Wavelengths

Volume 65 – Issue 06

Contents

Section Chair's Message	1
Upcoming Events	3
Ham Radio	4
RoboFest Report	5
Scientific Communicating	9
Tech Activities Report	11
New Officers: Suggestions	12
SAVE THE DATE!	13
This Month in June	14
Member News!	17
A&A Panel Schedule	18
Activities & Events	19
ORG UNITS cheat sheet	20
Executive Committee	22
ExCom 2025 Schedule	24
ExCom 2025 Calendar	24
Editor's Corner	25
Section Officers	27
Web & Social Sites	27
Leadership Meetings	28
Advertising Rates	28

Section Chair's Message

Welcome to June!
There is plenty to look forward to this month by way of activities. Now that the weather is warmer, we are encouraging more folks to contact either the section or their chapters, student branches, or affinity groups, and ask them to organize more events.

Last month we had 3 very interesting documentaries scheduled. These continue to be popular and attract many non-members as well.

But the real public facing IEEE SEM real major/massive events that took place of course were:

- ✓ Annual EMC Fest2025 and
- ✓ RoboFest World Championship

Both of them are signature events of our Section and you will find a report on Robofest in this edition and hopefully an equally enjoyable report on EMCFest in the next edition. You can find ALL the other upcoming events using the short URL link: **https://bit.ly/sem-upcoming**

To register, find the "Upcoming Events" tables and follow the vtools links.

SAVE THE DATE
We are planning to hold a joint celebration of two societies founding anniversaries, namely: Aerospace Electronics and the Technology Engineering Management Society. The scheduled date is October 18th and as always, we will be rotating the venue location, this time we are focusing on doing this in Lansing, Michigan. Stay tuned for details!

As for events, I have been sharing the progress and we are on track (see next page) to equal last years performance!

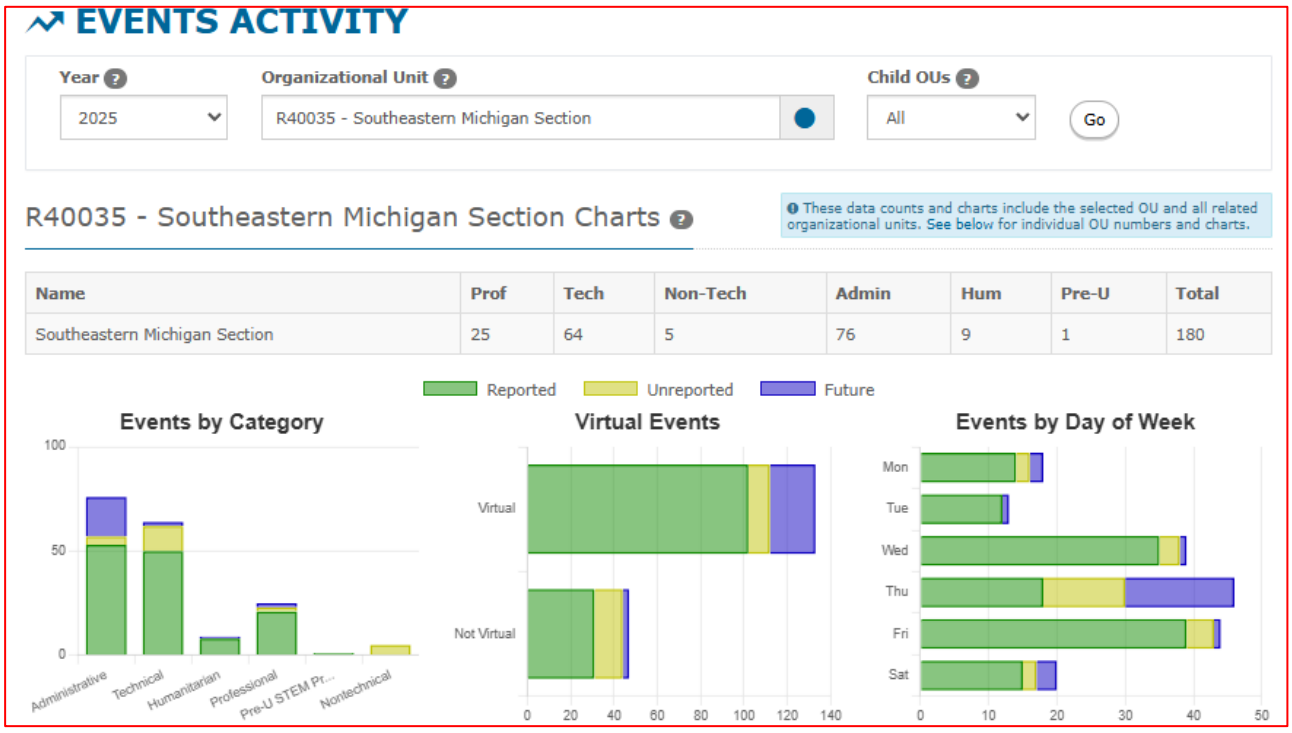
Volunteering:
We, IEEE Southeastern Michigan Section, function based on the work of our volunteers. If someone has important obligations that reduce their ability to volunteer, other volunteers need to step in and carry the load. The more volunteers we have, the easier the workload on everyone. Please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

