Wavelengths

IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Volume 64 – Issue 10

Contents

Upcoming Events

We have several events coming up this month, all are listed below, FYI.
Note: All times are EST/EDT. If any events are missed do kindly bring them to the attention of wavelengths@ieee-sem.org. Enjoy!
You can also use this bookmark to view All of the links at a single glance
http://bit.ly/sem-upcoming

Event	Date	Time
TEMS October Chapter Meeting	2024-10-02	1900 hrs
Technical Presentation: In-Sensor AI Computing for Efficient Real-Time Machine Perception	2024-10-03	1200 hrs
Mercedes Massana - Taking Calculated Risks in Your Career and Finding Your Niche	2024-10-08	1900 hrs
Ch8: Adcom Teleconference	2024-10-10	1100 hrs
Section ExCom Monthly Meeting (Virtual) for October	2024-10-10	1830 hrs
Life Members Affinity Group Admin meeting	2024-10-14	1200 hrs
Future of Work: Engaged Leadership and Empowered Teams	2024-10-17	1900 hrs
TACom Admin meeting	2024-10-21	1200 hrs
Magnetics Seminar Series 2	2024-10-25	1300 hrs
Documentary Night: Secret of Tuxedo Park	2024-11-01	1830 hrs
Section Senior Elevation Event	20240-11-09	1000 hrs

Chair's Column

What to look forward to this month of September:

- ✓ **We recently celebrated the 140th Anniversary of the IEEE, see the report of this event elsewhere in this issue!** *The IEEE is now 140 years old.*
- ✓ Interestingly, today October 1 (the first Tuesday of October) is celebrated as IEEE Day. You can learn of what various folks are doing all over the world to observe this occasion – see https://ieeeday.org/vtools-events-map/ . We did this already with our recent 140th event! 😊. Also expect an interesting video being prepared by IEEE-USA folks to help celebrate the occasion.
- ✓ We were on track to meet or exceed last 2023's activity count, but it appears we have lost a bit of momentum there, so expect a flurry of new activities to show up in both October and November! Stay tuned…….

Volunteering:
- ✓ We, IEEE Southeastern Michigan Section, function based on the work of our volunteers. If someone has important obligations that reduce their ability to volunteer, other volunteers need to step in and carry the load. The more volunteers we have, the easier the workload on everyone. Please volunteer, you will find the experience interesting and rewarding. There is a dedicated article on volunteering elsewhere in this edition.

What to look forward to:

You can find ALL the other upcoming events using the short URL link: **https://bit.ly/sem-upcoming**

Remember – every little bit helps, and the Section is here to help! If you have not taken the opportunity, do reach out to any of the Section officers (lifelong email contacts listed below). Who knows what unknown but immense value you may discover, by simply connecting with us. A possible membership annual rate discount, OR an upcoming soft skills event OR need of a professional member for a technical person resource OR opportunity to participate in a standards making process OR a chance to mentor a young graduate student in a domain badly needed in our section of the world OR network with a book publisher OR….the possibilities are limited only by your enthusiasm.

Finally, I ask you to help share news about our IEEE Section to fellow engineers. This will help us fulfill the mission and goals, which is to use technology to help society. Do help us gain more visibility – word of mouth, invitations to our tech events, skills, join as members, post our events to your social media feeds, etc.

Also of note – we take a great deal of interest in our members welfare. The *6th senior member elevation* event is taking place soon (November 9th). See the announcement in this issue. Note we have been timing these at least 2~3 weeks before each IEEE-HQ A&A panel meeting!

I look forward to hearing from you and seeing you at our events. As always, your ideas and suggestions are encouraged and welcome. If I don't hear back (good or bad) I will assume all is well 😊

Sharan Kalwani
Via email: chair@ieee-sem.org
Section members are encouraged to engage using <u>any</u> of these online platforms:

To reach any of our SECTION officers, for any help/assistance you seek you may try these easy to remember email addresses. The objective is to ensure business continuity, so one need not try to remember or hunt for the contact information! They can help you find your chapter officers or point you in the right direction for any query. They are:

- 📖 Chair is   chair@ieee-sem.org
- 📖 Vice Chair is   vicechair@ieee-sem.org
- 📖 Treasurer is   treasurer@ieee-sem.org
- 📖 Secretary is   secretary@ieee-sem.org
- 📖 Advisor is   advisor@ieee-sem.org

Tech Activities REPORT

Report ending: September 30th 2024

Ch's & AG's	Ave Tech Mtg. Attend	Ave Tech Mtg Guest	#L31 -Technical	#L31 -Admin	#L31 Professional	#L31 -Other	Geo-Unit Name	# Unreported	Total Mtgs
Cnslt	0	0	0	0	1	0	Consultants Network	0	1
LIFE	0	0	0	8	0	0	Life Members	0	8
WIE	29	21	2	7	2	0	Women In Engineering	0	11
YP	13	0	2	7	0	0	Young Professionals	0	9
1	0	0	0	5	0	0	Circuits & Systems, Signal Proc., Info Th.	0	5
2	117	21	4	3	0	0	Vehicular Technology	1	7
3	0	0	0	0	0	0	Aerospace & Elec. Sys., Communications	1	0
4	29	0	5	0	0	0	Trident (Ant, Elect Dev., uWave, Photo)	1	5
5	49	6	41	7	4	4	Computers	2	56
6	19	1	3	0	0	0	Geoscience & Remote Sensing	0	3
7	55	2	2	5	0	1	Power Engineering, Industrial App.	1	8
8	81	37	8	6	0	0	Electromagnetic Compatibility (EMC)	1	14
9	107	0	1	5	0	0	Power Electronics, Industrial Electronics	2	6
10	4	1	1	5	0	0	Engineering Management	0	6
11	0	0	0	2	0	0	Eng. in Medicine & Biology	0	2
12	16	2	1	1	0	0	Control Systems	0	2
13	0	0	0	0	0	0	Education	0	0
14	23	0	2	1	0	1	Robotics & Automation	0	4
15	29	0	5	0	0	0	Nuclear Plasma Science Society	1	5
16	0	0	0	1	1	0	Computational Intelligence / Sys.Man.Cyber.	1	2
17	16	1	3	0	0	1	Nano Technology Council	0	4
18	20	11	1	1	0	0	Magnetics Society	0	2
									0
SEM	111	61	3	18	4	1	SEM (Section)	6	26
Tot	717	162	84	82	12	8	NOTE: Highlight Green = Active	17	186
		23%					NOTE: Highlight clear = Concern		

SEM Section Chapter and Affinity group leaders who are not showing any technical or administrative meetings are encouraged to reach out to the TAcom for assistance. Those chapters and groups with unreported meetings please update your L31 reporting. Please refer to the Section Health snapshot. During a TAcom meeting this month actions were discussed to become more engaged with our Student Branch and Awards and Recognition committees. Plans are also being put into place to aide chapters with conducting this year's Section elections. We continue to exceed our projections for technical meetings hosted for our membership. Thanks to all GAs working to engage their membership.
V/r Jeffery V. Mosley
Chair, Technical Activities Committee (TAcom)
jvmosley@ieee.org
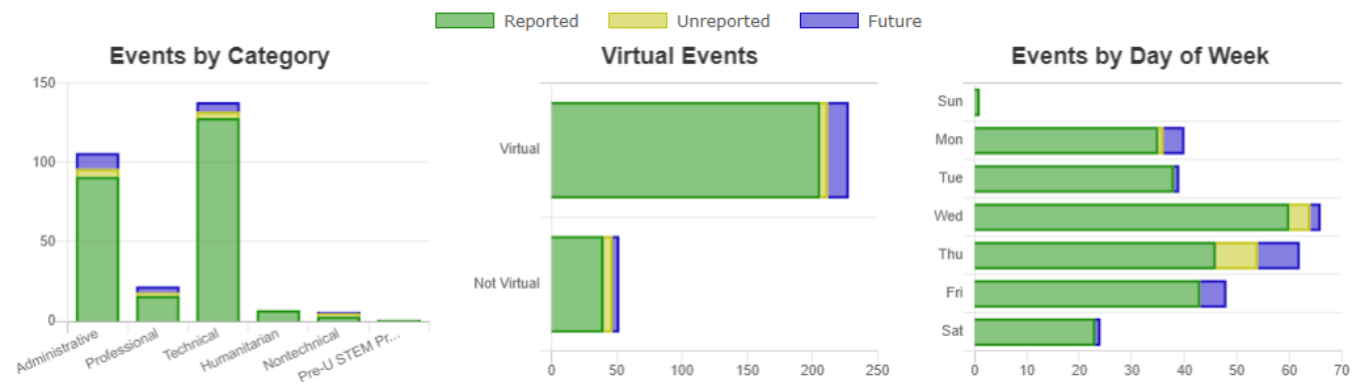Southeastern Michigan Section, IEEE Region 4

📈 EVENTS ACTIVITY

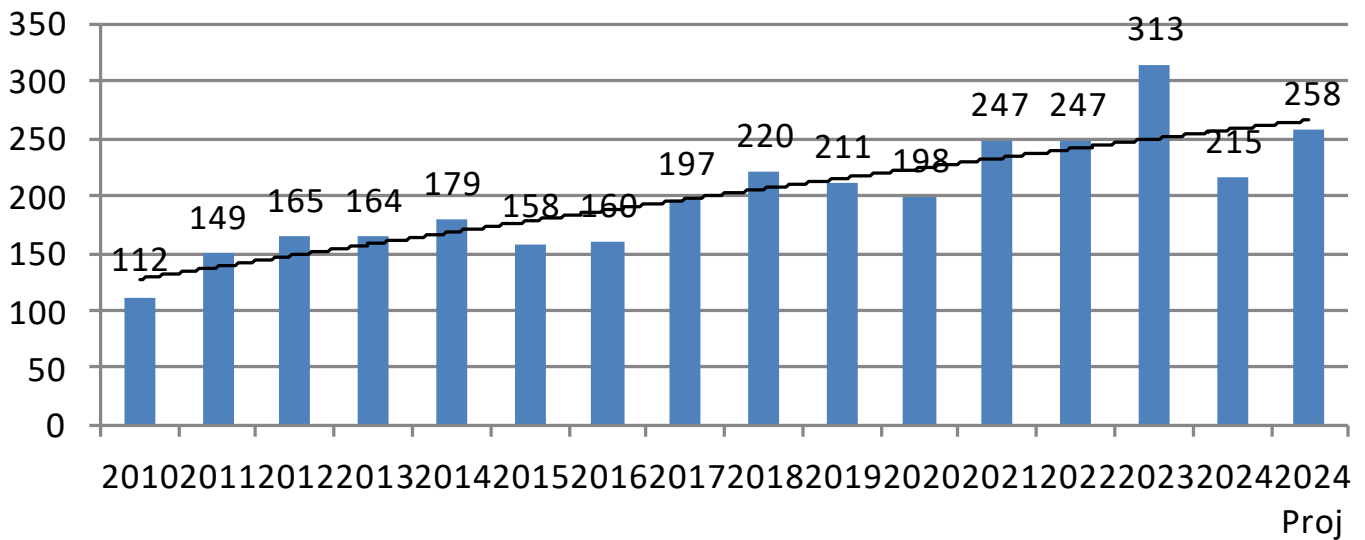| Year ❓	Organizational Unit ❓	Child OUs ❓
2024 ▾	R40035 - Southeastern Michigan Section ⊖	All ▾ Go

R40035 - Southeastern Michigan Section Charts ❓

ⓘ These data counts and charts include the selected OU and all related organizational units. See below for individual OU numbers and charts.

