ASEE Industrial Engineering Division Business Meeting

Tuesday 23rd June 2024
Portland, Oregon
Prepared by Vettrivel Gnaneswaran

Welcome/Call to Order

The Division Chair, McKenzie Landrum called the meeting to order at 3:17 pm PDT in Multnomah Room of the Hyatt Regency Portland Hotel and welcomed everyone to the Industrial Engineering Division (IED) Business Meeting. McKenzie asked the attendees to introduce themselves. The Program Chair, Thomas Omwando and member Vettrivel Gnaneswaran took the minutes and passed around a sign-up sheet. The following members were present.

	Name	email	Affiliation
1	Thomas Omwando	tomwando@simpsonu.edu	Simpson University
2	Elif Akgal	akcali@ise.ufl.edu	University of Florida
3	Tish Pohl	ipohl@uark.edu	University of Arkansas
4	Scott Streiner	scs147@pitt.edu	University of Pittsburgh
5	Karen Bursic	kbursic@pitt.edu	University of Pittsburgh
6	Janice Mejia	j-mejia@northwestern.edu	Northwestern University
7	Corey Kiassat	coey.kiassat@qu.edu	Quinnipiac University
8	Laura Savage	<u>laura.savage@vt.edu</u>	Virginia Tech
9	Houshang Darabi	hdarabi@uic.edu	University of Illinois at Chicago
10	Vettrivel Gnaneswaran	gnaneswaranv@uwplatt.edu	University of Wisconsin Platteville
11	Kate Abel	kabel@stevens.edu	Stevens Institute of Technology
12	Radu Babiceanu	babicear@erau.edu	Embry-Riddle Aeronautical
			University
13	Aneesha Gogineni	agoginen@svsu.edu	Saginaw Valley State University
14	Sanaz Motamedi	smotamedi@ufl.edu	University of Florida
15	McKenzie Landrum	mckenzie.landrum@ufl.edu	University of Florida
16	Katy Colbry	colbryka@msu.edu	Michigan State University
17	Raymond Smith	smithraym17@ecu.edu	East Carolina University
18	Sara Amani	saraamani@exchange.tamu.edu	Texas A&M University

McKenzie introduced the following officers for the year ending June 2024 and informed the members about position vacancies and that the Secretary/Treasurer Megan Hammond was not able to attend due to unavoidable circumstances.

Division Chair: McKenzie Landrum, presentProgram Chair: Thomas Omwando, present

• Assistant Program Chair: Vacant

- Secretary/Treasurer: Megan Hammond, absent
- Awards/Past Division Chair: Lisa Bosman, absent
- Directors:
 - Raymond Smith III (2025), present
 - Rick Olson (2024), absent
 - Tish Pohl (2024), present
 - Paul Lynch (2025), absent
- Webmaster: Lawrence Whitman, absent
- Commission on Diversity, Equity, and Inclusion Delegate: Karen Bursic, present
- P-12 Committee Representative: Justin W. Kile, absent

Approval of 2023 Meeting Minutes

The division chair and moderator, McKenzie Landrum led the members through the minutes from the 2023 business meeting for approval. Karen Bursic made a motion to approve the minutes, Laura Savage seconded the motion. The minutes were approved unanimously.

Program Chair Report

Thomas Omwando presented the following IED conference paper statistics

	2024	2023	2022	2021	2020	2019	2018
Abstracts submitted	29	34	15	21	21	15	36
Abstracts accepted	29	34	14	19	17	-	-
Drafts submitted	24	28	10	12	10	9	24
Drafts rejected	0	5	1	2	0	0	2
Final papers submitted	20	17	8	10	7	9	21
Papers transferred	0	2	0	0	0	0	0
Papers published	20	17	8	10	7	9	21
Diversity related	4	4	0	0	1	2	7
Posters	1	2	0	0	0	0	2
Panels	0	0	0	0	0	0	0

	2024	2023	2022	2021	2020	2019	2018
Reviewers pool	173	180	71	63	41	31	60
Reviewers - Active	41	44	42				
Reviewers - Recused	-	-	9				
Reviewers – No Response	132	136	20				
Reviews assigned			120	44	36	17	51
Reviews completed	192	144	87				
No. of reviews completed per paper (average)	Abstract = 2.3 Draft = 5.13		Abstract = 3.3 Draft = 4.2	Abstract = 3.4 Draft = 4.5	-	-	-

Awards Chair Report

McKenzie Landrum presented the following on behalf of Lisa Bowman.

