

Wavelengths



Volume 59 – Issue 11

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Upcoming Events

We have a number of events coming up this November. Be sure to check out the Section Website

<https://r4.ieee.org/sem>

As well as vtools:

https://events.vtools.ieee.org/tego/_events/administration

Listed below are some of the events, FYI.

Event	Date	Time
SEM Section ExCom Monthly Meeting (Teleconference) for November	November 6 th	12 noon
Chapter 17 officer teleconference	November 8 th	12 noon
Introduction to Raspberry Pi to build electronic projects	November 10 th	2:00 pm
SEM Chapter 9 AdCom Nov 2019 meeting	November 10 th	3:30 pm
Chapter 8 AdCom teleconference	November 14 th	11:00 am
TEMS Chapter 10 Planning Meeting	November 15 th	12:30 pm
Computational Electromagnetics in an Imperfect World	November 21 st	5:30 pm
SEM Section ExCom Monthly Meeting (Teleconference) for December	December 5 th	12 noon
Chapter 8 AdCom teleconference	December 12 th	11:00 am
Chapter 17 officer teleconference	December 13 th	12 noon
IEEE SEM Senior Member 'Roundup' & Networking @Oakland University	December 7 th	9:00 am

Chair's Message

Let me introduce myself. I'm David Mindham, the new Chair of the Southeastern Michigan Section. I've been active in the Section since moving to Michigan in 2012. My background is in power systems, focusing on energy policy and regional energy markets.

I remember when I joined IEEE in college. I was wandering down a hallway, and I saw a sign that said free pizza. I didn't know what to expect, but at that time, I would wander into any room with a free pizza sign. What I found was a great community of students. I spent the next few years as an IEEE member, but I didn't really know what that meant and how that tied into IEEE.

When I moved to Michigan, I reached out to get involved with IEEE. I again found a great community of engineers willing to help. (And there is still free pizza!) One of those individuals was Bob Neff. If you didn't know Bob, he has been the chair of our Section for the last several years, and he was active for many years before that. Bob recently passed away after a battle with cancer. Before that, he proved to be an excellent mentor, great leader and prepared me for the job of chair.

I will miss Bob.

I want to thank everyone for the opportunity to chair our Section. No matter how you like to interact with IEEE, 2020 is looking to be a great year. The Section has 17 focused chapters that bring significant events to our members. We also have several international conferences coming to Detroit, including:

Technology and Engineering Management Society: <https://temscon.org/>

Industrial Applications General Meeting: <http://ias.ieee.org/2020annualmeeting.html>
(website in development)

Energy Conversion Congress and Exposition: <http://www.ieee-ecce.org/2020/>

I look forward to meeting and working with everyone that wants to get involved. Please feel free to reach out to me or any member of the executive team if you'd like to learn how to get involved.

David Mindham: dmindham-At-ieee.org

Election 2020

2019 SEM Election Turnout!

The chart below is the graphic summary of our overall activity as shown on the monthly reports each of our Geo-units (Chapters and Affinity Groups). IEEE defines 'activity' as meetings with the most 'weight' given to Technical meetings focusing on the primary interests of the Society which our members have joined.

Ch's & AG's	Ave Tech Mtg. Attend	Ave Tech Mtg Guest	#L31 -Technical	#L31 -Admin	#L31 Professional	#L31 -Other	Geo-Unit Name	# Votes
CnsIt	0	0	0	0	0	0	Consultants Network	14
LIFE	0	0	0	0	0	0	Life Members	19
WIE	0	0	0	0	0	0	Women In Engineering	4
YP	0	0	0	0	0	0	Young Professionals	19
1	0	0	0	0	0	0	Circuits & Systems, Signal Proc., Info Th.	2
2	8	3	2	2	0	0	Vehicular Technology	6
3	0	0	0	0	0	0	Aerospace & Elec. Sys., Communications	0
4	34	17	5	1	0	0	Trident (Ant, Elect Dev., uWave, Photo)	57
5	29	19	22	13	0	1	Computers	32
6	27	4	1	1	0	0	Geoscience & Remote Sensing	27
7	30	2	1	0	0	0	Power Engineering, Industrial App.	86
8	44	29	12	4	0	1	Electromagnetic Compatibility (EMC)	32
9	0	0	0	4	0	0	Power Electronics, Industrial Electronics	0
10	19	6	2	8	0	0	Engineering Management	20
11	0	0	0	1	0	0	Eng. in Medicine & Biology	4
12	0	0	0	0	0	0	Control Systems	0
13	20	13	12	5	0	0	Education	2
14	8	1	3	0	0	0	Robotics & Automation	1
15	31	20	5	0	0	0	Nuclear Plasma Science Society	0
16	0	0	0	0	0	0	Computational Intelligence / Sys.Man.Cyber.	5
17	21	16	5	9	0	0	Nano Technology Council	4
SEM	13	10	1	6	0	1	SEM (Section)	97
Tot	287	141	71	54	0	3	NOTE: Highlight Green = Active	
		49%					NOTE: Highlight clear = Concern	

We join a Society (or Affinity Group) because we are interested in that organization and the causes it represents. As members of a Society we are interested in what is going on both internationally as well as locally. The international perspective we get from the Society publications and newsletters.