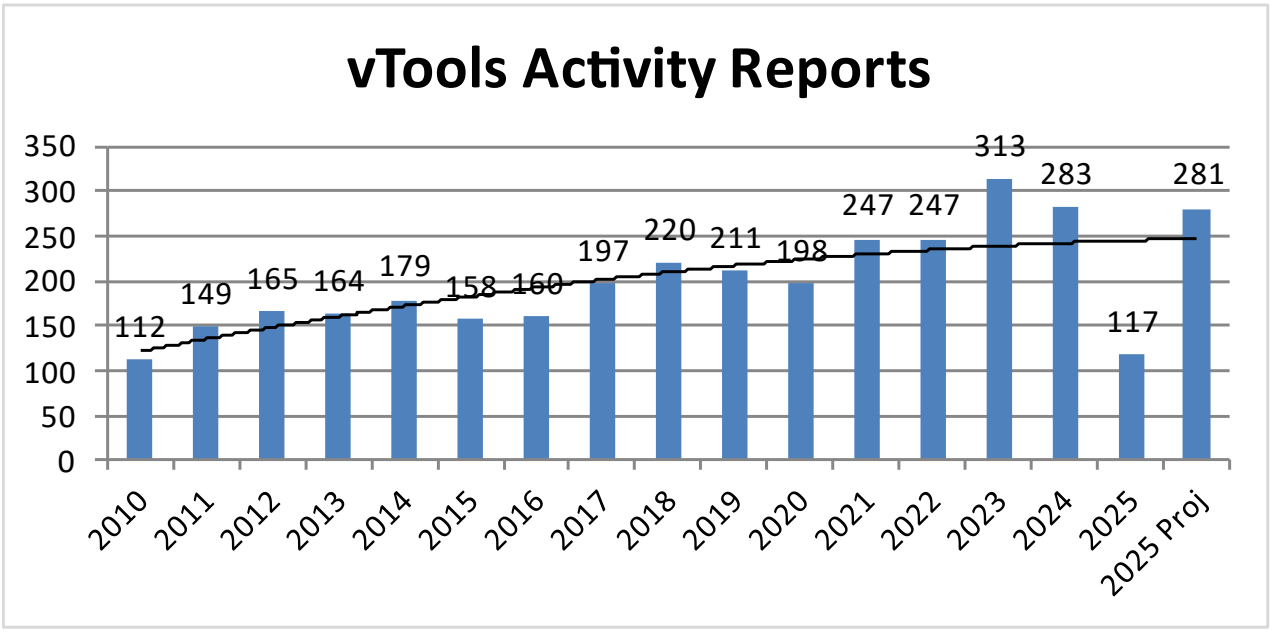
Also of note – we take a great deal of interest in our members welfare. We have already scheduled ONE MORE senior elevation events this month: June. I look forward to hearing from you and seeing you at our events. As always, your ideas and suggestions are encouraged and welcome. If I don't hear back (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





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 **https://bit.ly/sem-upcoming**

Event	Date	Time (US Eastern)
Jun 02 2025 - VTS: Admin Meeting : Southeastern Michigan Section Chapter, VT06	2025-06-02	2100 Hours
SEM Ch4 Admin Meeting : Southeastern Michigan Chap, AP03/ED15/MTT17/PHO36	2025-06-04	1201 Hours
A Review of Ultrasound Technologies and their Clinical Utility : Southeastern Michigan Section Chapter, EMB18	2025-06-05	1830 hours
IEEE SEM Chapter 3 Officer ZOOM Meeting - Members invited. : Southeastern Michigan Sec,AES10/COM19	2025-06-05	1900 Hours
IEEE SEM YP AFFINITY GROUP ADMIN MEETING - JUNE 2025 : Southeastern Michigan Affinity Group, YP	2025-06-09	1730 Hours
Ch8: AdCom Teleconference : Southeastern Michigan Section Chapter, EMC27	2025-06-12	1100 Hours
SEM Section ExCom Monthly Meeting (IN PERSON) For JUNE 2025 : Southeastern Michigan Section	2025-06-12	1830 Hours
Senior Member Elevation (a HYBRID Event!) : Southeastern Michigan Section	2025-06-14	1030 Hours
Friis Equation - The Secret Sauce of Signal Strength! : Southeastern Michigan Section Chapter, EMC27	2025-06-19	1730 Hours
Chapter TEM14: Administrative Committee Meeting : Southeastern Michigan Section, Chapter TEM14	2025-06-26	2000 Hours

Ham Radio

Field Day (June 28-29, 2025) is an annual amateur radio exercise, widely sponsored by IARU regions and member organizations, encouraging emergency communications preparedness among amateur radio operators.

In the United States, it is typically the largest single emergency preparedness exercise in the country, with over 30,000 operators participating each year. Field Day is always the fourth full weekend of June, beginning at 1800 UTC Saturday and running through 2059 UTC Sunday. Amateurs in Canada and Mexico also cooperate in the operations and add an international component to the exercise.

Since the first American Radio Relay League (ARRL) Field Day in 1933, radio amateurs throughout North America have practiced the rapid deployment of radio communications equipment in environments ranging from operations under tents in remote areas to operations inside Emergency Operations Centers (EOCs). Operations using emergency and alternative power sources are highly encouraged, since electricity and other public infrastructures are often among the first to fail during a natural disaster or severe weather.

To determine the effectiveness of the exercise and of each participant's operations, there is an integrated contesting component, and many clubs also engage in concurrent leisure activities (camping out, cookouts, etc.).

Operations typically last a continuous twenty-four hours, requiring scheduled relief operators to keep stations on the air.

Additional contest points are awarded for experimenting with unusual modes, making contacts via satellite, and involving youth in the activity.

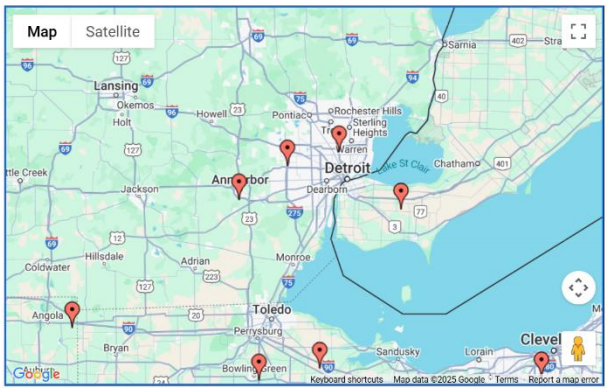
***** ***** ***** *****

Local Field Day Sites:

Most amateur radio club sponsored field day sites encourage visitors to come and see what amateur radio is all about, and many also have “Get On The Air” (GOTA) stations set up for non-amateurs to operate under the control of a licensed amateur radio operator.
See below:

Local locations of field day sites may be found by using the ARRL ‘field day locator’ interactive map on-line at:
http://www.arrl.org/field-day-locator

As you can see above, there are several field day sites in Southern Michigan and northern Ohio open to the ‘public’ to visit during the event. Use the map link above to locate the site nearest you and contact the club representative to



find the exact location of the outdoor exercise.

Courtesy: ARRL, the national association for Amateur Radio hq@arrl.org
-30-

RoboFest Report

Robofest 2025 World Championship Report

Robofest is a world-wide robotics competition program for pre-college students in 4th - 12th grade, sponsored by IEEE Southeast Michigan Section (SEM). Student teams design, construct, and program their autonomous robots to compete for trophies in 8 competition categories. More than 200 teams that advanced from local qualifying competitions competed in the World Championship at Lawrence Technological University from May 15 to 17, 2025. The event brought together over 700 students from 22 countries, accompanied by their parents and coaches. Each participating student received an IEEE medal, generously sponsored by the IEEE SEM. All the IEEE sponsored medals since 2004 was displayed at the IEEE table. Technical Judging is a very important part of Robofest. The following 22 IEEE members served as Judges in 4 categories to evaluate robotics projects.

