



AMERICAN SOCIETY FOR
ENGINEERING EDUCATION

Industrial Engineering Division

Fall 2019 Newsletter

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2020 ASEE Annual Conference and Exposition

The Industrial Engineering Division (IED) officers encourage the current IED members to plan to attend as well as invite colleagues to the 127th ASEE Annual Conference and Exposition which will be held in Montréal, Québec, Canada, June 21-24, 2020. The division's conference theme for the year is Artificial Intelligence and Industrial Engineering Education.

The abstract review deadline for the reviewers is by **Monday, October 28**. Session, workshop, panel, and distinguished lecture requests deadlines are also on the same date. IED authors will be notified the acceptance or rejection of their abstract submissions by **Monday, November 4**. The final paper drafts will be due by **Monday, February 3** for the accepted abstracts. The blind draft paper review to the program chair from the reviewers will be by **Monday, February 24**. The authors will receive a consolidated paper-review feedback from the program chair by **Monday, March 2**. Authors will be notified the final paper acceptance or rejection decision by **Monday, March 23**, after resubmitting the blind paper with applicable requested revisions by **Monday, March 16**.

Current IED Officers

Lisa Bosman from Purdue University is the new acting secretary/treasurer for the 2019-2020 academic year. Leonardo Bedoya-Valencia is a new director replacing Jane Frasier, who will soon retire. Jessica (Matson) Oswald agreed to continue another term as a director. Gene Dixon, the outgoing award/past division chair, retired at the end of August from East Carolina University.

The full list of the current IED officers for the year ending June 2019 is as presented below.

Division Chair:	Paul C. Lynch
Program Chair:	Ebisa Wollega
Program Chair-Elect:	Raymond Smith III
Secretary/Treasurer:	Lisa Bosman
Awards/Past Division Chair:	Justin Kile
Directors:	Rick Olson (2020) Tish Pohl (2020) Jessica (Matson) Oswald (2021) Leonardo Bedoya-Valencia (2021)
Webmaster:	Lawrence Whitman
Diversity Committee Delegate	Karen Bursic

2019 ASEE Conference IED Business Meeting Summary

Twenty-two members attended the annual IED business meeting. Topics discussed include ASEE code of conduct, bylaws, affiliated divisions, conference attendance, finance, and IED papers statistics.

The Professional Interest Council I (PIC I) chair Agnieszka Miguel reported on the ongoing effort to establish the code of conduct around meeting committee policies and procedures. Development of a moderator's handbook, which describes new ethics policies, is being considered to help communicate the details of the code of conduct when finalized.

The Chair also mentioned a few points related to finances. First, a replacement for ASEE's information management system, called Monolith, is presently being investigated since the system is unable to interface with apps, accounting and registration processes. Resolving these interface requirements would greatly enhance business operations and member experience. An RFP is being developed and the documentation of processes is needed. Second, each division is requested to provide a plan regarding how they will spend their BASS account money with respect to member services, or enhanced programming (see attached letter). Attendees proposed and discussed several suggestions, such as establishing a student paper travel grant, offering a workshop for student team building, increasing the paper award amount to attract participation, and offering a travel grant aimed at new member recruitment.

The Chair also discussed the current division membership, and evaluation of ASEE PIC reorganization. As of 3/31/2019, PIC I division membership stood at 4231 members with ASEE total organization membership at 10,253 members. Past PIC I division membership has been 4204 (in 2018), 4310 (2017), and 4451 (2016). Five PIC's represent a total of 53 divisions or constituent committees - where 22 of the

divisions are associated with disciplines. For several years, requests have been made to realign some of the PIC's to better align with interests and subject matter divisions. After careful review, three reorganization scenarios have been drafted. The next step would be for the divisions to provide their evaluation and feedback on the proposals to further refine a reorganization plan (see attached letter). Membership in attendance at the meeting expressed the need to strengthen collaboration across the PIC in general.

Lastly, Christi Patton Luks was introduced as the incoming PIC I chair (2019-2022), succeeding Agnieszka Miguel. Christi is an associate teaching professor, chemical and biochemical engineering, Missouri S&T.

The IED program chair Paul C. Lynch presented the IED conference papers statistics by comparing the current year to the past three years as shown below.