Name	Prof	Tech	Non-Tech	Admin	Hum	Pre-U	Total
Southeastern Michigan Section	22	138	6	106	7	1	280

Legend: ■ Reported ■ Unreported ■ Future

Events by Category

Virtual Events

Events by Day of Week

vTools Activity Reports

| 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2024 Proj
112	149	165	164	179	158	160	197	220	211	198	247	247	313	215	258

This Month in October

Or: Notable Events in Engineering & Science History, which I Did Not Know! ☺

October 1, 1908 - Henry Ford's Model T, a "universal car" designed for the masses, went on sale for the first time.

October 3, 1884 – IEEE Day, the first Tuesday of October, when a small group of individuals in the electrical professions met in New York, USA. They formed a new organization to support professionals in their nascent field and to aid them in their efforts to apply innovation for the betterment of humanity—the American Institute of Electrical Engineers, or AIEE for short. That October, the AIEE held its first technical meeting in Philadelphia, PA, USA. Many early leaders, such as founding President Norvin Green of Western Union, came from telegraphy. See also https://www.ieee.org/about/ieee-history.html

October 4, 1957 - The Space Age began as the Russians launched the first satellite into orbit. Sputnik I weighed just 184 lbs. and transmitted a beeping radio signal for 21 days. The remarkable accomplishment by Soviet Russia sent a shockwave through the American political leadership resulting in U.S. efforts to be the first on the moon.
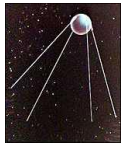
October 5, 1882 - Birthday - "Father of the Space Age" Robert Goddard (1882-1945) was born in Worcester, Massachusetts. During his lifetime he was ridiculed by the public and the press over his idea of constructing a space flight machine. In 1926, he launched the world's first liquid-fueled rocket on a farm near Auburn, Mass. In 1935, his liquid-fueled rocket surpassed the speed of sound. Other developments included a steering apparatus for rocket machines, staged rockets to reach high altitudes, rocket fuel pumps, and a self-cooling rocket motor.

October 6, 1846 -Birthday - Engineer and inventor George Westinghouse (1846-1914) was born in Central Bridge, New York. He developed air brakes for trains and was later responsible for the adoption of alternating current (AC) systems for electric power transmission in the U.S. He was also the first employer to give his employees paid vacations.
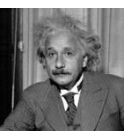
October 11, 1939 - Albert Einstein warned President Franklin D. Roosevelt that his theories could lead to Nazi Germany's development of an atomic bomb. Einstein suggested the U.S. develop its own bomb. This resulted in the top secret "Manhattan Project."

October 13, 1884 - Greenwich was established as the universal time from which standard times throughout the world are calculated.

October 21, 1879 - Thomas Edison successfully tested an electric incandescent lamp with a carbonized filament at his laboratory in Menlo Park, New Jersey, keeping it lit for over 13 hours.

October 24, 1861 - The first transcontinental telegram in America was sent from San Francisco to Washington, addressed to President Abraham Lincoln from the Chief Justice of California.

October 30, 1938 - The War of the Worlds radio broadcast panicked millions of Americans. Actor Orson Welles and the Mercury Players dramatized the story by H.G. Wells depicting a Martian invasion of New Jersey. Their script utilized simulated radio news bulletins which many listeners thought were real.

Sharan Kalwani
2022-2024 Chair, Southeastern Michigan Section,
Passionate Engineering History Buff/Aficionado

Elections 2024

A new, revised IEEE MGA procedure requires ALL Chapters and Affinity Groups to conduct their own elections and reduces the timeframe to 4 months as shown in the schedule below.

This new process requires direct involvement by each and every Geo-unit.

This year's recommended schedule from MGA HQ is as follows:

Task:	Sample Date:	Duration:
Appoint Elections Committee	1 August	Start no later than 1 August
Call for Nominations Issued	5 August	Open 30 days minimum - required
Call for Nominations Closed	5 September	
Candidates Reviewed	6-12 September	On average 7 days
Slate Approved by ExCom	13-19 September	On average 7 days
Region Director Approval (if necessary for single candidate slate)	20-26 September	On average 7 days
Slate Announced and Petition Opens	27 September	Open 30 days minimum - recommended
Petition Closed	27 October	
Petition Candidates Reviewed	28 October-3 November	On average 7 days
Final Slate Approved by ExCom	4-10 November	On average 7 days
Final Slate Announced	11 November	
Voting Opens	11 November	
Voting Closes	25 November	Open a minimum of 2 weeks - required
Final Results Announced and Officers Recorded	15 December	Announce results no later than 15 December

This year we elect our 2025 set of officers for all Geo-units (Affinity Groups & Technical Chapters).
Those officers include the Chair / Vice-Chair / Secretary / Treasurer.

Links to MGA training materials, including recordings of their virtual training session may be found as listed below:

MGA Geographic Unit Election Training Materials

15 July 2024 Training:
1. Slides:
   - https://docs.google.com/presentation/u/0/d/1ONfiVkhbDO9P9LVgjP-Pqut6THzZmAFH/edit?fromCopy=true&ct=2
2. Recording:
   - https://ieee.webex.com/webappng/sites/ieee/recording/64a1ae90253d103dabfc9a7245ce3034/playback

Links to frequently asked questions may be found at:
https://docs.google.com/document/d/1L0s5SMZTgtokTFRHwjDlcNLAn7YxWqePukU5zpp6kwM/edit

Links to most Job Descriptions may be found on the SEM Volunteer Portal at:
https://r4.ieee.org/sem/aboutsem/volunteer-portal/.

Links to the Affinity Groups and to the Chapters may be found at:
https://r4.ieee.org/sem/aboutsem/sem-chapters/

Note: Student Branches and HKN Chapters elect their officers on their individual schedules independently on their own.

Direct questions to: K.williams@ieee.org

Helpful information for Chapters and Affinity Group Leaders as you prepare for your Geographic Unit Elections:

- Each Chapter and Affinity Group should establish an Elections Committee, comprising of 3 Chapter or Affinity Group members who ideally are not current Chapter/Affinity Group Officers (Chair, Vice Chair, Treasurer and Secretary) and who are not putting themselves forward for consideration for the slate of officer positions.
- One current Officer can serve on the Election Committee but cannot be its Chair.
- The position of "Teller and vTools lead" on the Election Committee can be filled by any member of the Section (does not have to belong to the Chapter/Affinity Group forming the Committee).
- If there are still issues getting volunteers for the remaining positions on the Elections Committee, please reach out to the Section Chair for alternatives such as aligning with Section Elections (having the same Election Committee) or granting exceptions.
- The Region shall be informed of any such exceptions or alternatives.
- The Nominations/Elections Tool is not yet available for Chapters, Chapters and Affinity Groups can form the Election Committee manually.
- Chapters and Affinity Groups can use eNotice to send out the Call for Nominations and use vTools Voting.

vTools Training:
Many of our officers and members may not be familiar with the special electronic 'tools' that have been developed by the IEEE committees working with MGA (Member Geographic Association) designed to help officers in IEEE Chapters, Affinity Groups, Student Branches and HKN Chapters. The use of some of those tools (see insert to right) will help by making several of the election tasks much easier. (Note the tools shown in **bold** text.)

Access the vTools main page at: **https://vtools.ieee.org/**
Note: To use some of the vTools, each active officer or committee member must be listed in the vTools Officer Reporting tool for the specific Geo-unit (Chapter / AG). The current Geo-Officers (especially the Chair) has the authority to appoint members of his/her Geo-unit to committee posts as needed. (These appointed officers do not need to run for election.)

When the vTools page is opened, in the top header bar you should notice the '**Tutorials**' Button. This will take you to the page where you can select detailed tutorials covering the use of each of the commonly used vTools.

Doodle
IEEE Events Finder (Android)
IEEE Events Finder (iOS)
IEEE Functional Alias Request Form
IEEE Membership Validator
IEEE OU Analytics
IEEE Web Hosting
Other Volunteer Tools
Remote Conferencing
Survey Access Request Form
vTools Engage
vTools eNotice
vTools Events
vTools Local Groups
vTools Nominations
vTools Officer Reporting
vTools Student Branch Reporting
vTools Voting
WebEx Request Form

The vTools most needed during elections are **eNotice, Membership Validator, Officer Reporting** and **Voting**.
Each of these tools has a specific tutorial, except for the Membership Validator. This tool is so straightforward and self-explanatory that it only requires knowing the member's IEEE Member number, or the email address the member uses in their IEEE personal profile. The member number is the most reliable, since many members sign up as IEEE members using one email then routinely chose to use a different email for their normal communications.

Once the members IEEE number is entered the tool returns enough information to determine if the member is:
Active, their **Grade**, (Students may not hold a Chapter or AG office – Graduate Students are OK.) and which **Societies** they belong to. Candidates for office must reside in the Section, be an Active member, and belong to at least one of the supporting Societies or Affinity Groups which is the focus of the election.
See the example at the right:

Occasionally we have a member who joined IEEE in another section and move to Michigan and forget to update their personal profile to show that they are now located in our Section. To allow them to stand for election they only need to update their IEEE personal profile.

Unfortunately, the Membership Validator does not show the Section of record, and only when using the Voting tool will it be evident when an error message indicates the candidate is not a resident of the Section.

Membership validation status
First and last name initials: K. W.
Membership status: Active
IEEE member grade: Life Senior
Standards Association Member: Yes
Society membership(s):
- IEEE Antennas and Propagation Society Membership
- IEEE Electromagnetic Compatibility Society Membership
- IEEE Geoscience and Remote Sensing Society Membership
- IEEE Magnetics Society Membership
- IEEE Microwave Theory and Technology Society Membership
- IEEE Oceanic Engineering Society Membership
- IEEE Product Safety Engineering Society Membership
- IEEE Society on Social Implications of Technology Membership
- IEEE Technology and Engineering Management Society Membership
- IEEE Vehicular Technology Society Membership

Officer Training
We encourage members who are considering running for an officer position to take advantage of the 'Training Materials' available on the IEEE SEM Website at: **https://r4.ieee.org/sem/aboutsem/training/**

FREE Voice over Power Point Training: On-line virtual training modules are available through the SEM Website Training page. These videos will play directly and immediately from Google Chrome browser. They may not work well using Internet Explorer.

Turn OFF your pop up blocker if you don't see it load or download.
Blank Titles (Links) are in development.

(If you wish to rewind sections and play again, we suggest you download the module to your computer and play it using your systems 'media player'.)

Note: If you are beginning training, we recommend starting with Module # 46: Virtual Training Plan, and follow its recommendations for the training sequence. Send Questions about these Training Modules to: **k.williams@ieee.org**

30

OFCCT is now open!

IEEE Online Forum on Climate Change Technologies

This online forum will highlight recent developments in IEEE technologies and solutions that promote climate stability. It will provide interesting and relevant keynote talks on technology. Roadmaps, panels, and subject-matter experts will provide vital information about climate change.

IEEE is the global voice for engineering, computing, and technology information and resources. The IEEE Future Directions Committee has organized this event to provide insights into the technologies being developed at IEEE.

Participants will learn about IEEE's use of technology to achieve goals related to addressing the challenges posed by adaptation to and mitigation of climate change, as well as achieving the UN Sustainable Development Goals (SDGs).

Registration is free and open! (It is a virtual conference after all!)