- **Exhibition:** Priya Boopalan, Bowofola Fadojutimi, Benancio Gonzalez, Tao Liu, Victor Manske, Eric Martinson, Sreekanth Narayan, George Pappas, Vipul Patel, Tejaskumar Patil, Josh Siegel, Durvijay Sharma, Hemanth Venkata, and Huang Weiliang
- **RoboMED**: Ashok V Chintalapati, CJ Chung, Siri Sri Churakanti, Hao Jiang, Fan Li, and Choongbae Park
- **RoboArt**: Paula Lauren
- **Game**: Devson Butani

Sharan Kalwani, SEM section chair had a video interview with LTU news media to introduce IEEE Southeast Michigan Section.

(Figure 1) IEEE Robofest medal awarded to World Championship Contestants

(Figure 2) IEEE SEM Table with IEEE Robofest medals since 2004

(Figure 3) IEEE Judges in the gym

(Figure 4) IEEE Judges in the gym

(Figure 5) IEEE Judges in the LTU STEM Center

(Figure 6) Certificate of Appreciation Awarded to IEEE SEM

(Figure 7) IEEE Exhibition Judges

(Figure 8) IEEE Sr Exhibition Judges

(Figure 9) IEEE SEM Section Chair is holding an IEEE medal during his video interview with LTU new media

Scientific Communicating

(Suggested by the IEEE Society on the Social Implications of Technology)

How Science Can Fix Its Trust Problem

Written By: Cory Miller and Michael L. Platt

The following article was written by Cory Miller, a neuroscientist at the University of California San Diego, and Michael L. Platt, a neuroscientist at the University of Pennsylvania and director of the Wharton Neuroscience Initiative.

In recent years, the relationship between science and public perception has faced increasing complexities, driven by heightened skepticism and polarized opinions. This issue is not merely about the dissemination of knowledge but about the subtle interplay between trust, understanding, and the evolving modes of communication. Bridging the gap between the scientific community and the public requires a profound shift in how ideas are shared, emphasizing both clarity and relatability.

Americans' confidence in science has slipped to its lowest point in almost half a century, write neuroscientists Michael Platt and Cory Miller. In this opinion piece, they explain how scientists can work to rebuild trust.

Leadership

Communication should be treated as a vital part of a scientist's job: Senior scientists must adopt new modes of communication, and graduate programs must equip the next generation with these skillsets. Building trust requires leaving academic bubbles and engaging directly with diverse communities.

Scientists today seem out of touch with reality. In the past, when a new administration proposed deep cuts to federal research, scientists reflexively girded for battle using a tried-and-true playbook. We circulated petitions, attended protests, fired off angry emails, lauded our accomplishments, and hoped the storm would pass, all while patting ourselves on the back. But these days, the rising tide of anti-science sentiment is not receding. The same public that once rose to support us is not showing up. Americans' confidence in science has slipped to its lowest point in almost half a century.

Only a third of Americans today think highly of universities — a number that has dropped by half in only a decade. The world changed, and scientists stubbornly did not.

One thing is very clear. The old strategies will not work today. A paradigm shift is needed. If we want the public — and the politicians who represent them — to see research as a national necessity rather than an optional line item, scientists must fundamentally change how we show up in public life.

We have persuasive material to work with. Vaccines have doubled human life expectancy. Gene-editing tools are poised to cure once-fatal diseases. Brain-computer interfaces now let paralyzed people type with their thoughts. Yet too often these triumphs remain trapped in academic journals or emerge in press releases written for insiders, not neighbors. Into that vacuum step loud, well-funded voices eager to paint researchers as coastal elites pushing a partisan agenda.

Part of the problem is structural. Success bred specialization; specialization bred silos. Federal agencies, professional societies, and think tanks each assumed someone else was handling public outreach. Meanwhile, the range of viewpoints on many campuses narrowed, and protests occurred when conservative speakers visited universities, feeding the perception that science itself has taken sides. Critics had an easy target: isolated experts speaking an arcane language while missing the concerns of ordinary voters.

One thing is very clear. The old strategies will not work today. A paradigm shift is needed.

History warns us not to assume good data will prevail on its own because the significance of science is not inherently self-evident. Galileo's telescope shook the world, but it took 359 years for the Church to admit it was wrong. What finally wins hearts and minds is persistence, storytelling, and relevance to daily life — the very skills we scientists let atrophy.
We can do better, and quickly, by following three principles.

First, Treat Communication as a Core Professional Duty

A lab that publishes groundbreaking work but never explains why it matters is only half-funded. Universities and funding agencies should reward op-eds, town-hall talks, and social-media explainers with the same seriousness they give to peer-

reviewed papers. How the world communicates has changed radically, but scientific communication has not. Senior scientists must adopt these new modes of communication, and graduate programs must equip the next generation with these skillsets.

Second, Leave the Bubble

We cannot only talk with people who already agree with us. Rural hospitals struggling with doctor shortages, school boards debating climate curricula, faith groups weighing vaccine guidance — these are forums where evidence can save lives and bridge divides. Showing up in person, listening before lecturing, and acknowledging uncertainty are acts of respect that earn trust faster than any fact sheet.

Third, Invite Everyone In

Scientific talent is universal even if opportunity is not. When kids from small towns or underserved schools hear directly from researchers who look like them — or simply bother to visit — they glimpse a future they can join. That pipeline strengthens discovery and democracy alike.

Critics will say scientists don't have time for outreach; the grants won't write themselves. But if we don't make time, there will be no grants to apply for. Public opinion shapes budgets, and budgets enable breakthroughs.

We should also be honest about the stakes. Cancer, dementia, and antibiotic-resistant infections do not check party registration. A nation that underfunds discovery endangers Republicans and Democrats alike, along with everyone who never votes. Science is one of the few enterprises still capable of uniting us around shared hopes: health, longevity, a planet that sustains our grandchildren and great-grandchildren.

Rebuilding trust will not be quick, but it is achievable. We don't need every researcher on TikTok or testifying before Congress, but we do need to encourage some who can. We need warrior poets to step up and translate data into plain language, admit when findings change, and engage skeptics without condescension. If scientists won't cross the trenches we helped dig around our institutions, we shouldn't be surprised when society stops crossing the bridge to support us.