	2019	2018	2017	2016
Abstracts	15	36	19	27
Drafts submitted	9	24	-	-
Draft papers rejected	0	2	2	-
No final submitted	0	1	-	-
Papers transferred	0	0	-	-
Final papers	9	21	9	16
Diversity related	2	7	2	-
Posters	0	2	1	0
Panels	0	0	1	0
Reviewer pool	31	60	63	-
Reviewers assigned	17	51	36	-

Karen Bursic, diversity committee delegate, stated in her update only 30% of the divisions submitted a diversity paper this year. The diversity committee is examining opportunities to increase visibility and future participation. Two papers for the division were identified by the review committee this year as meeting the criteria: deals with underrepresented groups or addresses different learning capabilities.

2019 Awards

IED Best Paper Award

- Aimee Ulstad and Lora Mavrouli, "Aggregating Industrial Engineering Concepts Through Cookie Manufacturing". Authors are from The Ohio State University.

IED Best Paper Award Runner-Up

- Alejandro Salado and Andrew Katz, "Monetizing Life May Be the Ethical Thing to Do". Authors are from Virginia Tech and Purdue University, respectively.

New IE Educator Outstanding Paper Award

- Omar Ashour, Christian Emmanuel Lopez, and Conrad Tucker, "An Introduction to the CLICK Approach: Leveraging Virtual Reality to Integrate the Industrial Engineering Curriculum". Authors are from Penn State Behrend (Ashour) and Penn State University (Lopez and Tucker).

Distinguished Service Award

- Letitia Pohl, University of Arkansas

June 24, 2019

Dr. Agnieszka Miguel
PIC-1 Outgoing Chair
American Society for Engineering Education

Dr. Christi Patton Luks
PIC-1 Incoming Chair
American Society for Engineering Education

Subject: ASEE Industrial Engineering Division BASS Account Spending

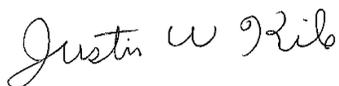
Dear Dr. Miguel and Dr. Luks:

Thank You for attending the ASEE Industrial Engineering Division Business meeting on Monday June 17th at the Marriott Waterside Hotel in Tampa, FL. During this meeting, you asked the Industrial Engineering Division to respond with a letter explaining how the division would spend BASS account resources moving forward. After much discussion in the Division Business meeting from members, past executive board members and current executive board members, the following recommendations were brought forward for future spending:

- (1) Continue to sponsor Annual Conference IED Travel Grants for New Attendees: \$500 per person selected
- (2) Continue to sponsor Annual IED Best Paper Award: \$250 for first author plus an engraved plaque
- (3) Continue to sponsor Annual IED New IE Educator Outstanding Paper Award: \$250 per author, up to \$500 per paper plus an engraved plaque
- (4) Continue to sponsor Annual IED Outstanding Student Paper Award: \$250 per author, up to \$500 per paper plus a certificate of recognition
- (5) Continue to sponsor IED Distinguished Service and Lifetime Achievement Awards: Engraved plaques provided for the recipients
- (6) Continue to provide IED/SED/EED/EMD joint banquet tickets for Annual IED award winners
- (7) Continue to provide food/ refreshments at the Annual IED Business meeting
- (8) Continue to provide favors/ handouts (as needed) for the Annual Conference Division Mixer
- (9) Pay ASEE Administrative Fees

Looking back at the Industrial Engineering Division financial position three years, the BASS account balance has decreased from approximately \$22,000.00 in 2016 to \$16,000.00 (after conference expenses) in 2019. The division is incurring approximately \$2000 more in expenses than it receives in revenues. Over time, the BASS account balance will continue to decrease as annual expenses are outweighing revenues. The division would like to make sure money is being spent on its members while also remaining fiscally responsible for the division to remain strong well into the future.

Sincerely,



Dr. Justin W. Kile
Outgoing Division Chair, Industrial Engineering
Division, ASEE



Dr. Paul C. Lynch
Incoming Division Chair, Industrial Engineering
Division, ASEE

June 24, 2019

Dr. Agnieszka Miguel
PIC-1 Outgoing Chair
American Society for Engineering Education

Dr. Christi Patton Luks
PIC-1 Incoming Chair
American Society for Engineering Education

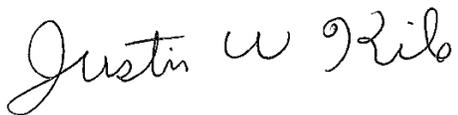
Subject: ASEE Industrial Engineering Division- Potential PIC Reorganization