 This year's both IED Best Paper Award and New IE Educator Outstanding Paper Award was

"Mixed Reality as a Teaching Tool for Improving Spatial Visualization in Engineering Students"

Ms. Israa Azzam, Purdue University, West Lafayette

Dr. Farid Breidi, Purdue University, West Lafayette

Dr. Faisal Aqlan, University of Louisville

Dr. Jose M. Garcia, Purdue University

Dr. Paul Asunda, Purdue University, West Lafayette

Financial Update

McKenzie Landrum presented the following financial update on behalf of Megan Hammond

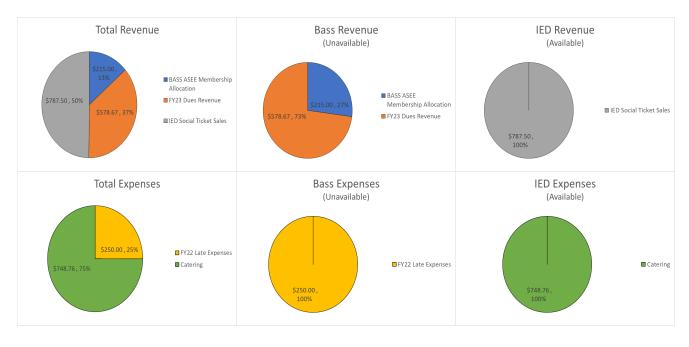
Financial Summary

(BASS Qrt2 - FY2024 - 3/31/2024)

		2023	2023 Error Adjustment	2024
	Starting Balance	\$14,983.35 (10/1/2022)	\$14,983.35 (10/1/2022)	\$15,527.02 (10/1/2023)
ilable	Revenue	\$793.67	\$793.67	\$195.00
Unavailable	Expense	\$0.00	<mark>\$250.00</mark>	\$0.00
	Ending Balance	\$15,777.02 (3/31/2023)	\$15,527.02 (9/30/2023)	\$15,722.02 (3/31/2024)
	Starting Balance	\$0.00 (10/1/2022)	\$0.00 (10/1/2022)	\$38.74 (10/1/2023)
Available	Revenue	\$787.50	\$787.50	\$264.00
Avail	Expense	\$998.76	\$748.76	\$0.00
	Ending Balance	-\$211.26 (9/30/2023)	\$38.74 (9/30/2023)	\$302.74 (3/31/2024)

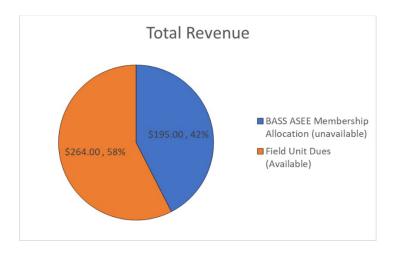
Financial Summary FY2023

(10/1/2022 - 9/30/2023)



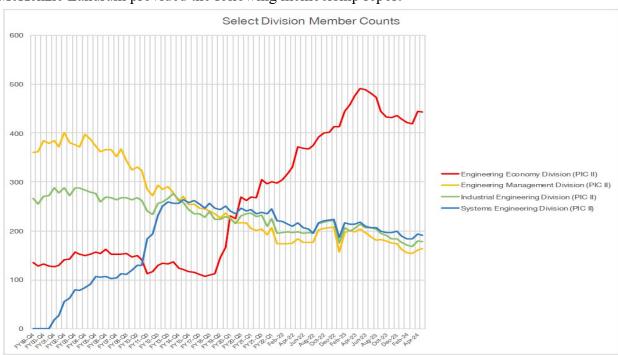
Financial Revenue Summary FY2024 YTD-Q2

(10/1/2023 - 3/31/2024)