In the end, the choice is ours. We can retreat behind microscopes and lament shrinking budgets, or we can step forward — lab coats off, sleeves rolled up — and make the case that evidence still matters in America. History suggests the public will listen, but only if we start that conversation first.

Tech Activities Report

As of May 29, 2025

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
CnsIt	0	0	0	1	1	1	Consultants Network	0	3
LIFE	0	0	0	0	0	2	Life Members	0	2
WIE	50	30	1	4	0	0	Women In Engineering	2	5
YP	0	0	0	3	1	0	Young Professionals	0	4
1	0	0	0	1	0	0	Circuits & Systems, Signal Proc., Info Th.	0	1
2	21	0	1	3	0	0	Vehicular Technology	1	4
3	16	10	2	2	1	0	Aerospace & Elec. Sys., Communications	0	5
4	21	12	2	4	1	0	Trident (Ant, Elect Dev., uWave, Photo)	0	7
5	71	46	15	5	11	3	Computers	1	34
6	29	8	4	0	0	0	Geoscience & Remote Sensing	0	4
7	0	0	0	2	0	1	Power Engineering, Industrial App.	0	3
8	25	12	3	4	0	0	Electromagnetic Compatibility (EMC)	5	7
9	52	4	1	2	0	0	Power Electronics, Industrial Electronics	0	3
10	16	10	1	2	0	0	Engineering Management	0	3
11	14	0	1	0	0	0	Eng. in Medicine & Biology	0	1
12	21	0	1	0	0	0	Control Systems	0	1
13	9	1	3	0	0	1	Education	0	4
14	702	680	1	0	0	0	Robotics & Automation	1	1
15	21	12	2	0	0	0	Nuclear Plasma Science Society	0	2
16	702	680	1	0	0	0	Computational Intelligence / Sys.Man.Cyber.	0	1
17	0	0	0	0	0	0	Nano Technology Council	0	0
18	0	0	0	0	0	0	Magnetics Society	1	0
									0
SEM	21	1	1	17	3	1	SEM (Section)	5	22
Tot	1791	###	40	50	18	9	NOTE: Highlight Green = Active	16	117
		84%					NOTE: Highlight clear = Concern		

SEM Section Chapter and Affinity group leaders who are not showing any technical or administrative meetings are encouraged to conduct meetings of your leadership ASAP. The TAcom will be contacting the following Geo-Units next month: Women in Engineering, Young Professionals, Chapters 1, 2, 7, 9, 10, 11, 12, 14, 16, 17, and 18 to help you establish a projected plan of event for the remainder of the year as well as to provide any other assistance needed. I have a draft plan for Chapter 16 that I'd be willing to share with you. Thanks to all GAs working to engage their membership (i.e., Consultants, Chapters 5 and 8)."

Jeff Mosley, TAcom Chair
CIS CH 16 Chair (SEM Section, Region 4)

New Officers: Suggestions

There are several actions that can & should be taken by officers when taking command of their organization. While one alone will not guarantee eventual success, leaving one out can seriously inhibit the long-term success of any team. The suggestions given here are my own understanding of what has worked well in the past. The specific sequence can be varied, so don't be concerned as long as all, or most, eventually come about.

1st: Establish regular and consistent Officer meeting days and times.

- This should first be applied to your organization's administrative committee (Chair / Vice-Chair / Secretary / Treasurer) if this is a traditional IEEE Geo-unit. If the organization is a standing committee, the titles will be more diverse.
- My personal experience has been that a first time 'face-to-face' meeting helps establish a rapport among the members. This is more effective when combined with refreshments or a meal.
  (*There is a reason why every culture on our planet greets newcomers with offers of something to eat and or drink, or both*.)
- Follow that first meeting with virtual meetings to minimize member travel and time but schedule other face-to-face gatherings at least 3 or 4 times each year to maintain the interpersonal gestalt established in the first event.
- Hold a 'non-working' social meeting near the end of the year to celebrate the successes and achievements of your team. This is the team's 'thank you' for a job well done.

2nd: Set up a communications method to remain 'in contact' with your general membership.

- Introduce your Officers and Volunteers to your general membership.
- Ask your members for their ideas on what activities and presentations they would like to see.
- Keep them informed about activities as they are planned.
- Seek additional officers and volunteers from among your members. An active meeting schedule may require more hands than just your four elected officers.
- Communications methods may include: Geo-unit website, eNotice, group meetings (ZOOM), picnic's, local site visit outings, etc.. Use your imagination. If one doesn't work, try something else.

3rd: Maintain contact with your Section Executive committee.

- Attend as many of the Executive Committee meetings as possible.
- Have your entire Administrative Committee attend and / or rotate that function among your officers and volunteers.
- Report on your Geo-unit activities to the Executive Committee, and…
- Document your activities with photos and articles contributed to the monthly Wavelengths newsletter.

4th: Use the 'v'Tools to plan and document all your activities.

- vTools Survey tools
- vTools Engage
- vTools eNotice
- vTools Events
- vTools Local Groups
- vTools Officer Reporting
- vTools Student Branch Reporting
- vTools Voting

5th: Establish contact with the other Geo-units in your Section.

- Cooperate with them to expand the opportunities for both your, and their, membership.
- Share the work and costs of organizing a major event.
- Increase attendance at events with both memberships
- Share information about both Geo-units for the benefit of both memberships.
- Have more fun!

30

SAVE THE DATE!

IEEE Southeastern Michigan

Electrical and Electronic Engineers Creating Our Future

Combined Celebration

Aerospace Electronics Society (75th)

and

Technology Engineering Management Society (10th)

Planetarium Tour & Show
Cocktail Reception and
Section Awards

2:00 to 7:00 pm
October 18th, 2025 (Saturday)
Abrams Planetarium
Lansing, Michigan
Registration link coming soon!

This Month in June

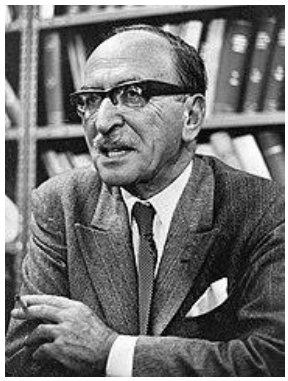
Or: Notable Events in Engineering & Science History, which I Did Not Know! ☺

Konrad Zuse; Born 22 June, 1910; died 18 December, 1995.