Dear Dr. Miguel and Dr. Luks:

Thank You for attending the ASEE Industrial Engineering Division Business meeting on Monday June 17th at the Marriott Waterside Hotel in Tampa, FL. During this meeting, you asked the Industrial Engineering Division to respond with a letter regarding how the division felt about the (3) potential PIC Reorganization scenarios that you presented to the division. The (3) potential scenarios are attached to this letter. After much discussion in the Division Business meeting from members, past executive board members and current executive board members, the following outlines the overall feel for the Potential PIC Reorganization:

- (1) Scenario RED: ***keeping Industrial Engineering (IED), Engineering Economy (EED), Engineering Management (EMD), and Systems Engineering (SED) in the same PIC (#4) was the overwhelming favorite.*** There is significant overlap in membership between these four divisions. The divisions work together throughout the year to plan division sessions for the ASEE annual conference. Each year, the four divisions come together for an annual banquet at the ASEE annual conference.
- (2) Scenario GREEN/ BLUE: there was minimal discussion regarding the difference for IED between these scenarios. The overall consensus was that IED was not in favor of scenario GREEN or BLUE.
- (3) There was some discussion regarding the size of the Educational Research and Methods Division in Scenario RED PIC (#4) when compared to the remainder of the divisions within this proposed PIC. It was noted that the PIC Reorganization committee should discuss the potential impact of such a large division in a PIC with divisions that are significantly smaller.

Sincerely,



Dr. Justin W. Kile
Outgoing Division Chair, Industrial Engineering
Division, ASEE



Dr. Paul C. Lynch
Incoming Division Chair, Industrial Engineering
Division, ASEE

Red Scenario

Divisions	Sum of Membership June 2018	Sum of FY 2018 - YTD	Sum of # Published Papers in Annual 2018	Sum of # Technical Sessions at Annual 2018
1	5,791	\$ 81,891	284	57
Computers in Education Division	408	\$ 4,038	49	10
Computing and Information Technology Division	874	\$ 750	29	8
Electrical and Computer Division	758	\$ 19,891	50	8
Energy Conversion and Conservation Division	1,150	\$ 12,781	18	4
Engineering Leadership Development Division	1,113	\$ -	15	3
Engineering Physics and Physics Division	187	\$ 7,844	11	3
Entrepreneurship & Engineering Innovation Division	377	\$ 11,950	38	8
Experimentation and Laboratory Oriented Studies Division	312	\$ 10,028	30	5
Instrumentation Division	131	\$ 3,418	12	2
Mathematics Division	176	\$ 7,847	23	4
Software Engineering Division	305	\$ 3,344	9	2
2	4,637	\$ 95,727	375	74
Architectural Engineering Division	237	\$ 237	11	3
Civil Engineering Division	540	\$ 4,814	56	8
Construction Engineering Division	124	\$ 5,629	15	5
Environmental Engineering Division	327	\$ 4,066	13	3
First-Year Programs Division	541	\$ 19,316	61	12
International Division	218	\$ 10,522	38	6
Military and Veterans Division	250	\$ -	11	3
Minorities in Engineering Division	547	\$ 14,361	24	5
Pre-College Engineering Education Division	592	\$ 19,180	93	19
Two-Year College Division	389	\$ 1,419	18	3
Women in Engineering Division	872	\$ 16,183	35	7
3	5,362	\$ 85,661	260	51
Biological and Agricultural Engineering Division	129	\$ 9,563	7	2
Biomedical Engineering Division	491	\$ 16,628	59	6
Chemical Engineering Division	476	\$ 19,840	34	6
Community Engagement Division	819	\$ 3,414	30	5
Engineering and Public Policy Division	198	\$ 13,680	8	2
Engineering Ethics Division	1,254	\$ 254	29	5
Engineering Libraries Division	213	\$ 12,523	24	5
Liberal Education/Engineering & Society Division	344	\$ 3,049	46	13
Materials Division	813	\$ 6,130	13	4
Technological and Engineering Literacy/Philosophy of Engine	625	\$ 580	10	3
4	3,963	\$ 100,983	289	58
Educational Research and Methods Division	1,452	\$ 33,761	112	20
Engineering Economy Division	110	\$ 13,663	4	1
Engineering Management Division	241	\$ 6,751	15	3
Faculty Development Constituent Committee Division	207	\$ -	22	5
Graduate Studies Division	253	\$ 8,260	24	5
Industrial Engineering Division	239	\$ 19,205	21	4
Manufacturing Division	232	\$ 2,692	47	10
New Engineering Educators Division	278	\$ 9,527	14	3
Student Division	695	\$ 3,977	18	3
Systems Engineering Division	256	\$ 3,147	12	4
5	5,443	\$ 354,074	289	62
Aerospace Division	297	\$ 2,876	14	3
College Industry Partnerships Division	523	\$ 42,769	18	3
Continuing Professional Development Division	160	\$ 49,486	10	2
Cooperative and Experiential Education Division	220	\$ 11,690	12	3
Design in Engineering Education Division	893	\$ 14,485	52	13
Engineering Design Graphics Division	167	\$ 19,060	15	3
Engineering Technology Division	464	\$ 176,133	51	11
Mechanical Engineering Division	821	\$ 29,012	51	9
Mechanics Division	303	\$ 8,284	28	6
Multidisciplinary Engineering Division	1,389	\$ 275	33	7
Ocean and Marine Division	206	\$ 4	5	2
Grand Total	25,196	\$ 718,336	1497	302