Membership Report

McKenzie Landrum provided the following membership report



It was reported that as of June 21, 2024, the memberships in each of the divisions were

- o Engineering Economy Current 423
- o Engineering Management Current 160
- o IED 176
- o SYS 189

Proposal of Bylaw Amendment

McKenzie Landrum presented the following Bylaw Amendment proposal to the members

• The IED Board Members would like to bring forth the following amendment to the Bylaws of the division regarding Section 3: Membership. Concern around the decrease in number of dues paying members has caused the IED Board to consider actions to alleviate any burdens preventing individuals from joining the Industrial Engineering Division. If membership falls below a threshold, the division is at risk of being dropped by ASEE.

Original Bylaw Language - Section 3. Membership

"Membership of the Division shall consist of those members of the Society who wish to affiliate with the Division and pay (\$4) annual membership dues charged by ASEE."

Proposed Changes to Bylaw Language (Clean) – Section 3. Membership

"Membership of the Division shall consist of those members of the Society who wish to affiliate with the Division and pay \$0 in annual membership dues until frozen IED account balance is released and one year beyond. The \$4 annual membership dues charged by ASEE will be reinstated one year following the release of frozen dues."

Following discussions on the proposed Bylaw changes, a vote was called. The proposed changes were NOT approved with a 5-4 vote by the IED members who were present at that time. The membership changes is planned to be revisited in the following year.

2025 Call for Papers (IED Division)

McKenzie Landrum presented the following call for paper

2025 Industrial Engineering Division (IED) Call for Papers

The Industrial Engineering Division (IED) of the American Society for Engineering Education (ASEE) seeks papers for presentation at the 132nd ASEE Annual Conference and Exposition in Montreal, Quebec, Canada, June 22-25, 2025.

2025 IED Theme: Generative AI and Industrial Engineering Education

Generative AI refers to a subset of artificial intelligence (AI) techniques focused on generating new, original data or content that is similar to, but not identical to, the data it was trained on. Example generative AI applications include ChatGPT, DALLE, and more. Unlike traditional AI models that primarily focus on classification or prediction tasks, generative AI models are designed to create new data instances, such as images, text, audio, or even entire scenarios. Generative AI holds significant importance for Industrial Engineering for several reasons:

- Innovation and Optimization: Generative AI techniques can help industrial engineers
 explore new design possibilities and optimize existing processes. By generating diverse
 solutions, engineers can identify innovative approaches to improve efficiency, reduce costs,
 and enhance productivity within industrial settings.
- Complex Problem Solving: Industrial engineering often deals with complex systems and
 optimization problems. Generative AI algorithms, such as genetic algorithms, neural
 networks, and reinforcement learning, can assist in solving these intricate problems by
 exploring vast solution spaces and finding optimal or near-optimal solutions.
- Simulation and Modeling: Generative AI enables the creation of realistic simulations and
 models of industrial processes and systems. These simulations provide valuable insights
 into system behavior, allowing engineers to predict performance, identify bottlenecks, and
 evaluate the impact of different design choices without the need for costly physical
 prototypes.
- Automation and Decision Support: Industrial engineers can use generative AI for automating routine tasks and decision-making processes. Machine learning algorithms can analyze large datasets to identify patterns, trends, and anomalies, helping engineers make data-driven decisions more efficiently and accurately.
- Education and Skill Development: Introducing generative AI concepts and tools into
 industrial engineering education equips students with valuable skills for the future
 workforce. Understanding how to leverage AI technologies for problem-solving and
 decision-making prepares students to tackle real-world challenges in industrial settings.
- Interdisciplinary Collaboration: Generative AI sits at the intersection of various disciplines, including computer science, mathematics, and engineering. By incorporating generative AI into industrial engineering education, students can develop interdisciplinary skills and collaborate effectively with professionals from different backgrounds to tackle complex industrial problems.