Award-winning German computer scientist Konrad Zuse created the world's first program-controlled computer, named Z1. He then moved on to Z3, the first fully functional programmable computer in the world, and Z4, the first commercial digital computer in the world. Post-retirement, he spent most of his time painting.

Frank Whittle; Born 1 June, 1907; died 9 August, 1996

Aviation engineer Frank Whittle entered the **Royal Air Force** as an apprentice and rose through the ranks to become a pilot. He invented the jet engine, though his idea of a plane that could fly at a phenomenal speed was initially laughed at. He was later *knighted* for his achievements.



Dennis Gabor; Born 5 June, 1900; died 8 February, 1979.

Dennis Gabor was a Hungarian-British physicist and electrical engineer best remembered for inventing holography. His invention earned him the prestigious *Nobel Prize in Physics* in 1971. Gabor won several awards during his lifetime. After his demise, many awards are given in his honor. The *Dennis Gabor Award* and *Gabor Medal* are some of the awards that are named after him.

Ben Rich; Born 18 June, 1925; died 5 January 1995

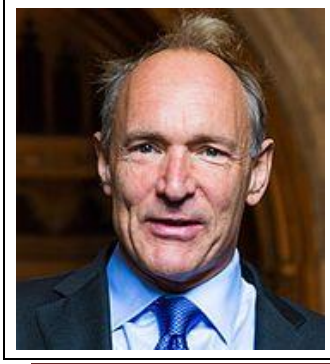
Benjamin Robert Rich (June 18, 1925 – January 5, 1995) was an American engineer and the second Director of Lockheed's Skunk Works from 1975 to 1991, succeeding its founder, Kelly Johnson. Regarded as the "father of stealth", Rich was responsible for leading the development of the F-117, the first production stealth aircraft. He also worked on the F-104, U-2, A-12, SR-71, and F-22, among others.

Burt Rutan; Born 17 June, 1943;
Burt Rutan is an American former entrepreneur and aerospace engineer. He is best known for his ability to make strong, light, energy-efficient, and unusual-looking air and space craft. Burt Rutan is credited with designing historically significant aircrafts like the *Virgin Atlantic Global Flyer*, which set the world record for the longest and fastest nonstop circumnavigation flight in history.

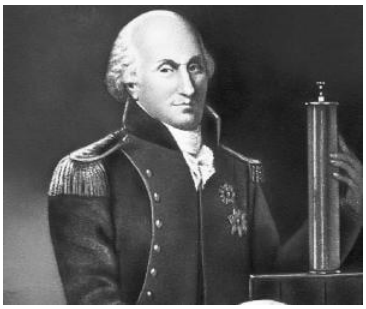
Henry Joseph Round; Born 2 Jun 1881; died 17 Aug 1966 at age 85.
English electronics engineer whose numerous inventions contributed to the development of radio communications. He joined the Marconi Company in 1902, and for his earliest work he devised the elements of direction-finding equipment. Round became Chief of Marconi Research in 1921. He was a prolific inventor. Amongst other inventions he designed the Straight Eight Gramophone Recording System, a large audience public address system which was used to relay King George's speech at the Wembley Exhibitions. A talking picture system he invented was used to record sound on to film during the 1930's cinema boom. In total he produced 117 patents. The last was "Pressure Wave Transmission Arrangements" (1964), at age 83.

Alan Dower Blumlein; Born 29 Jun 1903; died 6 Jun 1942 at age 38
British electronics engineer whose 128 patents contributed greatly in a wide field of electronics, including mono and stereo sound reproduction and sound recording, as well as high-definition radar, telephony and electrical measurements. His profuse creativity was achieved within just 18 years, because he died at age only 38 (while flight-testing a radar project during WW II). He began working in 1924 for International Western Electric Co., and by 1929 was with Columbia Gramophone Co. which became EMI (1931) where he invented the stereophonic recording system. Although a few stereo recordings were made in the 1930's, EMI did not extensively develop the technology until the 1950's, when it built on Blumlein's work.

Frederick Emmons Terman*; *Born 7 Jun 1900*; *died 19 Dec 1982 at age 82.
American electrical engineer whose research during WW II produced valuable radar countermeasures for the allied forces. He directed the Radio Research Laboratory at Harvard University formed for the purpose of inventing jammers of enemy radar, which included active radio transmitters, passive chaff (aluminum strips to mask targets by producing invalid reflections to enemy radar), and tunable receivers to detect radar signals. Terman also had responsibility for advising industrial contractors (such as RCA, GE, and Western Electric) concerning their manufacture. The radio electronics textbooks were popular because of his clarity. After the war, Terman worked on the design of long-distance electrical transmission and resonant transmission lines.



***Tim Berners-Lee*; *Born 8 Jun 1955*.**
English computer scientist who invented the World Wide Web and director of the World Wide Web Consortium, which oversees its continued development. In 1984, he took up a fellowship at CERN, to work on distributed real-time systems for scientific data acquisition and system control. While there, he proposed (1989) a global hypertext project, to be known as the World Wide Web, which permitted people to collaborate by sharing knowledge in a web of hypertext documents. On 6 Aug 1991, the first World Wide Web site was made available to the Internet at large, giving information on a browser and how to set up a Web server. He then expanded its reach, always nonprofit, to become an international mass medium.



Charles-Augustin Coulomb; Born 14 Jun 1736; died 23 Aug 1806 at age 70.
French physicist best known for the formulation of Coulomb's law, which states that the force between two electrical charges is proportional to the product of the charges and inversely proportional to the square of the distance between them. Coulombic force is one of the principal forces involved in atomic reactions. The inverse-square relationship is also seen in the relationship of the gravitation force between masses. In 1777, he invented a torsion balance which he subsequently modified for electrical measurements. He also did research on friction of machinery, on windmills, and on the elasticity of metal and silk fibers. Once he was asked to report on the feasibility of a navigable canal. Through his research he concluded that the proposed plan was too expensive—this angered the French bureaucracy and he was penalized. Knowing that he was right, he felt disappointed with the French government and decided to invest his efforts in the study of physics instead.

This continues the yearlong feature of interesting ***engineering*** events or milestones that occurred in a specific month. Readers are invited to share their views and opinions (or suggestions) at the accompanying link. Submissions can also be made using direct email to the editors at: wavelengths@ieee-sem.org.