Scenario Green

	Sum of Member ship June 2018	Sum of FY 2018 - YTD	Sum of # Published Papers in Annual 2018	Sum of # Technical Sessions at Annual 2018
1	4794	\$ 104,929	307	54
Aerospace Division	297	\$ 2,876	14	3
Architectural Engineering Division	237	\$ 237	11	3
Biological and Agricultural Engineering Division	129	\$ 9,563	7	2
Biomedical Engineering Division	491	\$ 16,628	59	6
Chemical Engineering Division	476	\$ 19,840	34	6
Civil Engineering Division	540	\$ 4,814	56	8
College Industry Partnerships Division	523	\$ 42,769	18	3
Community Engagement Division	819	\$ 3,414	30	5
Computers in Education Division	408	\$ 4,038	49	10
Computing and Information Technology Division	874	\$ 750	29	8
2	5232	\$ 194,126	296	61
Construction Engineering Division	124	\$ 5,629	15	5
Continuing Professional Development Division	160	\$ 49,486	10	2
Cooperative and Experiential Education Division	220	\$ 11,690	12	3
Design in Engineering Education Division	893	\$ 14,485	52	13
Educational Research and Methods Division	1452	\$ 33,761	112	20
Electrical and Computer Division	758	\$ 19,891	50	8
Energy Conversion and Conservation Division	1150	\$ 12,781	18	4
Engineering and Public Policy Division	198	\$ 13,680	8	2
Engineering Design Graphics Division	167	\$ 19,060	15	3
Engineering Economy Division	110	\$ 13,663	4	1
3	5236	\$ 248,865	309	63
Engineering Ethics Division	1254	\$ 254	29	5
Engineering Leadership Development Division	1113	\$ -	15	3
Engineering Libraries Division	213	\$ 12,523	24	5
Engineering Management Division	241	\$ 6,751	15	3
Engineering Physics and Physics Division	187	\$ 7,844	11	3
Engineering Technology Division	464	\$ 176,133	51	11
Entrepreneurship & Engineering Innovation Division	377	\$ 11,950	38	8
Environmental Engineering Division	327	\$ 4,066	13	3
Experimentation and Laboratory-Oriented Studies Division	312	\$ 10,028	30	5
Faculty Development Constituent Committee Division	207	\$ -	22	5
First-Year Programs Division	541	\$ 19,316	61	12
4	3530	\$ 98,419	303	63
Graduate Studies Division	253	\$ 8,260	24	5
Industrial Engineering Division	239	\$ 19,205	21	4
Instrumentation Division	131	\$ 3,418	12	2
International Division	218	\$ 10,522	38	6
Liberal Education/Engineering & Society Division	344	\$ 3,049	46	13
Manufacturing Division	232	\$ 2,692	47	10
Materials Division	813	\$ 6,130	13	4
Mathematics Division	176	\$ 7,847	23	4
Mechanical Engineering Division	821	\$ 29,012	51	9
Mechanics Division	303	\$ 8,284	28	6
5	6404	\$ 71,997	282	61
Military and Veterans Division	250	\$ -	11	3
Minorities in Engineering Division	547	\$ 14,361	24	5
Multidisciplinary Engineering Division	1389	\$ 275	33	7
New Engineering Educators Division	278	\$ 9,527	14	3
Ocean and Marine Division	206	\$ 4	5	2
Pre-College Engineering Education Division	592	\$ 19,180	93	19
Software Engineering Division	305	\$ 3,344	9	2
Student Division	695	\$ 3,977	18	3
Systems Engineering Division	256	\$ 3,147	12	4
Technological and Engineering Literacy/Philosophy of Engineering Division	625	\$ 580	10	3
Two-Year College Division	389	\$ 1,419	18	3
Women in Engineering Division	872	\$ 16,183	35	7
Grand Total	25196	\$ 718,336	1497	302

