grants Committee
- David Knight, Chair of the ERM Best Paper Award Committee
- Holly Matusovitch, ERM Program Co-Chair for FIE 2016
- Matthew Verleger, ERM Program Chair for ASEE 207

Volunteer Opportunities Still Available:

- Nomination Committee Chair + 2 additional volunteers
- ERM representative to Helen Plants Award Committee, 2016 – 2018
- ERM representative on the Interdivisional Cooperation Committee

ABET Changes

- In June (as the ASEE conference was ending) ERM Executive Board voted in favor of submitted a letter of concurrence with the letter submitted by the ASEE Liberal Education/Engineering and Society Division. The essence of the letter was that:  
*Like the Liberal Education/Engineering and Society Division, the Educational Research and Methods Division is deeply concerned about changes proposed in ABET Criteria 3 and 5, changes that run counter to the longstanding consensus, recognized in the Washington Accord, that engineers must be able to communicate well, practice professional responsibility, understand societal and global contexts of their work, and engage in lifelong learning.*
- Please contact Monica Cardella if you would like to see the full letter that was submitted.

LEARN/AERA Letter Opposing FY2016 Research Funding Cuts

- In August Norman Fortenberry contacted me, as Chair of ERM, to advise on whether ASEE should co-sign on a letter opposing FY2016 research funding cuts to IES (the Institute of Educational Studies)
- After investigating the programs that would be impacted by the proposed cuts, I advised Dr. Fortenberry that the cuts could negatively impact the ERM community and engineering education community more broadly. Please contact me for further information on this.

### Secretary/Treasurer Report – Adam Carberry

Budget Update:

- ASEE Accounting continues to go through changes. It's been a frustrating year with the main accountant leaving in Jan. 2015, the temporary replacement not being an accountant and then subsequently leaving in August 2015, and now a Junior Accountant trying to catch up.
- All reimbursements and disbursements have now been processed from ASEE 2015
- BASS account now stands at \$49,605.40
- Operating account is usually brought to \$0 by end of fiscal year (September 30). Due to the constant changes there was a remainder of \$152.72 in the Operating account that was lost. I'm trying to get this back, but it's not looking good.

All future deposits to the BASS account will now be subject to a 30% tax by ASEE

## **ASEE 2015 Program Chair – Shane Brown**

Nothing reported.

## **ASEE 2016 Program Chair – Lisa Benson**

### 2015 ERM Brouhaha

The 2015 ERM took place on Tuesday, June 16, from 7 PM to 10 PM at 1927 Events located at 1927 3<sup>rd</sup> Ave. in Seattle, WA, about 6 blocks from the convention center. Costs for the event came in right at \$12,000. Over 150 people attended; I don't have a firm head count but the caterer reported that they served 175 meals. We sold 150 tickets, and had several complimentary tickets (ERM Best Paper winners, 1 guest of a new attendee that didn't realize he needed to buy a ticket, maybe others?), but the caterer did not charge us for the extras, so we managed to stay within budget. Feedback was that it was a fun and welcoming event. Although there were several complaints about having to wait in line a long time to get food, others said the line was a unique opportunity to meet others and welcome new people to ERM.

### 2016 ASEE Program

The Call for Papers for ASEE 2016 went out in late July. Several changes were made from previous years:

- There are now four types of papers that will be considered:
  - Work in Progress (WIP) Paper: New this year, introduced as an option for all divisions by ASEE; these are studies at an early to intermediate stage for which authors are seeking feedback from the community. All WIP papers will be assigned to either roundtable or poster sessions to facilitate discussions.
  - The other 3 paper types are similar to past years: Research Paper, Theory Paper, and Evidence-Based Practice Paper.
- The plan is to organize round table and poster sessions based on how papers cluster and on author preferences. I have advised at least two groups of authors who were considering special session proposals to submit abstracts instead and request a roundtable session for a group of related papers. I will do my best to send these out as a group to the same reviewers, and ask the reviewers to consider them as a whole for a session. Not sure how that will actually work out, but it seems like a viable option for those wanting a meaningful discussion of similarly themed papers.
- By 10/9/15 (the due date for workshop and special session proposals), there were 4 workshop and 4 special session proposals. There is no limit on the number of workshops we can sponsor; we are limited to two special sessions. We have been asked to co-sponsor at least two other special sessions with other divisions. Workshop and special session proposals have been sent out for review.
- As of 10/20/15 (one day after the 10/19/15 due date), there are 245 abstracts submitted, and 263 reviewers.
- I am putting together a set of guidelines, FAQs and sample emails for the next Program Chair. This seemed especially important this year, since this position is currently open (see next item) and the future chair will not have the benefit of being copied on correspondence for this year's program.