REGISTER NOW

Dates of Conference:

4 thru 7 November & 2 thru 5 December 2024

Sponsors

Patrons

Spirit in the Stacks

Libraries help patrons hunt down apparitions:
By Anne Ford | September 3, 2024

Sonya Knisley, head of children's services at Clark County (Ohio) Public Library (CCPL), has seen it happen over and over again. Someone walks into her location and applies for a library card—with one obvious aim.
"As soon as they get their card, they immediately place a hold on a ghost-hunting kit," Knisley says.

Like many libraries, CCPL has begun loaning out collections of specialized electronic items said to help seekers of the supernatural track down spirits. These kits usually consist of a backpack or carrying case filled with items such as a "spirit box," which scans radio frequencies in hopes of encountering ghostly voices; an electromagnetic field (EMF) meter, on the theory that ghosts can manipulate EMFs; and a recorder for capturing electronic voice phenomena (EVP), aka messages from beyond the veil.

If you've got it, haunt it
Public belief in the supernatural has surged over the last two decades. In 1990, a Gallup poll found that 25% of respondents believed in ghosts; in 2019, a poll by global market research company Ipsos found that number had risen to 46%. Meanwhile, dozens of television and YouTube shows like *Ghost Hunters, Ghost Files,* and *Living for the Dead* have made ghost hunting a popular pastime among the public.

Knisley was inspired to start offering ghost-hunting kits at CCPL after seeing one on display at the Ohio Library Council Convention and Expo in 2022. As it happened, she was already familiar with the kits' technology, thanks to her 23-year-old daughter, who had introduced her to *Ghost Files* and similar shows.

"I got very excited, so excited that I emailed my boss immediately and said, 'Hey, what do you think?'" Knisley recalls. "Turns out he has a daughter around the same age, so he was familiar with them as well. He's like, 'I'm all for it. Get me a quote.'"

CCPL debuted three of the kits in January 2023 and was promptly spooked by their popularity. In a year and a half, the kits have circulated more than 90 times. "We've never not had holds on them," Knisley says. She soon added two more kits to meet demand.

To make them available to as many patrons as possible, the kits are available for one-week, nonrenewable checkouts only. And because each kit costs the library about $250 (not including replacement batteries), they are checked out only to adult patrons, who must sign a waiver and return the kit to the CCPL circulation desk, rather than leaving it in the library's dropbox.

Two of the kits, however, have recently gone missing. "They didn't make it back to us once checked out," Knisley says. "I'm not certain if ghosts took them."

Ghouls just want to have fun

In September 2023, Wilsonville (Ore.) Public Library (WPL) added a ghost-hunting kit to its Library of Things and watched as it joined the list of most popular items for checkout. "It's almost never on the shelf," says Angelika Heidelberger, WPL support services coordinator for technical services.

Like WPL's other high-demand items, such as a pressure washer and a metal detector, the ghost-hunting kit represents "specialized equipment that's not always affordable for someone who wants to try it," Heidelberger says. "That's the purpose of our Library of Things."

The EMF meter was going off a lot in our videogame section, so we did find it's possible that that section is haunted. — Lauren Walker, director of Coventry (R.I.) Public Library

That said, she worried at first about potential pushback to the kit's availability—either from patrons with religious concerns, or from those who might object to a public library offering equipment for a pseudoscientific activity.

"We put a disclaimer on all our items anyway, that the library has no liability in the consequences of using them," Heidelberger says. Regarding the ghost-hunting kit in particular, "this is recreational. The burden of deciding what proper use is lies with the person who checks it out."

A year later, however, WPL hasn't received any complaints regarding the kit. Neither has Coventry (R.I.) Public Library (CPL), which introduced its version in 2018. "For the most part, people just think it's a fun thing to do," says CPL Director Lauren Walker.

In addition to an EMF meter and EVP recorder, CPL's kit includes an infrared motion sensor, a thermometer (for shifts in ambient temperature), and a geophone, a device that measures vibrations and seismic activity, "but in the context of ghost hunting can be used to listen for footsteps and moving objects," Walker explains.

Unlike CCPL and WPL, CPL didn't see its ghost-hunting kit achieve instant patron popularity. "I don't think it circulated much when I started in 2019. I don't think a lot of people knew that we had it," Walker says. So in 2022, just for fun, she—along with CPL Teen Librarian Kylie Woodmansee and CPL Head of Adult Services Kiki Butler—made a [short video promoting the kit](#) in the style of a ghost-hunting TV show. (Butler plays the ghost.)

Since then, the kit "gets checked out all the time, not just around Halloween," Walker says. In addition, CPL has used the kit to conduct a teen program in which participants undertook a ghost hunt in the library itself.

"The EMF meter was going off a lot in our videogame section," Walker recalls, "so we did find it's possible that that section is haunted. The teens named the ghost Barry, I believe. That's our joke now sometimes when we can't find something— maybe Barry took it."

ANNE FORD is editor-at-large of American Libraries.Reprinted from American Libraries magazine: Sept/Oct 2024 © Copyright 1997-2018, American Library Association. This document may be reprinted and distributed for non-commercial and educational purposes only, and not for resale. No resale use may be made of material on this website at any time. All other rights reserved.

Next Senior Elevation

IEEE HQ Admission and Advancement (A&A) Review Panel Meeting Schedule

The Admission & Advancement (A&A) Review Panels meet six times annually to review applications and/or nominations for election or elevation to Senior Member (SM) or Life Senior Member (LSM) grade.

- The review panel meetings are held in various locations throughout the world.
- A panel of reviewers is recruited among Senior members, Life Senior members, and Fellows in the section where the meeting is to be held. This full-day session is presided over by the Admission and Advancement Chair and/or Vice Chair, as well as a representative of the Member and Geographic Activities staff.
- **In order for an application to be reviewed at the next Panel meeting, the application, resume, and required reference forms have to be submitted and received at least Seven days prior to the meeting date. [hence †] We have scheduled ours to be on November 9ᵗʰ – giving us enough time to fix any gaps, etc.**
- About two weeks following a review panel meeting, an update report with the names of the newly elevated Senior members is published and available for those who hold a volunteer position.

Review panel dates and locations (note: Dates and locations are subject to change without notice.)
Please see Meeting Deadlines (Eastern Standard Time) below for more details.

2024 Meeting Dates	Meeting Deadlines (Eastern Standard Time)
23 November 2024	11:59 p.m. on 16 November 2024

2024 IEEE HQ Panel Meeting Dates

†See our own Section organized event at: https://events.vtools.ieee.org/m/422559 **OR** check the Section web site

2024 / 2025 SEM Officers

The IEEE SEM Organizational Roster is Located in the IEEE Southeastern Michigan website at:
http://sites.ieee.org/sem/

Under the TAB titled "About SEM" use the button:
"Organization Roster" to download the PDF version of the current Roster.

(Note: It is also a good idea to download the Organization Org Chart as well in order to get the complete 'big picture' of the Section.)

(Note: To protect the members from getting spam email, the roster is password protected. Request access by sending email to our web master – Scott Lytle.)

Years ago, we used to publish the complete Chart and Roster in the Newsletter. But that was when we had only 5 committees and 9 chapters.

Today we have 16 committees and sub-committees, 18 Technical Chapters, 4 Affinity Groups and 8 Student Branches. The total roster divides into 12 pages with 247 identified officer positions.

That seems like a large organization, and it is, but it also presents our members with many volunteer opportunities to grow their capabilities through the experience of working with leaders who can guide and nurture engineering talent and widen the scope of volunteering through 'hands on' training in those 'soft skills' that can only be mastered by 'doing.'

We often refer to learning the non-technical side of an engineering career as similar to learning to play a musical instrument, or a sport, or how to dance. You can read all the books you want but, you only really learn by doing.

Reading the Roster

Once downloaded notice that the roster is divided into five major segments:
- Executive Committee
- Standing Committees
- Affinity Groups
- Technical Chapters
- Student Branches

Within each segment you should find, at a minimum, the e-mail account for each officer, and in many cases, a work phone and a cell phone for quicker contact.

You may note a number of identified officer roles that have a blank cell (highlighted in yellow) where we would expect an officer name. These are vacant officer positions.

If you notice a vacancy where you might be interested in contributing to fill that role, please contact the relevant 'Chair' in that organization and discuss the duties of the office and consider helping out in that element.

As with all others, the road to this learning begins with the first step. That step is inquiring and finding out what skills go with each position. That information is maintained in the IEEE Center for Leadership Excellence at:
https://ieee-elearning.org/CLE/

Good luck!

140th Anniversary Report

Presented here is a brief synopsis of the 140th anniversary of the IEEE celebration, which was held on September 21st 2024 at the Charles Wright Museum of African American History (https://thewright.org). We had a very active volunteer planning committee to thank for all the efforts they put in. The volunteer planners were:

Susan Brooks, Aneesh Mathai, Christopher Johnson, Mohamad Berri, George Pappas, Subra Ganesan and Ramesh S.

The venue was decided upon some time ago and was well researched, the committee did indeed uncover many more sites with great potential for future similar face to face social and celebration events. Befitting the occasions, we also invited not one but two keynote speakers: Keith Moore – President IEEE-USA 2024 and Alexander Magoun, of the IEEE History Center in Piscataway, New Jersey (aka IEEE-HQ)! We also planned two tours of the museum – namely the *Tuskegee Airmen* and the main signature exhibit *"And Still We Rise….",* followed by a reception hour which was held in the famous Rotunda location (see https://www.thewright.org/exhibitions/ring-genealogy), then the two keynote speeches, sandwiched in between were the section awards ceremony, finally capping it all off was the sumptuous dinner.

Early Birds at the event, picture in front of the display of the
Southeastern Michigan Section's 20-year long sponsorship of Robofest!

The IEEE Registration Desk at the 140th event

The Wright Museum's Educators giving a background of the famous names on the Ring!

Keith Moore (President 2024 IEEE-USA), answering questions after his keynote talk

Keith Moore presenting the 2024 Section Volunteer award to Sneha Shetiya

Keith Moore presenting the 2024 Section Volunteer award to Naresh Ravuri

Keith Moore accepting his Speaker appreciation plaque along with the Section officers

Alexander Magoun was in a rapturous mood whilst giving his talk on 140 years of the IEEE

Alexander Magoun accepting the Section's Speaker Appreciation plaque

A view of the Rotunda just before the IEEE SEM 140th event setup

Our registration desk – just before the attendees started walking in!

An awe inspiring & beautiful view of the Dome above the Ring where the main event was held

Send your thoughts, feedback and suggestions/future event ideas/emails to chair@ieee-sem.org

RoboFest News

(1) Seeking Part Time Robofest Staff Member
(2) Robofest 2024 Appreciation Dinner Scheduled
(3) One-week Summer Camp for LTU College Credit: C WITH ROBOTS
(4) Introduction to C with Robots Dual Enrollment Class for Fall 2024 Semester
(5) 2025 Season Kickoff and World Championship Dates Announced (Tentative)
(6) Fall UMC Scholarship Competition and Workshop for High School Students

Note: All times are listed in EDT unless noted

(1) Seeking Part Time Robofest Staff Member
The Robofest Office at Lawrence Technological University is searching for a **part-time** Coordinator to join the team. This on-campus staff position has flexible hours (average 5-10 per week) with some evenings and Saturdays. US Citizenship or permanent residency is required. The ideal candidate has Microsoft Office and Google app knowledge, as well as some autonomous robotics experience as a coach or participant. This position is eligible for LTU Educational Assistance Program for the individual and dependents (some restrictions apply). Contact the Robofest Office (robofest@ltu.edu) for more information.