Past readers have asked to feature one or more of these events in more detail. So, starting in January 2024, we have been featuring both documentaries and black & white movies, that will help shed more light on these luminaries and also explore the hidden side of their life stories. We will also endeavor to republish an article from various publications in the same month of Wavelengths.
This continues the yearlong feature of interesting ***engineering*** events or milestones that occurred in a specific month. Readers are invited to share their views and opinions (or suggestions) at the accompanying link. Submissions can also be made using direct email to the editors at: wavelengths@ieee-sem.org.

Past readers have asked to feature one or more of these events in more detail. So, starting in January 2024, we have been featuring both documentaries and black & white movies, that will help shed more light on these luminaries and also explore the hidden side of their life stories. We will also endeavor to republish an article from various publications in the same month of Wavelengths.

We will also endeavor to republish an article from various publications in the same month of Wavelengths, featuring one or more of these luminaries. I urge any and all faculty of the STEM departments to share this with their students!

Also, like previous months, where we screened online scheduled documentaries featuring several of the folks mentioned in this column, we will repeat them ALL in 2025, as part of a growing series. Enjoy!

Sharan Kalwani
2022-2025 Chair, Southeastern Michigan Section,
Passionate Engineering History Buff/Aficionado

Member News!

The IEEE Southeastern Michigan Section is extremely proud and happy to welcome many senior members, who got upgraded (or elevated as we like to call it) to senior status. It is all part of our Membership Development on-going initiative to play a role in the professional lives of our members and support them in every which way possible. Congratulations to all. Do feel free to contact them for follow up.

Mohamad Berri & Sharan Kalwani.
Membership Development Committee

Newly elevated Senior Members:

Sreekanth Narayana

With over 20 years of experience in enterprise architecture and SAP solutions, Sreekanth Narayan has established himself as a distinguished leader in the realm of technology-driven business transformation. Beginning his career as a mechanical engineer, he swiftly transitioned into the domain of enterprise technology, leveraging his analytical acumen and problem-solving expertise to optimize business processes for global enterprises. Throughout his career, Sreekanth Narayan has been at the forefront of designing and implementing complex SAP architectures that drive operational efficiency, scalability, and digital innovation. His deep understanding of enterprise systems, coupled with his ability to align IT strategies with overarching business goals, has made him a trusted advisor to executives and stakeholders across industries.

To complement his technical expertise, Sreekanth Narayan pursued an MBA from the prestigious Jack Welch Management Institute, where he honed his leadership and strategic management skills. This business acumen enables him to bridge the gap between technology and enterprise leadership, ensuring that digital transformations not only enhance IT infrastructures but also deliver tangible business value. He has successfully led large-scale SAP implementations, cloud migrations, and enterprise architecture initiatives, helping organizations streamline operations and gain a competitive edge in an increasingly digital marketplace. His ability to integrate Cutting-edge technologies with business objectives have earned him recognition as a visionary leader in enterprise architecture. Passionate about driving innovation and excellence, I continue to explore emerging technologies and best practices that redefine the future of enterprise IT. He is an advocate for continuous learning and enjoys mentoring professionals in the field of enterprise architecture and SAP solutions.

When not immersed in technology and strategy, Sreekanth Narayan enjoys engaging in industry discussions, speaking at conferences, and contributing thought leadership to the broader enterprise IT community. Recently, he was elevated to Sr. Member of the IEEE. Sreekanth Narayan is married to Shilpashree Sreekanth and has two kids, Aditi Sreekanth and Ahana Sreekanth.

Weiliang Huang

Weiliang Huang is a highly experienced Platform Product Owner at Robert Bosch LLC in Plymouth, MI, leading a globally distributed team of 15 in the development of automotive cockpit products. Prior to this role, he served as a Software Architect, specializing in display subsystem design and contributing to the development of a super large in-vehicle display. With 17 years of expertise in embedded systems, particularly platform software, including base software, operating systems, and device drivers, Mr. Huang drives innovation and provides technical guidance to his team.

His deep knowledge spans BSP, filesystems and storage, display and graphics subsystems, and virtualization. As a technical authority, he also serves as the department's primary interface with suppliers, investigating and resolving complex technical challenges. Mr. Huang holds a Bachelor's degree from Soochow University (2007) and is proactively exploring emerging technologies, such as the application of AI to enhance future cockpit experiences.

A&A Panel Schedule

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**
- 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.

2025 IEEE HQ Panel Meeting Dates

2025 Meeting Dates	Meeting Deadlines (Eastern Standard Time)
28 June 2025	11:59 p.m. on 21 June 2025
TBD	11:59 p.m. on 26 July 2025
TBD	11:59 p.m. on 20 September 2025
22 November 2024	11:59 p.m. on 15 November 2025

†See our own Section organized event at: https://events.vtools.ieee.org/m/479785 **OR** check the Section web site

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 https://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 WORK space for online chat, discussions, connecting with SECTION specific IEEE activities, besides geared/focused towards our local Southeastern Michigan officers.

vTools Meetings:
https://vtools.ieee.org/
Select "Events" on the right hand side and then "manage Events" and then "Schedule" 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.

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)

And of course our Section OU # is : R40035!

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!

Curated & Maintained By
Sharan Kalwani,
Chair, IEEE Southeastern Michigan Section (2022-2025)
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.

Executive Committee

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

The SEM Executive Committee meets in a teleconference each month, 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: **https://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.