Locally, we look to our Chapters and Affinity Groups to hold meetings and bring in local, or national, speakers to help us understand what our Society is doing on the local front.

Looking at the chart above you should notice some of our Geo-units are highlighted in green. This indicates they have held the 'minimum' number of expected meetings in the year as defined by IEEE in order to remain on the "Active" list. Those shown in white have yet to meet that goal.

Election Voting:

Notice the column to the right of the main chart labeled "# Votes". It shows the number of actual votes for individual officers placed by the members of that Geo-unit in the election we just finished.

(Assume one person votes for each of the officers – Chair, V-Chair, Secretary, Treasurer, there should be 4 'votes' for each member who voted. i.e. divide the # Votes by 4 to give a rough idea of the number of members who cast a vote.)

You may also notice that there is some correspondence between those Geo-units with little or no activity and the number of votes received.

A look at the Roster of all officers in our Section will point you to the leaders for each Geo-unit. If your Chapter is not holding meetings that meet your needs, volunteer to help select topics and speakers.

IEEE SEM Organization Roster is located at:

https://r4.ieee.org/sem/wp-content/uploads/sites/6/2019/10/Organization_Roster_Publish_10.29.2019.pdf

(Geo-units begin on page 5) will show the leaders of each Geo-unit arranged by Affinity Group then Chapters by our Section numbering system. If you don't know your Chapter number, you can also use the 'search' function and enter one of the seminal names associated with your Technical Society (example... "Antennas") and it will put you into the correct area.

Officer Training

A series of Officer Training events was broadcast early in September. Since these were only minimally attended, the Nominations & Appointments Committee will be recommending that the Executive Committee consider alternative training methods for those who have been elected before they need to 'take office'. Watch for notices in future issues of Wavelengths.

If an officer was unable to attend a training session, the option remains to look for the voice over power point training materials on the SEM webpage.

Voice over Power Point Training:

Many on-line virtual training modules are available through the SEM Website Training page at:

<http://sites.ieee.org/sem/about-sem/training/>

More in depth training may be found on the IEEE Center for Leadership Excellence site located at:

<https://ieee-elearning.org/CLE/>

2019 Appointments:**Non-Elected Geo-Unit Positions:**

While we elect our basic officers (Chair, Vice-Chair, Secretary, Treasurer), many geo-units utilize the talents and energy of 'appointed' volunteers. For these positions, contact the Chair of the particular geo-unit, and discuss the opportunities. Alternatively, look at the Volunteer Portal at:

<https://r4.ieee.org/sem/about-sem/volunteer-portal/>.

The positions listing on the Volunteer Portal is intended to provide a quick link to position descriptions but, at the present time only a few links have been established. We need volunteers to help build that listing and its link page into a fully functioning page.

Why do we have a Section Mission?

The Section Mission statement and goals below provides guidance when any situation stretches beyond the normal parameters of our operation or when we are considering new options and opportunities.

Normal operating procedures are intended to cover the most usual and 'normal' situations. But, when a situation is not covered by existing procedures, we need a philosophical base to fall back upon for how we are to conduct ourselves. This is the function of our Mission statement, to provide that philosophical base.

The Mission statement serves a similar role as the Constitution of the United States of America which provides the guidance for all governmental decisions, as well as the philosophical foundation for future and past actions.

Section Mission

Inspire – Enable – Empower and Engage Members of IEEE at the local level.

For the purpose of:

- Fulfilling the mission of IEEE to foster technological innovation and excellence for the benefit of humanity,
- Enhancing the members' growth and development throughout their life cycle, and
- Providing a professional home.

Section Goals

- Increase member engagement,
- Improve relationships with and among members,
- Increase operational efficiency and effectiveness, within the section and its interfaces,
- Enhance collaboration – serve as the local face of IEEE to the community,
- Increase membership, and
- Ensure the collection of appropriate information necessary to assist the IEEE to become a data driven organization.