(2) Robofest 2024 Appreciation Dinner Scheduled
Save the Date: Thursday, August 22, 5:30 pm~7:30 pm. We are hosting our Site Host, Volunteer and Coach Appreciation Dinner at LTU in the Computer Science Robotics Lab, Room J234. In addition to dinner, we will have some giveaways, share our wrap-up video and season statistics, and announce plans for the 2025 Robofest season. A RSVP form will be emailed soon. We hope you can join us!

(3) One-week Summer Camp for LTU College Credit: C WITH ROBOTS
Space is still available! July 22-26, 2024, 9:00 am~4:00 pm, Lunch provided
C stands out as one of the most widely used programming languages. This intensive camp course covers essential C programming skills, including variable types, conditional statements, loops, arrays, functions, formatted input/output, file operations, and more. A distinctive feature of this camp is the hands-on application of acquired skills to solve robotics problems. Students will actively engage in writing C code for VEX IQ robots, incorporating various sensor types and actuators. The camp course includes 5+ assignments, a project, a quiz, and a final exam, providing a comprehensive learning experience. LTU's Computer Science bachelor's programs require two MCS1111 coding club classes and this camp will satisfy one of them. To register, go to: https://apply.ltu.edu/register/mcs1111summer24

(4) Introduction to C with Robots Dual Enrollment Class for Fall 2024 Semester
An introduction to C Programming language using VEX IQ Robots is now offered through LTU's Dual Enrollment program for local High School students. The 2-credit class, instructed by Professors Elmer Santos and CJ Chung, runs on Tuesdays from 8:20 am to 10:00 am. Interested students should have completed intermediate algebra/geometry. Contact Professor Santos (esantos@ltu.edu) or the LTU Admissions office (specialadmit@ltu.edu) for more information.

(5) 2025 Season Kickoff and World Championship Dates Announced (Tentative)
The Robofest 2025 Season International Rules will be released on Saturday, **September 28, 2024**. We will host a series of kickoff meetings to review the rules for clarification prior to the US release in November. All rules will be finalized in January 2025.

The kickoff meetings will be held:
    Friday, October 4, 2024 9:00am ~ 10:30am (Zoom only)
    Thursday, November 7, 2024 7:00pm ~ 8:30pm (Zoom only)
    Saturday, January 11, 2025 10:00am ~ 11:30 am (In person and Zoom)

The 26th Robofest World Championship will be hosted on the campus of Lawrence Technological University on **May 15, 16 and 17, 2025**

(6) Fall UMC Scholarship Competition and Workshop for High School Students
Robofest is hosting our second annual Unknown Mission Scholarship Challenge this fall for High School students to compete to win a $17,000 Annual LTU Scholarship. Individual students will be challenged to build and program a robot kit

to solve a task in a limited amount of time. The registration fee is $25. Review the 2024 UMC Rules on the UMC page for the list Robot Kits allowed: https://www.robofest.net/index.php/current-competitions/unknown-mission-challenge

Competition: Sat, Nov 2, 2023, 1:00 PM ~ 5:00 PM
At Lawrence Technological University, Robofest Lab, J234
21000 West 10 Mile Road, Southfield Michigan 48075
Building No. 8 on the LTU campus map: https://www.ltu.edu/about/map Use parking lot E.

A free workshop has been scheduled for registered students to prepare for the competition using VEX IQ robot kits and VEXCodeIQ. Students who attend this optional UMC workshop may borrow a VEX IQ robot kit for the competition on November 2.

Workshop: Sat, Oct 19, 2024, 1:00 PM ~ 5:00 PM
At Lawrence Technological University, Robofest Lab, J234

Registration links for the workshop and competition will be opened on the Robofest registration site after September 1.

Lawrence Technological University / Robofest / J-233 / 21000 W. Ten Mile Rd, Southfield, MI 48075
Prof. Elmer Santos, Director, esantos@ltu.edu
Shannan Palonis, Assistant Director, spalonis@ltu.edu
Pam Sparks, Coordinator, psparks@ltu.edu
Dr. CJ Chung, Professor of Computer Science, Robofest Founder, Executive Council Chair, cchung@ltu.edu
Dr. Chris Cartwright, Associate Professor of Math, Executive Council Member
Dr. Eric Martinson, Chair of Math & Computer Science Dept, Executive Council Member

http://www.robofest.net   http://facebook.com/robofest   https://www.linkedin.com/company/robofest-official

AVCC 2024

REGISTER NOW!

IEEE FRIENDS - SAVE THE DATE!
OCTOBER 8-9, 2024

In-person or virtual tickets

2-day event with 25+ sessions

AVCC2024

Accelerating ADAS and Autonomous Vehicle Technology

Registration is now open!

Please join the Autonomous Vehicle Computing Consortium (AVCC) for our 2nd annual event taking place in Farmington Hills, Michigan at Bosch, where we bring together industry leaders, innovators, and experts to shape the future of assisted driving and autonomous vehicle computing.

For more information or to register for your free ticket, visit
avcc.org/avcc2024

hosted by: **BOSCH**

AVCC2024
FARMINGTON HILLS, MICHIGAN
OCTOBER 8-9, 2024

EMC Chapter Chatter

Distinguished Lecturer, IEEE EMC Society Life member, and Senior Technical Leader of Electromagnetic Compatibility for the Ford Motor Company, Keith Frazier, gave his presentation Impact of Electric Vehicle on AM Radio Reception to the Southeastern Michigan IEEE EMC Society June 20th. Keith is responsible for all EMC of Ford automotive products worldwide. His interests include system/subsystem design and analysis for EMC.

The chapter was treated to the electrical basics of vehicle AM radio reception and EMI pertaining to EVs (electric vehicles). Keith presented an introduction to the characteristics of electrically short antennas, traditional and non-traditional EMI source coupling mechanisms. He used those basic concepts to present a simple lumped circuit model to demonstrate how the EV powertrain couples EMI to the vehicle's antenna causing interference to AM radio reception. This is illustrated in Figure 1. He also explained the fundamentals of EV powertrain design including internal EMI coupling mechanism between the traction inverter and motor in addition to various design options to reduce coupling to the vehicle's antenna.
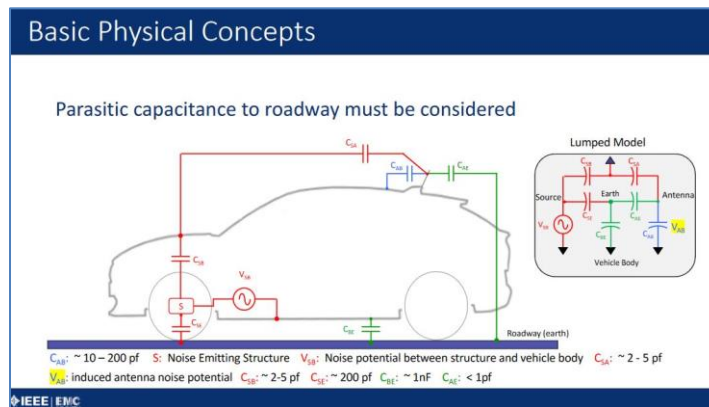

Figure 1. "4-Capacitor" AM Coupling Model from Keith Frazier Distinguish Lecturer Presentation

Keith also provided an overview of the potential customer impact of reduced AM radio reception from EVs. He showed an example where although moderate to weak AM stations could be potentially reduced by up to 33%, all local stations remained unaffected. He also referenced automotive manufacturer data that shows listenership of AM radio is significantly less than other media (FM, Satellite radio, streaming). Lastly, he addressed the concerns voiced by some media that reduced AM reception may affect the Emergency Alert System (EAS). Although EMI from an EV may impact reception of some AM radio stations, EAS is robust in that it includes most AM and FM stations nationwide in addition to cell phones, and subscription free SiriusXM channels 1 and 184. Keith concluded with a brief overview of the political aspects of AM radio was covered. Two bills were currently in the US legislature, one in the Senate (S.1669) and one in the House (H.R. 3413) to assure AM radios will remain in future vehicles.

Figure 2. Keith Frazier with Ford F-150 Lightning® Truck

Magnetics Chapter Conference Report

Small Conference Grant Report
IEEE Magnetic Society Conference Executive Committee
8th International Conference on Microwave Magnetics

Overview
In June 2024, Oakland University hosted the 8th International Conference on Microwave Magnetics (ICMM 2024). The conference focused on new developments in all branches of fundamental and applied microwave magnetics, including:
- Magnetization and Relaxation Dynamics
- Applications in communication, sensing, and energy harvesting
- Cavity and hybrid magnonics
- Spin waves, spintronics, and nonlinear magnetic phenomena
- Microwave and millimeter wave magnetic materials and devices
- High-frequency magnetic materials and characterization
- Integrated RF and microwave magnetic devices

The event featured presentations of the latest advances and fostered discussions on the future directions of research and applications in these areas.

The conference attracted nearly 60 contributors from more than ten countries, including researchers from across the USA and several Michigan universities. Many attendees were among the most prominent researchers in the magnetism community. These esteemed researchers presented the latest advances in microwave magnetism through 31 talks and 20 posters.

The grant awarded by the IEEE Magnetic Society Conference Executive Committee (CEC) was instrumental to the success of the conference. This report provides a description of the conference and details on how the grant money was utilized.

Presentations & Scientific Content

The scientific content of ICMM 2024 comprised both oral and poster presentations. The oral presentations included a total of 31 talks, with 19 invited and 12 contributed, amounting to more than 12 hours of oral presentations. These talks were distributed across six sessions:

> Session I: Magnonics
> Session II: Magnon-Photon Coupling
> Session III: Magnetic Materials
> Session IV: Devices and Applications
> Session V: Quantum Magnonics and Magnon Computing
> Session VI: Spin Textures and AFM Magnonics

Of the 19 invited talks, 7 were delivered by early career researchers, including 4 students. Figure 1 below shows a student delivering an invited talk at our venue, located in the Oakland University Engineering Center.

Twenty scientific posters were presented during the ICMM 2024 poster session, which took place in the atrium of the Oakland University Engineering Center. Figure 2 shows the poster session and a poster promoting the IEEE Magnetics Society.