Overall, integrating generative AI into industrial engineering education empowers students to leverage cutting-edge technologies for innovation, optimization, and problem-solving in industrial settings, ultimately driving improvements in productivity, efficiency, and sustainability.

The members unanimously supported this call for paper for the 2025 Industrial Engineering Division.

Election and Installation of New Officers

McKenzie Landrum conducted the election and installation. Because the bylaws provide for orderly transition of officers, only a new secretary/treasurer was needed to be elected. However, given the vacancy in Program Chair, McKenzie indicated that Sanaz Motamedi has expressed interest in serving in this role.

McKenzie Landrum made a motion to approve the nomination of Sanaz Motamedi for the position of program chair, Thomas Omwando seconded the motion. Sanaz was elected program chair by acclamation.

Following this Thomas Omwando nominated Vettrivel Gnaneswaran for the secretary/treasurer position. McKenzie Landrum made a motion to approve the nomination and Karen Bursic seconded the motion. Vettrivel was elected secretary/treasurer by acclamation.

There was concern on the seriousness of the office bearers and it was emphasized that officers need to take their roles seriously. It was emphasized that attendance of board members in the business meeting is important to provide leadership.

Board of directors: To serve as a board of directors, one needs to have been in a leadership role prior. McKenzie Landrum informed that Raymond Smith and Paul Lynch will continue to serve on the board of directors and for the other two positions, McKenzie nominated Lisa Bowman and requested Tish Pohl to continue to serve on the board of directors for another two-year term. McKenzie Landrum made a motion to approve both Lisa Bowman and Tish Pohl for the board of directors. Thomas Omwando seconded the motion. Both Lisa and Tish were elected by acclamation.

Commission on Diversity, Equity, and Inclusion Delegate: Karen Bursic after serving many years in this role expressed her intent to step-down from this role. Her services were appreciated.

Thomas Omwando nominated Mahesh Kumar Pallikonda from Austin Peay State University and Janice Mejia from Northwestern University self-nominated herself for this position. McKenzie Landrum called a vote and Janice Mejia was elected unanimously for this position.

The membership accepted the slate of directors as indicated below. The IED officers for the coming year will now be:

	2023 - 2024	2024 - 2025
Past Division Chair (Awards Chair)	Lisa Bosman	McKenzie Landrum
Division Chair	McKenzie Landrum	Thomas Omwando
Program Chair	Thomas Omwando	Sanaz Motamedi
Assistant Program Chair	TBD	Megan Hammond
Secretary/Treasurer	Megan Hammond	Vettrivel Gnaneswaran
	Raymond Smith ('25)	Raymond Smith ('25)
Board of Directors (2-year term)	Tish Pohl ('24)	Tish Pohl ('26)
board of birectors (2 year term)	Rick Olson ('24)	Lisa Bowman ('26)
	Paul Lynch ('25)	Paul Lynch ('25)
Commission on Diversity, Equity, and Inclusion Delegate	Karen Bursic	Janice Mejia
P12 Committee Representative	Justin Kile	Justin Kile
Webmaster	Lawrence Whitman	Lawrence Whitman

Professional Interest Council I Chair Report and Discussion

The Professional Interest Council II (PIC II) chair, Katy Colbry presented the following report.

- ASEE Strategic Plan
 - o Three big areas:
 - 1. Redefine ASEE's value proposition and continuously improve member's experience
 - 2. Increase membership for a thriving community of practice
 - 3. Financial sustainability

Feedback on these areas were solicited using a QR code prior to voting the following day

ASEE Finances

- Work on stabilizing ASEE finances is ongoing with operational costs being reduced
- Audits of prior year finances are ongoing and is expected to be caught up by end of FY2025.