### 2017 Program Chair Position

At this time this position is open and we are seeking nominations. Self-nominations are welcome.

### ASEE 2016 Program Chair – Matthew Verleger

Matthew Verleger has recently volunteered to serve as Program Chair for ASEE 2017. He will soon begin working on plans for Brouhaha at ASEE 2016. Please contact Matthew if you are able to help- especially if you have local knowledge of New Orleans.

### FIE 2015 Program Chair – Senay Purzer

#### Titles and Roles

- **ASEE ERM Program Chair:** Şenay Purzer
  - **Special Session Chair:** Holly Matusovich
  - **New Faculty Fellowship Reviews:** James Huff
- **CS Society Program Chair:** Ari Korhonen
- **IEEE Program Chair:** Mani Mina
  
- **FIE 2015 Conference Chair:** Michael DeAntonio
- **Staff:** Kevin Curry
- **Staff:** Lauren & Cynda (conference catalysts)

#### FIE Program Chairs Handbook

[https://docs.google.com/document/d/1cCj1YTOJCUza\\_2zQ-Uhepk-HxdHfcqM4JvDvhmIJReo/edit?pli=1](https://docs.google.com/document/d/1cCj1YTOJCUza_2zQ-Uhepk-HxdHfcqM4JvDvhmIJReo/edit?pli=1)

#### Year-to-Year Comparative Data

	FIE 2011 Rapid City	FIE 2013 Oklahoma City	FIE 2014 Madrid	FIE 2015 El Paso
Initially received	736	609	940	757
Abstracts accepted	643	570	~920	721
Full papers received		466	685 or 699	552
Abstract/FullSubmit		77%		73%
<b>ACCEPTED</b>	<b>504</b>	<b>187?</b>	<b>421~530</b>	<b>403</b>
Full papers		109	320	231+22=253
WIPs		66	73	121+7=128
Special sessions		6	9	14
Panels		2	2	1
Mini-Workshops		8	11	---n/a---
Pre-workshops		4	6	7
<b>REJECTED</b>		<b>61</b>	<b>185</b>	<b>132</b>
Full papers		41	125	89

WIPs		19	40	35
Special sessions		1	4	2
Panels			2	4
Mini-Workshops			8	---n/a---
Pre-workshops			6	2
<b>Final published</b>	<b>440</b>		<b>520</b>	<b>TBA</b>
<b>Submit-to-publish rate</b>	<b>60%</b>		<b>58%</b>	<b>TBA</b>

#### **FIE 2015 Program Chair – Holly Matusovich**

Nothing reported.

#### **Director Reports – Sarah Zappe, Daria Kotys-Schwartz, Archie Holmes, & Kathryn Jablakow**

- During the past year + the ERM Directors have focused on different Goals from the 2014 ERM Strategic Plan ([http://erm.asee.org/images/2014\\_Strategic\\_Plan.pdf](http://erm.asee.org/images/2014_Strategic_Plan.pdf)).
- Kathryn Jablakow will be focusing on Strategic Goal 2: Promote and disseminate high quality research across the broad spectrum of engineering education.
- Archie Holmes will be focusing on Strategic Goal 3: Promote and disseminate empirically-based teaching practices.
- Sarah Zappe & Daria Kotys-Schwartz focused on Strategic Goal 1 (Ensure that ERM is a welcoming community, open to researchers and educators of diverse backgrounds and at all levels of experience and interest.) last year and will focus on Goal 4 this year: Promote and/or develop workshops and training programs for the engineering education community.
  - For ASEE 2015 Sarah & Daria developed the ERM Welcome Breakfast to integrate new members of ERM.
  - To continue the charge that Elliot gave the ERM Directors, Sarah & Daria have been working with Cindy Finelli to develop a workshop that addresses the 4th goal in the ERM Strategic Plan. The purpose of the workshop is to introduce new and current members of the ERM division to engineering education research. The intended workshop audience includes faculty who are just getting started or are interested in conducting research in engineering education. Our plan is to submit the workshop proposal to ERM (along with other workshop proposals). However, we would like to have this workshop sanctioned as a ERM training/workshop.
- Please contact any of the Directors if you have ideas to share or would like to help.

#### **Newsletter Editor – Glen Livesay**

Nothing reported.