Figure 3 highlights our promotion of the IEEE Magnetics Society. This figure features the co-chairs of the newly formed local chapter of the IEEE Magnetics Society, Cody Trevillian and Steven Louis. One photo in Figure 3 shows Cody delivering a slide presentation during an academic session to all conference participants, discussing the benefits of joining the IEEE Magnetics Society, particularly for students participation in SiM. Another photo shows Cody Trevillian and Steven Louis posing with the poster promoting the IEEE Magnetics Society.
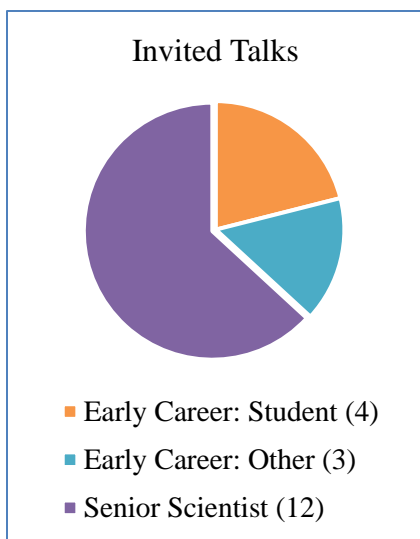

Figure 1: (Left) Proportion of invited talks given by early career researchers. (Right) A photograph showing the invited talk of Kristýna Davídková, a graduate student from the University of Vienna.
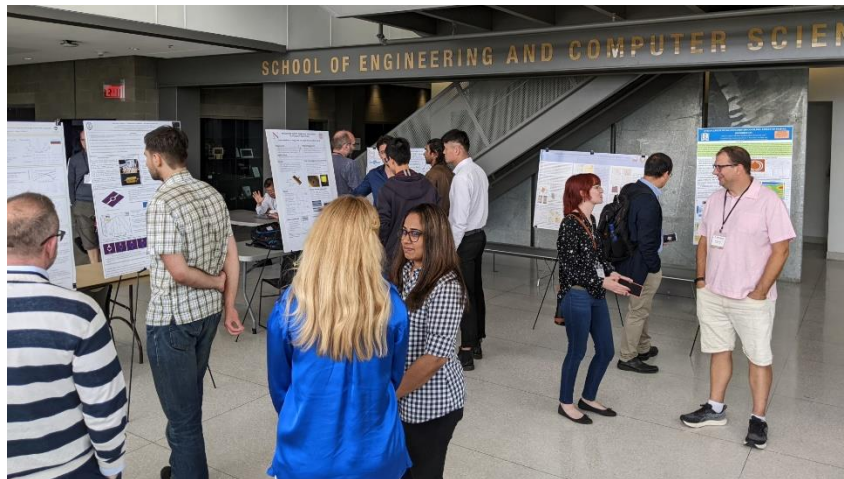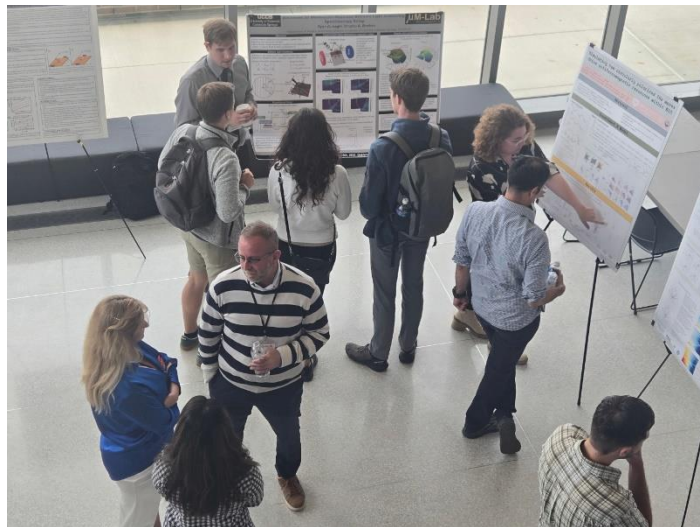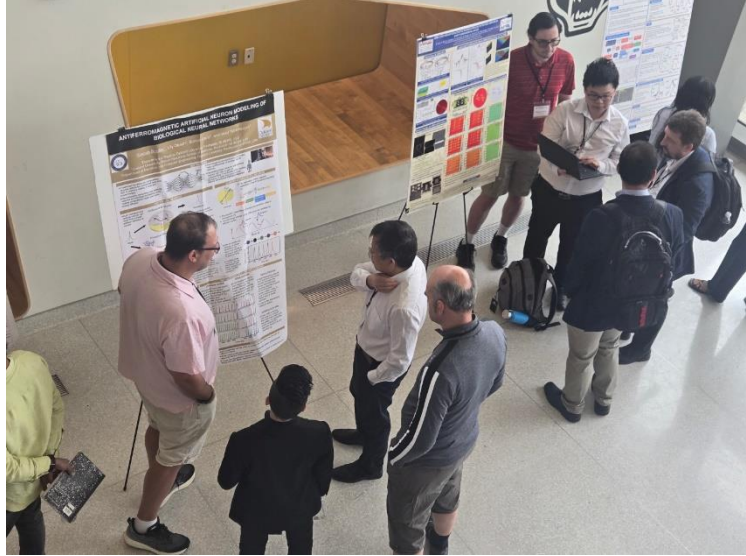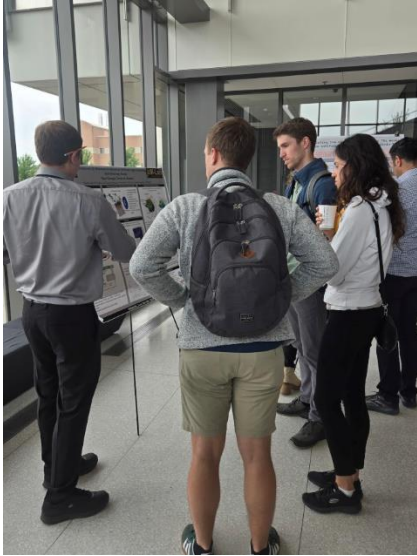
Figure 2: Photos of the ICMM 2024 Poster Session.

Figure 3: Cody Trevillian and Steven Louis, co-chairs of the Southeastern Michigan chapter of the IEEE Magnetics Society. (Top) Cody Trevillian presenting about the IEEE Magnetics Society during Session V of the academic talks. (Bottom) Steven Louis and Cody Trevillian with the IEEE Magnetics Society promotional poster.

Women in Magnetism

The Women in Magnetics (WiM) reception at ICMM 2024 took place on the evening of Monday, June 17. The event was hosted by Dr. Bushra Hussain (Fig. 4, top), a faculty member in the University of Michigan-Dearborn's Department of Physics. The reception was held at a restaurant within walking distance of the conference venue, known for its traditional "Detroit Style Pizza." Nearly all of the conference participants attended the reception in support of WiM (Fig. 4, bottom).

The total cost of the event was $931.91, with $730 covered by the grant provided by the IEEE Magnetics Society.

Fig 4: The Women in Magnetics event. (Top) Host of the event, Dr. Bushra Hussain. (Bottom) Attendees of the event.

Students in Magnetism: Lunch with the Experts

During this event, senior scientists were paired with students in an informal setting. The luncheon provided an opportunity for experts and students to gather in an open and engaging dialogue. Students were able to ask questions, seek advice, and discuss their research interests and career aspirations with seasoned professionals. Figure 5 shows some photos of this event.

The total cost for the event was $880, with $500 covered by the IEEE Magnetics Society grant.

Figure 5: ICMM 2024 Lunch with the experts.

Student Awards

We are proud to report that more than 50% of the ICMM 2024 conference participants were students. Thanks to the grant from the IEEE Magnetics Society, 22 students received awards. A total of $3,770 from the IEEE Magnetics Society grant was distributed as student awards. The distribution of these awards was as follows: four travel awards ($1,940), two Ukrainian student awards ($470), and sixteen partial registration awards ($1,360).

Travel Awards

Four students traveled internationally to attend the conference. Each received a travel award of $485 to help cover travel expenses, totaling $1,940 for the four students. The list of these students, along with their affiliations and the titles of their work, is as follows:

- Maria Jose Vazquez Bernardez (CNRS-Université de Strasbourg)
  Multi-resonance microwave absorption in Ti/Mn substituted barium hexaferrites

- Kristyna Davidkova (University of Vienna)
  Frequency-selective limiter on nm-thick YIG film

- Johannes Greil (Technichal University of Munich)
  A study on spin-wave spectrometers based on the Rowland arrangement

- Lukas Fischer (Max-Planck Institute of Microstructure Physics)i
  Self-propelling of a magnetic domain wall by a resonant excitation with high frequency magnetic fields

(Please note: Originally, there were five international student presenters; however, one was unable to obtain a visa for travel to the US.)

Ukrainian Student Awards

Two students from Ukraine, Ivan Fantych and Oleh Shtanko, had their abstracts accepted to the ICMM 2024 conference. Unfortunately, due to the current conflict with Russia, they were unable to leave Ukraine. These students received a "Ukrainian Student Award" of $235 each, totaling $470.

To accommodate these students and their work, they were allowed to present their posters remotely. They submitted posters and recorded videos presenting their research results. The conference printed their posters and made their videos available to all participants. Their posters were on display for the entire conference. Figure 6 shows their posters on display during the poster session.

Partial Registration Award

All students who applied for awards received one. Students who were not traveling internationally received a partial registration award of $85. Sixteen students received a partial registration award, totaling $1,360.

The students who received the award are:
Annah Frost, Cody Trevillian,   Eric Stimpson, Hannah Bradley, Nicholas Homrocky, Petro Artemchu, Sabita Acharya, Amin Pishehvar, Ranjeet Bhadoriya, Ryan Dunagin, Tabitha Sheronick,   Yassin Elmeligi, Bin Luo, Dinesh Wagle, Maxwell Robbins and Mohammad Tomal Hossain.
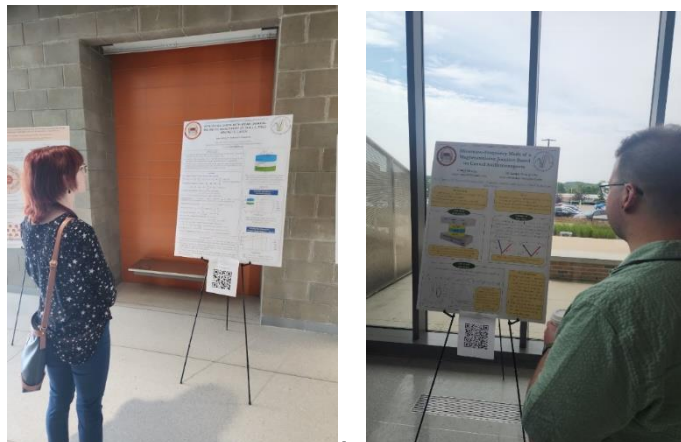

Figure 6: Remote posters for Ukrainian students Oleh Shtanko and Ivan Fantych. Attendees were able to access their pre-recorded videos via the QR codes at the bottom of the posters.

Demographics

A total of 57 individuals participated in the conference. Of these, 49 attended the conference in person, while 8 were unable to attend. Of the 8 who were unable to attend, 2 were from Ukraine, and 6 were from India and were unable to obtain visas. (Please note that four of these students work with Dr. Bijoy Kumar Kumar of Jawaharlal Nehru University. He was busy presenting all of their work during the conference!)

Of all conference participants, there were 13 senior career scientists, 12 early career scientists, 29 graduate students, and 2 undergraduate students.

Career Diversity

- Students (32)
- Early Career (12)
- Senior Scientist (13)
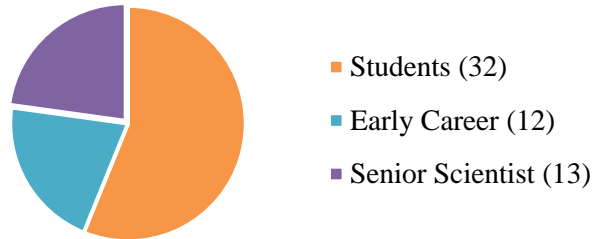
Participants included 38 from North America, 11 from Europe, and 7 from Asia. In person, there were 38 attendees from North America, 9 from Europe, and 2 from Asia. The venue was located in Michigan. There were 21 participants from Michigan and 17 from other states.