If interested in helping, please contact

K.williams@ieee.org

Note: All standing committee positions are 'appointed' and not 'elected'. Contact the current Committee Chair to discuss volunteer options. Also see the SEM Organization Roster posted in the SEM Website for details of each committee.

<https://r4.ieee.org/sem/about-sem/>

Look for the button "Organization Roster" and download the PDF file.

K.williams@ieee.org

Chair: N&A Committee.

Remembering Bob:

I first met Robert (Bob) when we both were employed by Eaton Corporation at its Engineering and Research Center in Southfield, Michigan. Bob's focus, at the time, was on collision mitigation and avoidance and devices (Air-Bags & Radar Systems). Since we all had concerns about the immunity of these systems from the newly emerging threats of conducted and radiated radio waves, 'Electromagnetic Compatibility' (EMC) our paths and interests soon merged. (Remember this was the time of the CB Radio boom, and incidents of 'unexplained' electronic 'incidents' were everywhere.)

The Eaton EMC Laboratory grew out of those concerns and became recognized as a leader in the development of automotive electronic components EMC evaluation test methods. Scott Lytle (SEM Chapter 8 – EMC – Chapter Chair) and I led the development of a world class team of engineers and technicians and Bob watched with interest and encouraged us along the way.

A few years later, after the events of "911" the Eaton top management at its headquarters in Cleveland, Ohio did some soul searching and made the decision to 'return to its roots', which had always been mechanical engineering. As a result they decided to 'release' the bulk of their electrical and electronic engineers and technicians at both their Southfield, MI and Milwaukee, WI research centers. Within days of that 'internal' announcement, Eaton management was receiving inquiries from all the major US EMC test organizations about the availability of the Eaton EMC test team and all its equipment. *(We never did find out how the 'word' got 'out'.)*

Local Eaton managers knew that the EMC team was a close knit unit, and gave us the final decision as to which of those test 'houses' we would align with. We all liked the vision of Underwriters Laboratories: "Working for a Safer World" and the representatives we met. We arranged for a new building in Novi, MI, and made the move, 'lock, stock and barrel'.



At that time the EMC team also realized that we would need a strong marketing manager and Bob agreed to join us in our new home. We also hired Yolanda Holton away from Eaton to become our overall administrative manager and Joy Williams (no relation) as our administrative Secretary. With Bob leading our marketing effort, business success followed as current and new customers found our new location.

Mohamad Berri and Bob Neff present an award to Malcolm Lunn at right.

Bob also joined the IEEE and the Electromagnetic Compatibility Society. Along the way he became active in local IEEE Section activities and soon his organizational and managerial talents elevated him to the position of Section Chair. At the Chapter level, Bob applied his talents to ensuring the success of our yearly local EMCfest 'colloquial' events. He 'grew' the vendor attendance from its small beginnings to the 'full capacity' at each venue we occupied and helped find our 'next' venue with more available space, then grew the event to full capacity again!

When Bob was asked to run for office in our Southeastern Michigan Section, he stepped up and accepted the challenge to become one of our most effective Section Chairs, and one of the most liked.

Bob with Philip Hall (Chair Chapter 3) and Nevrus Kaja, Section Vice-Chair at right:



Bob was a strong booster of STEM activities of the Section Education Committee. At the right, Bob accepts a donation to support STEM work from ZF Gives. Malcolm and Bob share the stage with Bryan Johnson who was Manager of Communications Department of ZF North America and Akio Fujimaki, our Section photographer in a rare moment when Akio is not behind the camera.



Bob and Irian Sullivan at the 2018 SEM Section Conference.

He was an avid downhill snow skier. For over 50 years he taught with Blizzard Ski School in West Bloomfield. He also taught for Vail at Mt. Brighton and Beaver Creek in Colorado. He was known for his infectious smile, patience, and his kind and compassionate spirit.

Those of us who knew Bob and worked with him will always remember him as active, energetic and deeply involved in everything he did. Bob never did anything 'half way' and always gave his whole devotion to whatever he did.

I will always think of Bob, at the top of the hill, ready for a full out downhill run through powder snow with that happy grin on his face.

Good bye Bob. We will miss you!



Bob passed away peacefully October 6, 2019 at the age of 76 laid to rest at Rural Hill Cemetery in Northville, Michigan.

He was born March 13, 1943 in Detroit, Michigan; son of Robert L. and Mary T. (McElvar) Neff. Robert graduated from Shrine High School in Royal Oak; Class of 1961. An athlete in high school he played baseball, football, and ran track. He attended Ferris State University on a football scholarship and earned a Bachelor of Science in engineering. He was a member of Pi Kappa Alpha fraternity. Robert later attended Lawrence Technological University. While at Ferris, Robert met the love of his life Patricia Patterson. They were united in marriage on September 24, 1966 and just celebrated their 53rd wedding anniversary.