#### **Helen Plants Award – Marisa Orr**

2014 Representatives

- ERM: Marisa Orr, Chrys Demetry
- Computer Society: Mats Daniels (chair)

- Education Society: not appointed

Ten special sessions were evaluated. Attendance varied from just a few to about 24. There were several outstanding sessions which made the decision difficult, but one in particular had overwhelmingly positive reviews, with several mentioning it was the best session they had attended. The winner of the 2014 Helen Plants Award is: “**Agents for STEM Change - Articulating the Goals of Our Community,**” run by:

- \* Rebecca Bates (Minnesota State University, Mankato, USA)
- \* Alan Cheville (Bucknell University, USA)
- \* Jennifer Karlin (SD School of Mines and Technology, USA)
- \* Lisa Benson (Clemson University, USA)
- \* Cynthia Finelli (University of Michigan, USA)
- \* Susan M. Lord (University of San Diego, USA)

This year ERM will be the chair. Mats Daniels has been reappointed from the Computer Society, but will be unable to attend, so Dr Aletta Nylén has been appointed as a substitute. An Education Society Representative has not yet been named. This is the last year of Marisa’s term.

**Ben Dasher Award Committee – Noemi Mendoza**

Nothing reported.

**Webmaster - Geoffrey Herman**

Nothing to report.

**FIE Steering Committee – Jim Morgan, Beth Eschenbach, & Archie Holmes**

**From:** Dr. Russ Meier, IEEE Education Society Vice President of Conferences **Subject:** ASEE/IEEE Frontiers in Education (FIE) Conference Statistics  
**To:** Dr. James Sluss, IEEE Education Society 2015 President  
**cc:** FIE Steering Committee, IEEE Education Society Board of Governors

**1. INTRODUCTION AND HISTORICAL SPONSORSHIP**

The Frontiers in Education conference (FIE) is a well-respected international conference on electrical engineering and computer science education. The IEEE Education Society founded the conference in 1971. The American Society for Engineering Education joined as a co-sponsor in 1973. For more than two decades, these two sponsoring societies held the conference in various locations around the United States and, occasionally, in international venues. In 1995, the IEEE Computer Society became a sponsor and together these three groups have continued to plan high quality events that provide engineering and computer science educators the opportunity to network and showcase peer-reviewed scholarly contributions in educational research and classroom practice. In 2013, the FIE Steering Committee formed formal policy that places FIE within the continental United States with the possibility of an international location at five year intervals. The first international location chosen was Madrid in 2014. Thus, FIE returns to the United States for 2015-2018 with 2019 as the next potential international date.

The educational research and the educational practice literature generated by FIE is regularly cited in scholarly work and inspired a well-regarded textbook in engineering education written by John Heywood and published by IEEE Press in 2001. Dr. Heywood is currently working on a textbook revision that will update the text to

include the most recent FIE reference citations from the years between 2001 and 2014.

## 2. MISSION AND VISION

The Frontiers in Education conference strives to be the most relevant and respected forum for disseminating innovations that improve computer science, electrical engineering, and technology education. The conference helps engineering and computer science educators learn about innovations in learning theory, educational technology, and classroom techniques.

To achieve its mission, Frontiers in Education creates an engaging conference program that relies upon a number of presentation formats and social networking events to bring together a worldwide community of teachers. The conference values diversity and the learning that occurs when ideas are shared and differing opinions reflect multiple viewpoints. The conference envisions a collaborative event where peer-reviewed research results and peer-reviewed classroom practice contributions are both respected and encouraged. These values reflect the conference goal of helping educators continue their own lifelong learning about their profession of teaching.

Table 1 provides acceptance information for the past seven years. Note that FIE acceptance rate is quoted based on the full two-level peer review of acceptable papers. Thus, in 2014, 895 abstracts were deemed appropriate to move to full-paper creation and peer-review. After peer-review,  $480 / 895 = 57\%$  of the original author contacts result in published work. The acceptance rate is also plotted with a trend line. The slight upward trend is caused by the 2013 outlier year. The overall trend line has an upward directional slope but is a nearly horizontal line with an average around 50% when the outlier is removed.

Table 1: Eight Years of FIE Acceptance Rate Data

Year	Accept Rate	Abstracts	Published	Trend
2014	57%	895	507	
2013	70%	609	429	
2012	43%	690	300	
2011	60%	736	440	
2010	45%	833	379	
2009	45%	783	355	
2008	47%	876	411	
2007	55%	734	403	