Geographic Diversity, International

- Asia (8)
- Europe (11)
- North America (38)
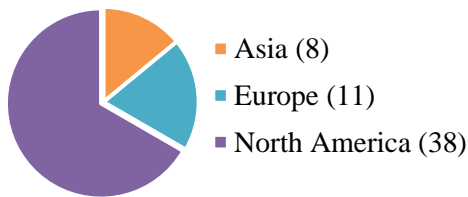
Geographic Diversity, United States

- Other (4)
- North Carolina (2)
- Colorado (2)
- Deleware (3)
- Massachusetts (6)
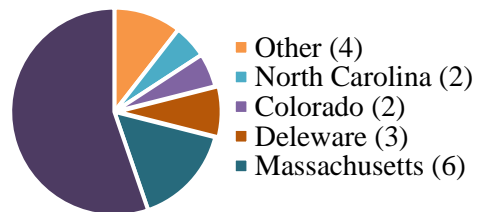
There were 11 female participants and 45 male participants.

Career Diversity

- Male
- Female

ESD Job Fair

ENGINEERS GET HIRED

**TAILORED HIRING EVENT FOR
ENGINEERING AND TECHNOLOGY PROOFESSIONALS**

**OCTOBER 24, 2024
2 – 7 p.m.
SUBURBAN COLLECTION SHOWPLACE**
46100 Grand River Avenue, Novi, MI 48374

**Connect With Top Employers
Discover Hundreds of Opportunities**

Whether you're a seasoned professional, a recent graduate or an in-between careers job seeker, you'll find your next position at The Engineering Society of Detroit's **Engineers Get Hired** Job Fair.

This premier recruitment event is your best opportunity to:

- Grow your career or start a new one
- Learn about great job openings in your field
- Meet more than 25 employers looking to hire — with possible on-the-spot interviews
- Visit one-on-one with company representatives

Employers will be hiring for full and part-time positions, internships and co-ops. Past companies have included Administrative Controls Management, Ford, AM General, Dürr Systems, Electro-Matic Ventures, General Dynamics Land Systems, Ghafari, Gresham Smith, Mich. Dept. of Transportation, NTH Consultants, Sachse Construction, and Trillium Technical.

ESD
THE ENGINEERING SOCIETY OF DETROIT®
FOUNDED IN 1895

COST TO ATTEND

ESD Members: **FREE**

Non ESD Members: **$20** if registered by October 10, 2024
$25 if registered after October 10, 2024
Registration includes a one-year membership to ESD. (Offer good for new, first-time members only.)

ADDED BONUS!

Job seekers are encouraged to enter their resumes into the ESD Job Bank, jobs.esd.org, free of charge. Recognized as the premier recruitment resource for the industry, the job bank provides confidential resume posting and is easy to use.

For more information or to register, visit EngineersGetHired.org or call 248-353-0735.

Engineering Ethics

THE ENGINEERING SOCIETY of Detroit

ABOUT · JOIN · PROGRAMS · AWARDS · MEMBERS ·

PE Engineering Ethics

Engineering Ethics: Will You Do the Right Thing When It Matters Most?

Presented by Dr. Darrell Kleinke

Thursday, October 17, 2024
7:00 – 9:00 p.m.
Online via the Zoom Platform

I'm a good person, so why do I need to study ethics? Unfortunately, the complexities of today's engineering world create very complicated ethical situations. When does my obligation to the public overrule an obligation to my employer? What is a conflict of interest anyway? And, when an ethics problem arises, how much time do I have to decide the "right" thing to do?

These and other questions will be addressed in ESD's Ethics review class. Join us to explore how the engineering code of ethics helps us discern the right thing to do when the time comes!

This course meets the professional engineer licensure requirements for 2 hours of ethics continuing education by the State of Michigan.

A certificate of participation will be provided to attendees after the class.

About the Presenter:

Dr. Darrell Kleinke has an extensive background in industry and academia. He holds a PhD in Mechanical Engineering from Wayne State University and a master's degree from the University of Michigan. He has 25 years of industry experience in automotive advanced product development and has recently retired as a tenured Professor of Mechanical Engineering at the University of Detroit Mercy. Dr. Kleinke now serves as a consultant in engineering management, supporting companies that are dealing with the rapid evolution of technology. Dr. Kleinke specializes in Engineering Management, Professional Development of Technical Talent, Systematic Innovation and Advanced Product Development. He has instructed the Ethics review course for ESD and taught Ethics at the University of Detroit Mercy.

A complete list of publications and awards can be found on Dr. Kleinke's LinkedIn profile:

https://www.linkedin.com/in/darrell-kleinke-930474b/

Cost:
$100 Members
$139 Become a Professional Member and attend for free. (Offer available to new, first-time members only.)

To Register: Register online by using the link to the upper right.

REGISTER

For information, call 248-353-0735, ext. 119 or email eshelef@esd.org.

Cancellation Policy:
Cancellations must be received at least 48 hours in advance of the beginning of the program in order to receive a refund.

ESD online educational sessions may qualify for continuing education hours or professional development hours – check with your licensing agency for more information.

ESD will provide certificates of attendance to participants upon request.

Lament

At the recent 140th IEEE Anniversary event, I passed around a poem that I was first read in grade school.

The New Colossus

Not like the brazen giant of Greek fame,
With conquering limbs astride from land to land;
Here at our sea-washed, sunset gates shall stand
A mighty woman with a torch, whose flame
Is the imprisoned lightning, and her name
Mother of Exiles.
From her beacon-hand Glows world-wide welcome;
her mild eyes command
The air-bridged harbor that twin cities frame.
"Keep, ancient lands, your storied pomp!"
cries she With silent lips.
"Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tost to me,
I lift my lamp beside the golden door!"

Emma Lazarus
November 2, 1883

Of the six members at our table in the Charles Wright Museum of African American History, only one could identify that poem and its public location and its significance.

I have trouble reading those words of Emma Lazarus without sheading a silent tear. When I first read this poem in grade school, and learned its significance, and its location, and understood that every new immigrant to our country was greeted with this poem on the base of the Statue of Liberty in New York harbor. To me this was the essence of America. The land of immigrants. The "Melting Pot" as it was often referred to in those days.

Then, as now, people come from all over this planet to a place where we espouse the ideals of democracy and freedom. Yet we still struggle to honor those ideals in our everyday life. The Charles Wright Museum of African American History was a stark reminder of just how badly we upheld those ideals in the early years of our country when slavery was rampant throughout the world. We are still learning that lesson every day.

We did no better in our treatment of the Native American Indian tribes with forced removal from the lands they had occupied for thousands of years. Many times, this was 'justified' when it was learned that valuable minerals were present on those lands, or when political pressure to provide land for new 'non-Indian' settlers prompted the US Army to 'clear the land'.

We did not seem to learn any lessons then and repeated the mistake during WWII when we unjustly imprisoned many Japanese American citizens in camps like Manzanar War Relocation Center where two thirds of those held there were American citizens by birth, often with their Japanese relatives serving in the US military in the European and African theaters of the war.

During the build up to the Nazi Party takeover of their own country, Germany, the Nazis sought a scape goat to blame for any and all social or economic problems. In that case it was the Jewish people living and working in Germany that were used explain anything that was wrong with their society or government.

This is not a new political tactic. It was used during biblical times when the Samaritans were signaled out for similar abuse.

Recently some of our political leaders have pointed to our immigrant population in a similar attempt to blame one smaller group of people for anything and everything they point to as a social or economic problem. (Sound familiar?)

One of the foundation stone of our democracy, that used to be stressed along with freedom, is responsibility.

If you are free to choose for yourself, you must also accept responsibility for your actions and its consequences. The childish excuse of 'The devil made me do it.' makes as much sense as blaming our actions on someone else or blaming some social or economic condition on some other group of people.

America has always stood as a 'land of opportunity' and welcomed new immigrants. Once we called America the 'Melting Pot'. I like the view expressed by the Russian American folk singer and actor Theodore Bikel who likened America to a kaleidoscope in which each different culture retained its collective identity and added its own 'color' to the blend without losing its 'roots'.

Here is Southeastern Michigan we enjoy a wonderful mix of cultures due to the opportunities afforded by our industry and educational institutions. Over the years we have been host to new enclaves from almost every other country on the planet, and we reap the rewards of that wonderful mixture. Any day of the week we can choose to dine out in authentic restaurants from all over the world. A couple of years ago Delta Airlines noted that Detroit (not New York) has the best choices in America.

Try to greet your new neighbors in their native language, if you are able. Make them welcome.
Kimball Williams

Kimball Williams

ORG UNITS cheat sheet

Section Unit Name or Affinity Group or Chapter Name (Organizational Unit code is in parentheses)

```
Consultants Network Affinity Group: (CN40035)
Life Members:                       (LM40035)
Young Professionals:                (YP40035)
Women in Engineering:               (WE40035)
Chapter: 01 (CH04049)(SP01)  Signal Processing Society,
                     (CAS04) Circuits and Systems Society and
                     (IT12)  Information Theory Society
Chapter: 02 (CH04051)(VT06)  Vehicular Technology Society
Chapter: 03 (CH04053)(AES10) Aerospace and Electronic Systems Society and
                     (COM19) Communications Society
Chapter: 04 (CH04050)(AP03)  Antennas and Propagation Society,
                     (ED15)  Electron Devices Society,
                     (MTT17) Microwave Theory and Techniques Society,
Chapter: 05 (CH04055)(C16)   Computer Society
Chapter: 06 (CH04056)(GRS29) Geosciences and Remote Sensing Society
Chapter: 07 (CH04057)(PE31)  Power Engineering Society,
                     (IA34)  Industrial Applications Society
Chapter: 08 (CH04088)(EMC27) Electromagnetic Compatibility Society
Chapter: 09 (CH04087)(IE13)  Industrial Electronics Society,
                     (PEL35) Power Electronics Society
Chapter: 10 (CH04142)(TEM14) Technology and Engineering Management Society
Chapter: 11 (CH04099)(EMB18) Engineering in Medicine & Biology
Chapter: 12 (CH04103)(CS23)  Control Systems Society
Chapter: 13 (CH04113)(E25)   Education Society
Chapter: 14 (CH04115)(RA24)  Robotics And Automation Society
Chapter: 15 (CH04144)(NPS05) Nuclear Plasma Sciences Society
Chapter: 16 (CH04125)(CIS11) Computational Intelligence Society,
                     (SMC28) Systems, Man and Cybernetics Society
Chapter: 17 (CH04128)(NANO42)Nanotechnology Council
Chapter: 18 (CH04162)(MAG33) Magnetics Society
```

Section Unit Name or Affinity Group or Chapter Name (Organizational Unit code is in parentheses)

```
University Of Detroit-Mercy:        (STB00531)
Michigan State University:          (STB01111)
University Of Michigan-Ann Arbor:   (STB01121)
Wayne State University:             (STB02251)
Lawrence Technological University:  (STB03921)
Oakland University:                 (STB06741)
Eastern Michigan University:        (STB11091)
University of Michigan-Dearborn:    (STB94911)
```

Use the Geo-unit 'Codes' (Shown above between brackets '()' for faster access in the vTools system applications.
Example: Using STB94911 in the vTools search window goes directly to the Student Branch.
Faster than typing 'University of Michigan-Dearborn'. This works for all Affinity Groups, Technical Chapters and Student Branches.

HKN Code	HKN Name (Student IEEE Honor Society)
HKN029	University of Michigan-Ann Arbor, Beta Epsilon
HKN042	University of Detroit-Mercy, Beta Sigma
HKN054	Michigan State University, Gamma Zeta
HKN073	Wayne State University, Delta Alpha
HKN163	University of Michigan-Dearborn, Theta Tau
HKN164	Lawrence Institute of Technology, Theta Upsilon
HKN190	Oakland University, Iota Chi
HKN244	Southeastern Michigan Alumni

Why do we publish this? Well, this is most useful when searching the vTools page for entering L31s or creating new events or searching for existing events!