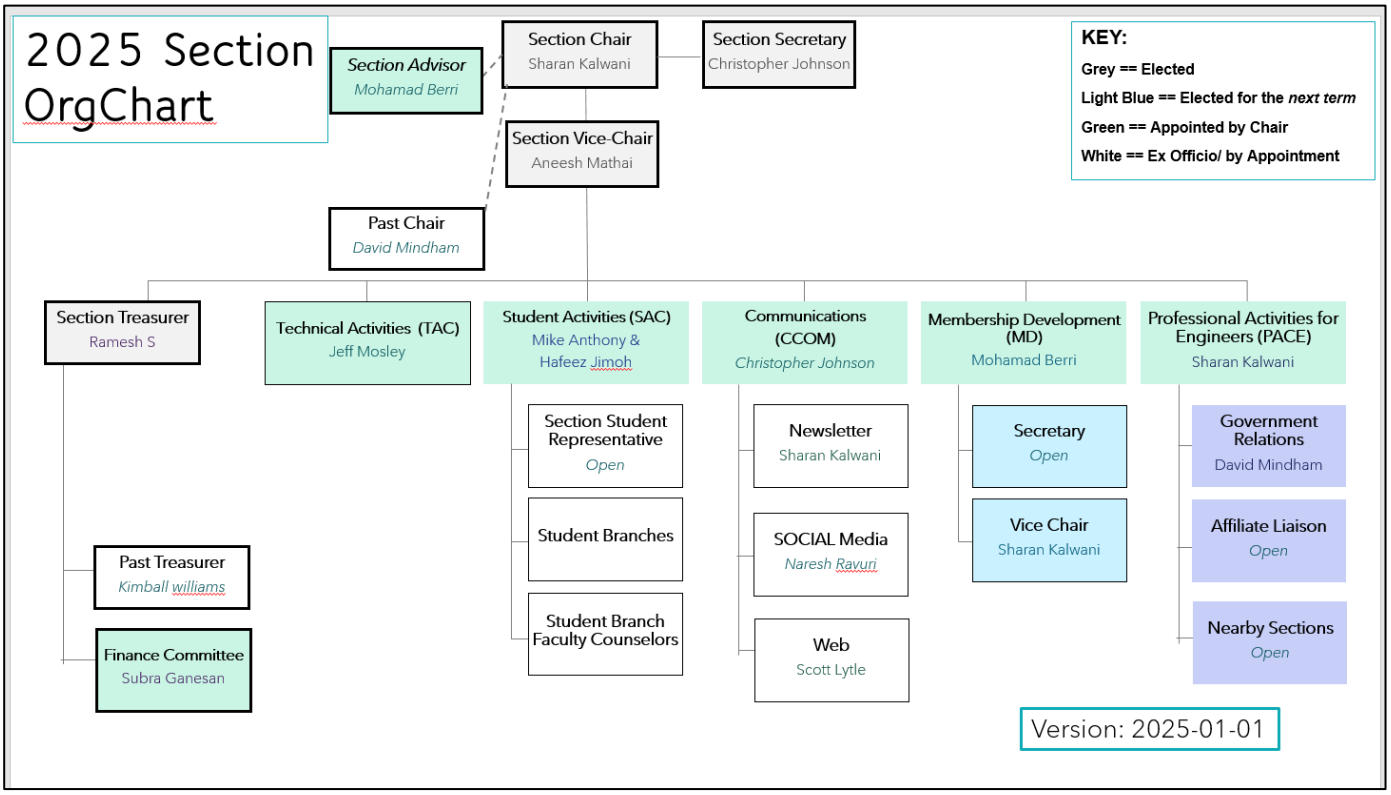
However, members of the section may have multiple technical interests and would like to have meeting information of other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to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

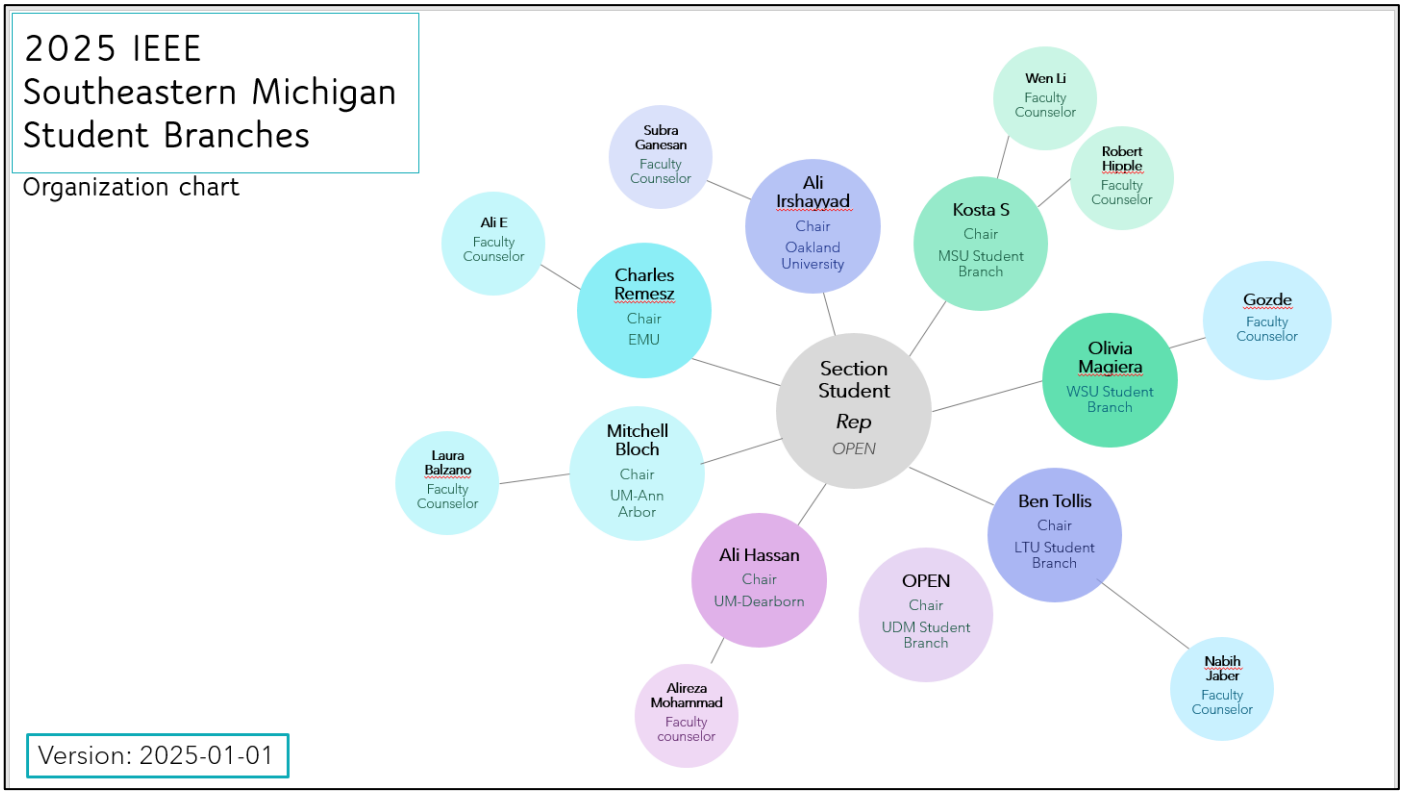
More detailed information on meetings may be found through the IEEE SEM Website: **https://r4.ieee.org/sem/** and clicking on the **SEM meetings list** button near the bottom of the left-hand banner.

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 complete SEM Organization Chart, in PDF format, it available soon at https://r4.ieee.org/sem/ . In the meantime, you may use the diagram below (recently refreshed!)