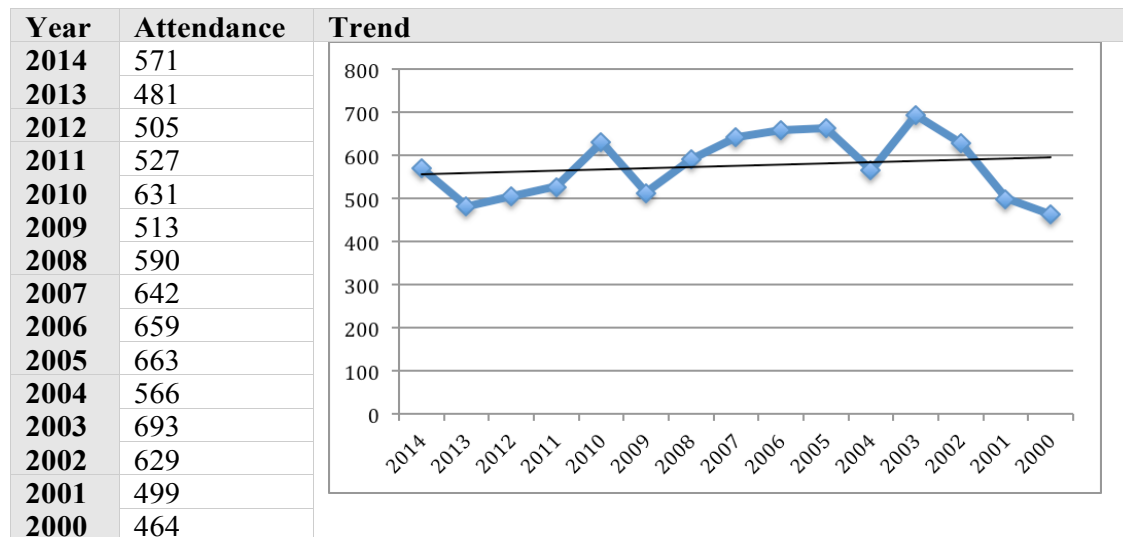
## 3. ATTENDANCE STATISTICS

The Frontiers in Education Conference is one of the world's premier conference events covering the areas of electrical engineering, computer engineering, software engineering, and computer science education. It has a loyal author and attendee base. Registrations have remained relatively constant over the past fifteen years. This is remarkable when the worldwide economic recession is considered. The reason is the sense of community that FIE provides to attendees: the high quality technical papers consistently provide state-of-the-art conversation in education, the registration fee has remained relatively affordable, and registration pays for an opening reception, three breakfasts, three lunches, all coffee and refreshment breaks, as well as the conference



bag, the proceedings, an exhibit hall, free wireless internet, and other similar amenities. Registrants consistently compliment FIE on the common food functions that foster a sense of camaraderie and provide ample opportunity for participant networking. Table 2 provides the statistical summary of FIE registration in the 21<sup>st</sup> century. The trend line is nearly horizontal with an average attendance of 576 people.

Table 2: FIE Attendance in the 21<sup>st</sup> Century



#### 4. INDEXING SERVICE STATISTICS

Authors and grant writers often want to know the impact factor statistics for the Frontiers in Education Conference. I have included five measures that are easily identified using the Internet. The FIE Steering Committee has a strategic goal of increasing the impact factor of FIE over the next five years through systematic refinement of the type and quality of papers submitted to the conference. I have included five impact factor ratings in Table 3.

- The Computing Research and Education Association of Australia ranks conference proceedings using a four-level scale: A\* = flagship conference and a leading venue in the discipline, A = excellent conference and highly respected in the discipline, B = good conference that is well regarded in the discipline, C = meets minimum standards
- The Excellence in Research for Australia report ranks conferences using a three-level scale: A = best conference (top 20% of conferences in the discipline), B, and C.
- Google Scholar h5-index: This measure reports paper citations over the past five years (h5). The h-index is the largest number h such that h articles published in the last five years have at least h citations each.
- Scopus SCImago Journal h-index is that largest number h such that h articles published in the included years have at least h citations each.

Overall, the conference has a good reputation and achieves ratings higher than or consistent with other conferences in the engineering education field. I have included four other conferences in Table 3 for comparison: the IEEE Global Engineering Education Conference (EDUCON), the ASEE National Conference and Exhibition

(ASEE), the ACM Technical Symposium on Computer Science Education (SIGCSE), and the IEEE Conference on Software Engineering Education and Training. This data is used by the FIE Steering Committee to set strategic direction for calls-for-papers, instructions to authors, and peer-reviewers.

Table 3: FIE Relevance and Impact Statistics

<b>Measure</b>	<b>FIE</b>	<b>EDUCON</b>	<b>ASEE</b>	<b>SIGCSE</b>	<b>CSEET</b>
<b>Computing Research and Education Excellence in Research for Australia</b>	B	no rating	B	A	C
<b>Google Metrics h5-index</b>	14	15	no rating	27	11
<b>SCImago Journal h-index</b>	12	6	5	11 (5 yrs.)	3 (5 yrs.)

**Apprentice Faculty Grant Award – Nadia Kellam**

Nothing reported.

**ERM ASEE Best Paper Award – David Knight**

Nothing reported.