[NOTE – the Student Branch Chapters of several Societies has been eliminated, due to several years of non-activity as well as there is no one left, who started it years ago!]

Curated & Maintained By
Sharan Kalwani,
Chair, IEEE Southeastern Michigan Section (2022-2024)
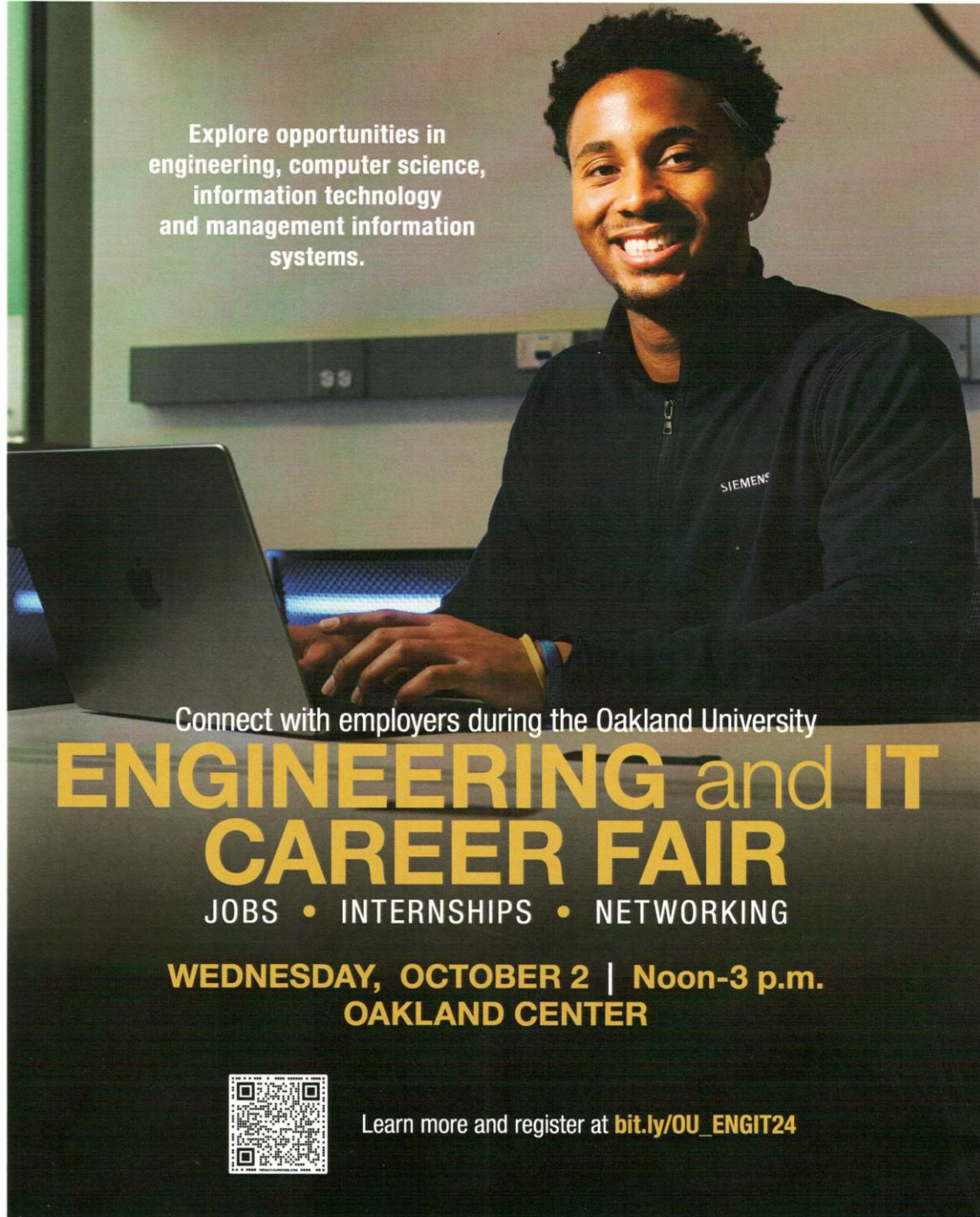*Editor, Wavelengths (*Serving you as an active newsletter contributor since 2018)
Enthusiastic IEEE volunteer since 2011

Use the Geo-unit 'Code' for faster access in the vTools system applications.

Oakland U Job Fair

Activities & Events

We try to publish IEEE events in several places to ensure that everyone who may want to attend has all the available relevant information. **NOTE: The IEEE SE Michigan section website is located at http://r4.ieee.org/sem/**

SEM Wavelengths:
https://r4.ieee.org/sem/about-sem/sem-history/wavelengths-magazine-archive/

SEM Calendar of events:
https://r4.ieee.org/sem/sem-calendar/
Select "SEM Calendar" button in the top row of the website. This is our 'Active' event listing site where everyone should look first to see what events are scheduled for our Section in the near future.

SEM Collabratec Workspace:
https://ieee-collabratec.ieee.org/app/workspaces/5979/IEEE-Southeastern-Michigan-Section/activities
An IEEE supported space for online chat, discussions, connecting with other global IEEE entities, besides our local Michigan folks.

vTools Meetings:
http://sites.ieee.org/vtools/
Select "Schedule a Meeting" button in the left-hand column of buttons.

Other Happenings

Here are some of the non-IEEE functions that may be of interest to you or someone you know. Let us know if you have a special interest in a field that encourages technical study and learning and wish to share opportunities for participation with members of the section. NOTE: Copy the URL and paste it into your browser address bar.
These websites were checked in June 2022 and found viable.
Send details to: wavelengths@ieee-sem.org OR letters@ieee-sem.org

Michigan Institute for Plasma Science and Engineering: Seminars for the academic year:
https://mipse.umich.edu/seminars.php

Model RC Aircraft
http://www.skymasters.org

Model Rocketry
https://www.nar.org/find-a-local-club/nar-club-locator/

Astronomy
http://www.go-astronomy.com/astro-clubs-state.php?State=MI

Experimental Aircraft Association
https://www.eaa.org/en/eaa/eaa-chapters/find-an-eaa-chapter

Robots
https://www.robofest.net/index.php/about/contact-us

Science Fiction Conventions
https://2022.penguicon.org/

http://www.confusionsf.org/

Mad Science
http://www.madscience.org/

ESD PE Review Class
https://www.esd.org/programs/pe/

Maker Faire:
https://swm.makerfaire.com/

It appears that the SouthWest Michigan Maker Faire was a casualty of the Global Pandemic, as were many of our friends and several organizations.

However, we retain this link for anyone wishing to make contact and consider pumping life back into what was a wonderful experience.

Executive Committee

The Executive Committee is the primary coordination unit for Southeastern Michigan (SEM) IEEE operations. The basic organization chart below shows the 2023 arrangement of communications links designed to provide inter-unit coordination and collaboration.

The SEM Executive Committee meets in a teleconference each month on usually on a Thursday at 6:30 pm. The specific meeting days, times, phone or WebEx numbers and log in codes are published on the IEEE SEM Website calendar: **http://r4.ieee.org/sem/** Click on the "Calendar" button in the top banner on the first page of the web site.

If you wish to attend, or just monitor the discussions, please contact **Christopher Johnson**, the section secretary at secretary@ieee-sem.org and request to be placed on the distribution list for a monthly copy of the agenda and minutes. More meeting details are available on the next page of this newsletter.

Other Meetings:
About half of our members maintain memberships in one or more of the IEEE technical societies, which automatically makes them members of the local chapter which is affiliated with that society. As a result, they should receive notices of the local chapter meetings each month.

However, members of the section may have multiple technical interests and would like to have meeting information of other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to send meeting information to our webmasters for posting on section's calendar.

More detailed information on meetings may be found through the IEEE SEM Website: **http://r4.ieee.org/sem/** and clicking on the **SEM meetings list** button near the bottom of the left-hand banner.

Automatic e-mail notification of web updates may be received using the "**Email Notifications**" button at the top of the **SEM Tools/Links** side banner.

Christopher Johnson (Secretary)
Email: secretary@ieee-sem.org

If you wish to download the <u>complete SEM Organization Chart</u>, in PDF format, it will be made available soon at http://r4.ieee.org/sem/ . In the meantime, you may use the diagram below (recently refreshed!)

2024 Section OrgChart

KEY:
Grey == Elected
Light Blue == Elected for the *next term*
Green == Appointed by Chair
White == Ex Officio/ by Appointment

Version: 2024-01-01
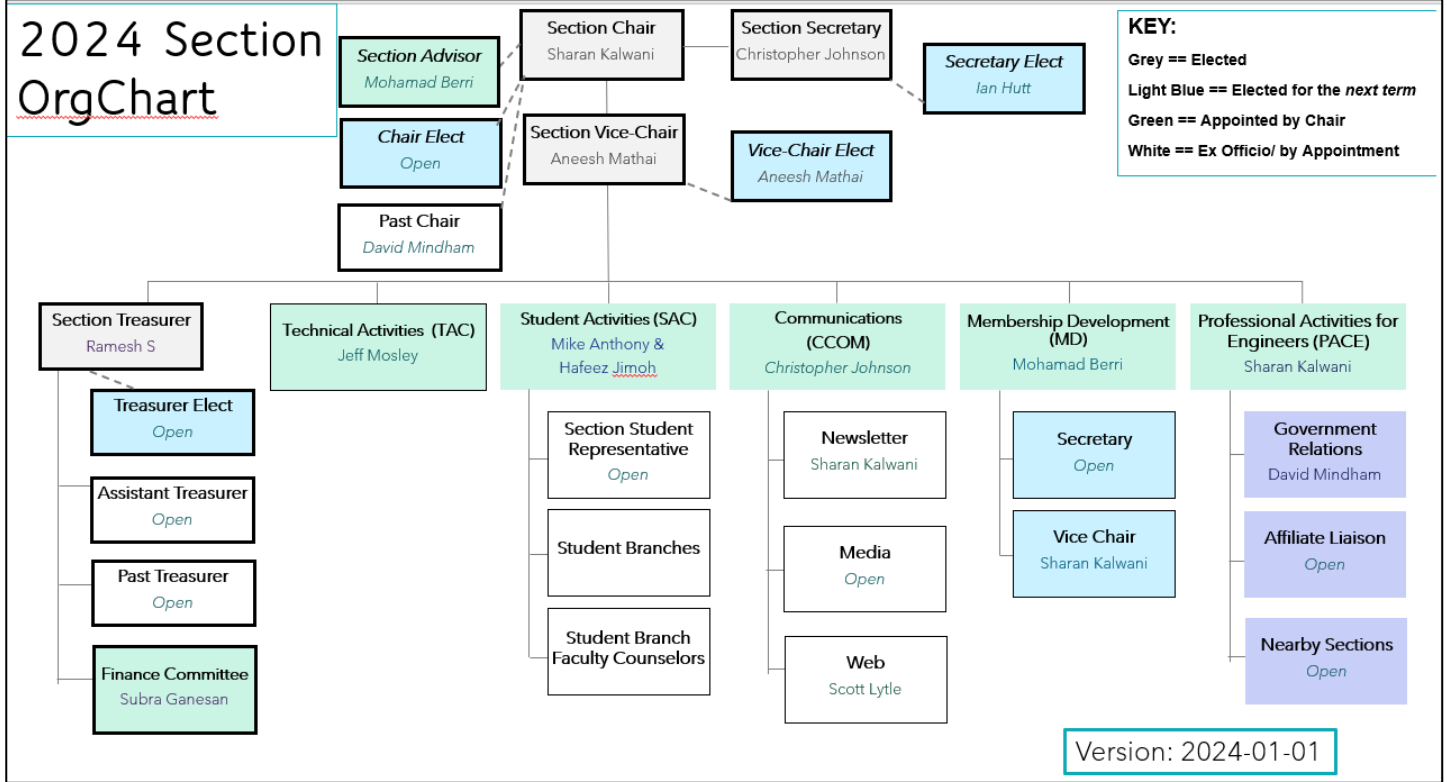
2024 IEEE Southeastern Michigan Student Branches — Organization chart