ExCom 2025 Schedule

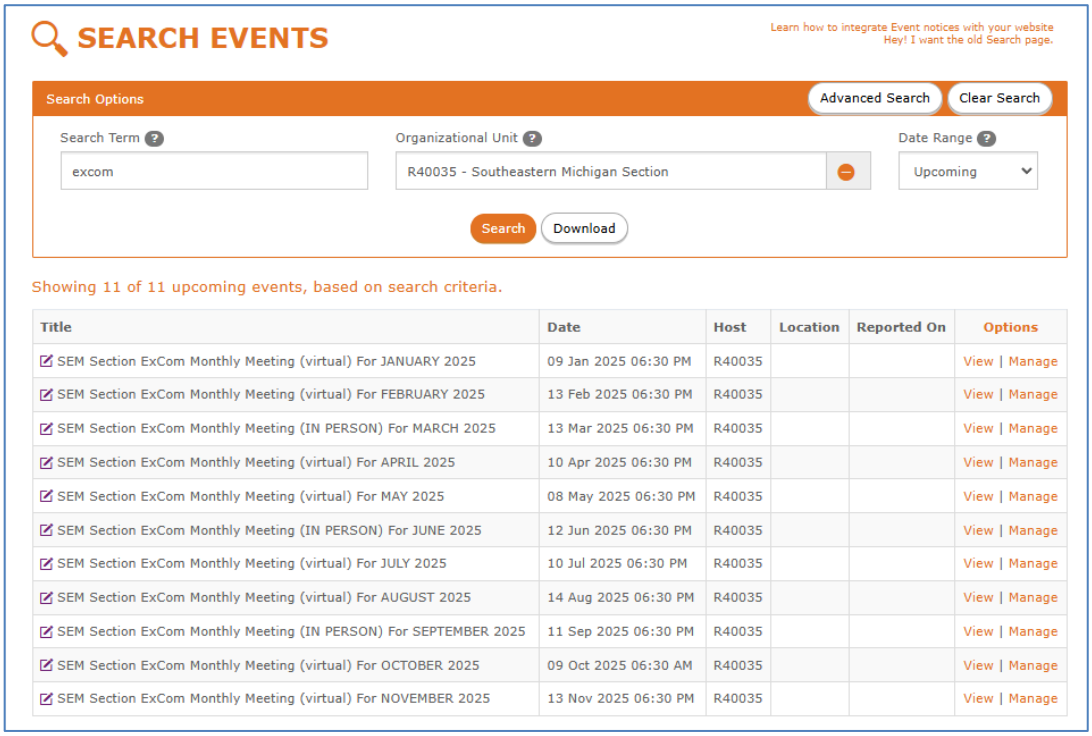
NOTE: All SEM members are invited to attend ALL ExCom (Executive Committee) meetings:
Below is the 2025 schedule for the Section ExCom meetings with links to add the events to your calendar. It is important that ***at least one person*** from each Chapter/Affinity Group attends each scheduled ExCom meeting. Please mark your calendars for the 2025 meetings. Or link your personal calendar to the SEM Web calendar.
Section ExCom Meeting Schedule for 2025: (clickable links, SO YOU CAN EASILY REGISTER)

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.

ExCom Meeting (all clickable links)	*Date & Start Time, Duration*
SEM Section ExCom Monthly Meeting (IN PERSON) For JUNE 2025	**2025-06-12; 6:30 PM; 2 hours**
SEM Section ExCom Monthly Meeting (virtual) For JULY 2025	2025-07-10; 6:30 PM; 1 hour
SEM Section ExCom Monthly Meeting (virtual) For AUGUST 2025	2025-08-14; 6:30 PM; 1 hour
SEM Section ExCom Monthly Meeting (IN PERSON) For SEPTEMBER 2025	**2025-09-11; 6:30 PM; 2 hours**
SEM Section ExCom Monthly Meeting (virtual) For OCTOBER 2025	2025-10-09; 6:30 PM; 1 hour
SEM Section ExCom Monthly Meeting (virtual) For NOVEMBER 2025	2025-11-13; 6:30 PM; 1 hour

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

ExCom 2025 Calendar



Section Administrative Committee (ExCom) Meeting Schedule for 2025 (At a Glance), you can print this page and pin it up anywhere easily visible……

Editor's Corner

Previous editions in this series may be found on the IEEE SEM website at: https://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

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 do not be shy. 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,
2018~2019~2020~2021~2022-2023-2025

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	Future Cities Judges	Election Results	Resolutions	
Feb	Cons	2		MSU	Science Fair Judges	Officer's Welcome	Surviving Winter	Future Cities
Mar		3	13	EMU	Spring Conf. Flyer	Spring Conference	Spring Conference	Science Fair
Apr		4		U/M-D	National Engrs Wk.	Future Cities	Chapter Focus	ESD - GOLD
May	Life	5	14		Outstanding Eng Awd	Science Fair	Elections - Prep	New Fellows
Jun		6			IEEE-USA Apmts.	ESD Banquett	Leadership Skills	SEM Awards
Jul		7	15		Nominations Call	MD-Webcasts	Students Issues	Region 4
Aug	WIE	8			MGA - Apmts.	Tech-Webinars	Womens Issues	
Sep		9	16	LTU	Region 4 Apmts.	Engineers Day	Professional Skills	
Oct		10		U/M-AA	Fall Conf. Flyer		Fall Conference	
Nov	YP	11	17	WSU	ELECTIONS!		Humanitarian	
Dec		12		U/D-M	IEEE-Com Apmts.	Fall Conference	Happy Holidays	

Wavelengths Annual Publication Plan for Personal Profiles

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

IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Web & Social Sites

Southeastern Michigan Section Website
https://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 "" button under the top row)
https://www.facebook.com/groups/ieeesemich

SEM LinkedIn Page
(Select the "" 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 (Co-Chairs)

Student Mentors
OPEN

SECTION Student Rep
OPEN

Technical Activities
Jeffery Mosley

Information Mgmt. Coordinator
Kimball Williams

IEEE Southeastern Michigan

Electrical and Electronic Engineers Creating Our Future

IEEE Southeastern Michigan

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

Advertising Rates

SEM Website & Newsletter Advertising is coordinated through our e-Wavelengths website at:

Leadership Meetings

SEM Executive Committee Monthly Teleconferences:

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

SEM Executive Committee Face-to-Face Meetings:

- 1/Qtr. 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
  https://r4.ieee.org/sem/
  (Select the "SEM Calendar" button in the top row.)

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