Scenario Blue

Divisions	Sum of		Sum of #	Sum of #
	Membership June 2018	Sum of FY 2018 - YTD	Published Papers in Annual 2018	Technical Sessions at Annual 2018
1	6538	\$ 104,569	403	79
Computers in Education Division	408	\$ 4,038	49	10
Computing and Information Technology Division	874	\$ 750	29	8
Educational Research and Methods Division	1452	\$ 33,761	112	20
Electrical and Computer Division	758	\$ 19,891	50	8
Engineering Leadership Development Division	1113	\$ -	15	3
Engineering Libraries Division	213	\$ 12,523	24	5
Faculty Development Constituent Committee Division	207		22	5
First-Year Programs Division	541	\$ 19,316	61	12
New Engineering Educators Division	278	\$ 9,527	14	3
Software Engineering Division	305	\$ 3,344	9	2
Two-Year College Division	389	\$ 1,419	18	3
2	5366	\$ 124,650	327	66
Biological and Agricultural Engineering Division	129	\$ 9,563	7	2
Biomedical Engineering Division	491	\$ 16,628	59	6
Chemical Engineering Division	476	\$ 19,840	34	6
Design in Engineering Education Division	893	\$ 14,485	52	13
Engineering Design Graphics Division	167	\$ 19,060	15	3
Engineering Economy Division	110	\$ 13,663	4	1
Engineering Ethics Division	1254	\$ 254	29	5
Entrepreneurship & Engineering Innovation Division	377	\$ 11,950	38	8
Experimentation and Laboratory-Oriented Studies Division	312	\$ 10,028	30	5
Liberal Education/Engineering & Society Division	344	\$ 3,049	46	13
Materials Division	813	\$ 6,130	13	4
3	4006	\$ 55,504	202	43
Architectural Engineering Division	237	\$ 237	11	3
Civil Engineering Division	540	\$ 4,814	56	8
Construction Engineering Division	124	\$ 5,629	15	5
Energy Conversion and Conservation Division	1150	\$ 12,781	18	4
Engineering Physics and Physics Division	187	\$ 7,844	11	3
Environmental Engineering Division	327	\$ 4,066	13	3
Instrumentation Division	131	\$ 3,418	12	2
Mathematics Division	176	\$ 7,847	23	4
Mechanics Division	303	\$ 8,284	28	6
Ocean and Marine Division	206	\$ 4	5	2
Technological and Engineering Literacy/Philosophy of Engineerir	625	\$ 580	10	3
4	5027	\$ 260,232	320	67
Engineering and Public Policy Division	198	\$ 13,680	8	2
Engineering Management Division	241	\$ 6,751	15	3
Engineering Technology Division	464	\$ 176,133	51	11
International Division	218	\$ 10,522	38	6
Military and Veterans Division	250	\$ -	11	3
Minorities in Engineering Division	547	\$ 14,361	24	5
Multidisciplinary Engineering Division	1389	\$ 275	33	7
Pre-College Engineering Education Division	592	\$ 19,180	93	19
Systems Engineering Division	256	\$ 3,147	12	4
Women in Engineering Division	872	\$ 16,183	35	7
5	4259	\$ 173,381	245	47
Aerospace Division	297	\$ 2,876	14	3
College Industry Partnerships Division	523	\$ 42,769	18	3
Community Engagement Division	819	\$ 3,414	30	5
Continuing Professional Development Division	160	\$ 49,486	10	2
Cooperative and Experiential Education Division	220	\$ 11,690	12	3
Graduate Studies Division	253	\$ 8,260	24	5
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Manufacturing Division	232	\$ 2,692	47	10
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