Version: 2024-08-01
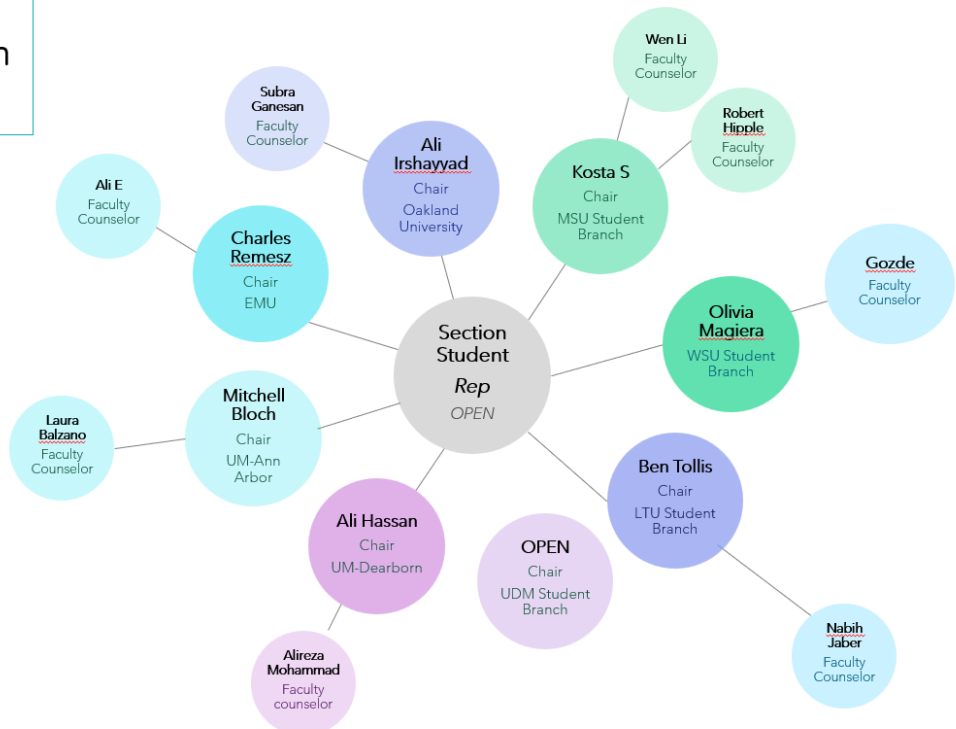
ExCom Meeting Schedule

NOTE: All SEM members are invited to attend ALL ExCom (Executive Committee) meetings:

Below is the 2024schedule for the Section ExCom meetings with links to add the events to your calendar. It is important that **_at least one person_** from each Chapter/Affinity Group attends each scheduled ExCom meeting. Please mark your calendars for the 2024 meetings. Or link your personal calendar to the SEM Web calendar.

Section Administrative Committee (ExCom) Meeting Schedule for 2024: (clickable links)

Note: All IEEE Members are welcome at any IEEE meeting, at any time but please register so we can be sure to accommodate you. This month's meeting is highlighted in **Bold**.

ExCom Meeting (all clickable links)	Date & Start Time, Duration
Section ExCom Monthly Meeting (virtual) For OCTOBER	10 Oct 6:30 PM, 1 hour
Section ExCom Monthly Meeting (virtual) For NOVEMBER	14 Nov 6:30 PM, 1 hour
Section ExCom Monthly Meeting (In Person) For DECEMBER	12 Dec 6:30 PM, 2 hours

Christopher Johnson (Secretary)
Email: secretary@ieee-sem.org

Section Administrative Committee (ExCom) Meeting Schedule for 2024: (screen snapshot)

SEARCH EVENTS

Learn how to integrate Event notices with your website
Hey! I want the old Search page.

Search Options   Advanced Search | Clear Search

Search Term ❓	Organizational Unit ❓	Date Range ❓
section excom	R40035 - Southeastern Michigan Section ⊖	Upcoming ⌄

Search | Download

Showing 6 of 6 upcoming events, based on search criteria.

Title	Date	Host	Location	Reported On	Options
☑ SEM Section ExCom Monthly Meeting (virtual) For JULY 2024	11 Jul 2024 06:30 PM	R40035			View | Manage
☑ SEM Section ExCom Monthly Meeting (virtual) For AUGUST 2024	08 Aug 2024 06:30 PM	R40035			View | Manage
☑ SEM Section ExCom Monthly Meeting (In Person) For SEPTEMBER 2024	12 Sep 2024 06:30 PM	R40035	Sou...		View | Manage
☑ SEM Section ExCom Monthly Meeting (virtual) For OCTOBER 2024	10 Oct 2024 06:30 PM	R40035			View | Manage
☑ SEM Section ExCom Monthly Meeting (virtual) For NOVEMBER 2024	14 Nov 2024 06:30 PM	R40035			View | Manage
☑ SEM Section ExCom Monthly Meeting (In Person) For DECEMBER 2024	12 Dec 2024 06:30 PM	R40035	Southfield, Michigan		View | Manage

Editorial Corner

Previous editions in this series may be found on the IEEE SEM website at: http://r4.ieee.org/sem/. Click on the "Wavelengths" button in the top row of selections.

Comments and suggestions may be sent to the editorial team at wavelengths@ieee-sem.org
OR
sharan.kalwani@ieee.org
k.williams@ieee.org
cgjohnson@ieee.org
akio@emcsociety.org

We rely on our officers and members to provide the 'copy' that we finally present to readers of the newsletter.
The **Wavelengths Focus Plan and Personal Profiles** plan shown in the matrix below is presented to ensure coverage of section activities and events.

We try to complete the newsletter layout a week before the first of the month to allow time for review and corrections. If you have an article or notice, please submit it two weeks before the first of the month or earlier if possible.

The plan below relies on the contributions of our members and officers, so please <u>do not be shy</u>. If you have something that should be shared with the rest of the section, we want to give you that opportunity.

We always encourage all chapters and student branches to share news of activities (both past and future) in their arenas. Please feel free to share any and all information so your peers, colleagues can hear about all the good work you do.

Quote*:*
"If a tree falls in a forest and no one hears it, how do you know it actually fell??"

So, publicize your work, one never knows when it can pay off!

Editors:

We are always looking for members interested in helping to edit the newsletter. The process is always more fun with more people to share the duties. Having more participants and contributors also helps us keep the newsletter interesting.

Join the Team:

If you feel you might like to join the team, or would like to train with us, please contact one of us at:
wavelengths@ieee-sem.org

Sharan Kalwani,
Chair, IEEE SE Michigan Education Society Chapter
Vice-Chair, IEEE SE Michigan Computer Society Chapter
Co-Editor, Wavelengths,
2018~2019~2020~2021~2022-2023-2024

Wavelengths Annual Publication Plan for Articles

Month	AG's	Ch's	Ch's	SB's	Special Notice	Reporting Events	Monthly Focus	Awards
Jan		1		OU	New Year Officers	Officer's Welcome	The Year Ahead	
Feb	Cons	2		MSU	Science Fair Judges	National Engrs Wk.	Surviving Winter	
Mar		3	13	EMU	Elections - Prep			
Apr		4		U/M-D		ESD Gold Awards	Chapter Focus	
May	Life	5	14			Science Fair		
Jun		6					Leadership Skills	
Jul		7	15				Students Issues	
Aug	WIE	8			Nominations Call		Womens Issues	
Sep		9	16	LTU	Ballots	Engineers Day?	Professional Skills	
Oct		10		U/M-AA	Elections!	IEEE Day		
Nov	YP	11	17	WSU	Election Results	New Fellows		
Dec		12		U/D-M	IEEE-Com Apmts.		Happy Holidays	R4 Nom

Wavelengths Annual Publication Plan for Personal Profiles

Month	Profiles	Profiles	Committees
Jan	Chair	New Officers	ExCom
Feb	Treasurer		Communications
Mar	Secretary		Conference
Apr	Stud-Rep		Education
May	V-Chair		Executive
Jun	Sect-Adviser		Finance
Jul	Sr Officers		Membership
Aug			Nominations
Sep			PACE
Oct			Student Activiies
Nov			Technical Activiies
Dec	Editor-WL		

Web & Social Sites

Southeastern Michigan Section Website
http://r4.ieee.org/sem/

Each of the sites below may be accessed through the Website:

Section Website Event Calendar
(Select the "SEM Calendar" button - top row)

SEM Facebook Page
(Select the "f" button under the top row)
https://www.facebook.com/groups/ieeesemich

SEM LinkedIn Page
(Select the "in" button under the top row)
https://www.linkedin.com/groups/1766687/

SEM Twitter Account (new)
(Select the " " button under the top row)
https://www.twitter.com/ieeesemich

SEM Collabratec *Community* Page
https://ieee-collabratec.ieee.org/app/section/R40035/IEEE-Southeastern-Michigan-Section

SEM Collabratec *Workspace* Page
https://ieee-collabratec.ieee.org/app/workspaces/5979/IEEE-Southeastern-Michigan-Section/activities

SEM Instagram (new)
https://www.instagram.com/ieeesemich/

SEM Officers:
For a complete listing of all - Section - Standing Committee - Affinity Group - Chapter and Student Branch SEM Officers Roster on the web page (top banner)

Section Officers

Section Chair
Sharan Kalwani

Section Vice-Chair
Aneesh Mathai

Section Secretary
Christopher Johnson

Section Treasurer
Ramesh Sethu

Standing Committees:

Section Adviser
Mohamad Berri

Wavelengths Editor
Sharan Kalwani

Educational Committee
Anthony Will **(Chair)**

Finance Committee
Subra Ganesan **(Chair)**

Membership Development
Mohamad Berri **(Chair)**

Awards & Nominations
Jerry Song **(Chair)**

PACE
Sharan Kalwani **(Chair)**

Student Activities
Michael Anthony & Hafeez Jimoh **(Co-Chairs)**

Student Mentors
OPEN

SECTION Student Rep
OPEN

Technical Activities
Jeffery Mosley

Information Management

IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

IEEE Southeastern Michigan

Visit Us on the Web at:
http://r4.ieee.org/sem

The formula to measure the area of a pun is length times wit.

Leadership Meetings

SEM Executive Committee Monthly Teleconferences:
- 2nd Thursday of Each Month @ 6:30 PM
- Check the Section Web Calendar at:
  http://r4.ieee.org/sem/sem-calendar/
  (Select the "SEM Calendar" button in the top row.)

   OR

SEM Executive Committee Meetings:
- Find the location, and Registration at:
  http://bit.ly/sem-ieee

SEM Standing Committee Meetings:
SEM Affinity Group Meetings:
SEM Technical Society/Chapter Meetings:
SEM University Student Branch Meetings:
- Meeting schedules are announced on SEM Calendar
  http://r4.ieee.org/sem/
  (Select the "SEM Calendar" button in the top row.)

- Registration for all at:
  http://bit.ly/sem-upcoming