- As financial audits are completed, overhead rate for that year is finalized. Final rates are likely lower than provisional rates, requiring payback to the government
- Future Committee identified changes to constitution, bylaws, and financial policies

BASS Accounts

- o BASS accounts are not frozen, they were emptied prior to October 1, 2022.
- o Timing of repayment to BASS accounts is uncertain
- Need to wait at least until financial audits are complete and government paid back
- o Division dues collected as of October 1, 2023, are being added to BASS balances
- o Division allocation of \$1 per member will be added to BASS balances in October
- Professional Interest Council II (PIC II) membership.
 - A summary of the ASEE membership was reported out as shown in the following table.

	1/2021	1/2022	1/2023	1/2024
Academic Institutions	420	433	360	364
Nonacademic Institutions	41	43	34	46
Individuals	9,573	9,108	8,440	8,783

• PIC / Conference updates

- o NEMO
 - Limited possibility for upgrades due to finances
- Divisions are welcome to fundraise to support activities
 - Reach out to the Conferences team for help
- COI policy
 - Papers submitted by program chairs are handled by the PIC Chair

• 2025 Annual Conference Paper Schedule

Abstract Submission Open	09/01/2024
Abstract Submission Deadline	10/01/2024
PC Abstract Accept/Reject	11/01/2024
Draft Paper Submission Deadline	1/15/2025

PC Reviewer Feedback Deadline	02/07/2025
Revised Paper Submission Deadline	02/21/2025
Reviewer Revisions Deadline	03/07/2025
Author Registration Deadline/ Early Bird	04/07/2025
Registration	04/07/2023
Finalized Paper Submission Deadline	05/01/2025

• Division Office Updates

- o List of division officers for 2024-25 due to Tim Manicom on July 1
- o Confirm that officers are members of both ASEE and your division
- o Include:
 - 1. BASS account holder different position from Treasurer, but can be the same person
 - 2. Delegate for inter-divisional town hall planning committee
 - 3. Delegate for Commission on Diversity, Equity, and Inclusion (CDEI)

• Upcoming Conference Venues

ASEE Annual Conference & Exposition

Year	Dates	Location
2023	June 25 - 28	Baltimore, Maryland
2024	June 23 - 26	Portland, Oregon
2025	June 22 - 25	Montreal, Quebec, Canada
2026	June 21 - 24	<u>Charlotte, North Carolina</u>
2027	June 20 - 23	<u>Toronto, Ontario, Canada</u>
2028	June 11 - 14	<u>Pittsburgh, Pennsylvania</u>
2029	June TBD	Honolulu, Hawaii

• 2024 Best PIC PapersPIC II Best Paper Award

- PIC I: To record or not to record? Collaborating through conflict
 by Crum, Bennett, Adler, Bergsman, Minkoff, Prybutok, from ChED
- PIC II: Equitable Engineering Identity? Race/Ethnicity and Gender Differences in the Predictors of Engineering Identity in First-Year Engineering

by Bahnson, McChesney, Cooper, Godwin, DeAngelo, Binning, from ERM

 PIC III: Navigating the Mystery: An Approach for Integrating Experiential Learning in Ethics into an Engineering Leadership Program

by Magarian, Feiler, McGonagle, Milligan, Rokosz, Schanne, Rahaman, de Weck, from LEAD

 PIC IV: Near-Peer Mentors' Discussions with a Student Avatar Experiencing Logistical Issues on a First-Year Design Team by Lottero-Perdue, Malladi, Headley, FYEP

 PIC V: The Wooden Bike Frame Challenge: Learning Statics Through Hands-On Design

by Buckley, Trauth, De Rosa, Doty, from MECH

- 2024 Conference Best Paper Award
 - o This year's Conference Best Paper Award was;
 - 1. Near-Peer Mentors' Discussions with a Student Avatar Experiencing Logistical Issues on a First-Year Design Team

by Lottero-Perdue, Malladi, Headley

This paper was submitted under First-Year Engineering Programs Division, PIC
 IV

Adjournment

McKenzie Landrum adjourned the meeting at 5:05 PDT.