Bob had a passion for the automotive industry and was heavily involved in both SAE and IEEE professional organizations. An excitement for its evolution and new technology he became an industry expert.

Senior Elevation!

IEEE SE Michigan Section
Presents
"Senior Membership Elevation Round Up"



IEEE Southeastern Michigan Section will reprise its Senior Member Round up event, at Oakland University on December 7th, 2019 between 9 AM and 1pm in the Dodge Hall. Senior Member Reviewers will assist interested member candidates with at least 10 years of experience in their profession.

The way it works is:

At least a 10 years of significant experience with BS degree needs be established to initiate the senior membership elevation. (A PhD is considered to be 5 years of significant experience and a master degree is considered to be 2 years of significant experience. The remaining 5 (with PhD) to 8 (with MS degree) years of significant experience should be established from the member experience in his/her profession to initiate and submit applications for Senior Member Elevation)

There is no cost to becoming a Senior Member, and this step is a necessary prelude to seeking the IEEE 'Fellow' level. For a complete description of the Senior Member process and its benefits, see the link at:

http://www.ieee.org/membership_services/membership/grade_elevation.html

To sign up for "Elevation" Time Slot, please register on this site for the event and bring your resume, and relevant supporting materials.

We also invite the newly minted IEEE members to join us. Bringing Senior members of the Section and new members together should create a wonderful opportunity for cross-generation networking. New & Senior Members are requested to also register and invite potential new members who may benefit from joining the IEEE.

At Glance

- **When:**
Date: Dec 7th, 2019
Time: 9:00am – 1:00 pm
- **Where:**
Room 236/237, Dodge Hall
Oakland University
Rochester, MI 48309
- **Parking:**
118 Library Drive
Oakland University
Rochester, MI 48309
- **Energy Sources:** Soda Pop, water, Vegetarian pizza or Turkey Sandwiches
- **Audience:** All Eligible Members, Senior members and Potential Members

Sponsored by
IEEE
SE Michigan Section
Membership Development
&
Region 4

Pre-Registration Required!

<https://events.vtools.ieee.org/m/207662>



Raspberry Pi

The screenshot shows a web browser window displaying the IEEE vTools Events page. The browser's address bar shows the URL: <https://events.vtools.ieee.org/m/208708>. The page header includes the IEEE logo and navigation links: VTOOLS, SEARCH, ABOUT, CONTACT, and Sign In. The main heading is "INTRODUCTION TO RASPBERRY PI TO BUILD ELECTRONIC PROJECTS". Below the heading is a brief description: "An introduction to raspberry pi to build electronic projects. This introductory session is for young professionals or High school or middle schools kids who would like to build electronic projects with minimum electronic knowledge." The page is divided into four columns: DATE AND TIME, LOCATION, CONTACT, and REGISTRATION. The DATE AND TIME column lists the date as 10 Nov 2019, time as 02:00 PM to 03:00 PM, and provides calendar integration options. The LOCATION column lists the venue as Canton Public Library, 1200 S Canton Center Rd, Canton, Michigan, United States, with room number Community Room and a map link. The CONTACT column provides an email event contact link. The REGISTRATION column lists the start time as 28 October 2019 02:06 PM, end time as 10 November 2019 10:00 AM, and notes that there is no admission charge. A "Register Now" button is located at the bottom right of the registration section.

Introduction to Raspberry Pi to X +

← → ↻ 🏠 🔒 <https://events.vtools.ieee.org/m/208708> 90% ⋮ ⌵ ⌘

🏠 IEEE.org | IEEE Xplore Digital Library | IEEE Standards | IEEE Spectrum | More Sites 🔍 Sign In

IEEE vTools **EVENTS**

VTOOLS ▾ SEARCH ABOUT CONTACT

INTRODUCTION TO RASPBERRY PI TO BUILD ELECTRONIC PROJECTS

[Tweet](#) [Share](#) [Share](#)

An introduction to raspberry pi to build electronic projects. This introductory session is for young professionals or High school or middle schools kids who would like to build electronic projects with minimum electronic knowledge.

🕒 DATE AND TIME | **📍 LOCATION** | **✉ CONTACT** | **🏷 REGISTRATION**

<p>Date: 10 Nov 2019 Time: 02:00 PM to 03:00 PM All times are America/Detroit</p> <p>📅 Add Event to Calendar 📧 Outlook (vCal) 📅 iCal 📅 Google Calendar</p>	<p>Canton Public Library 1200 S Canton Center Rd Canton, Michigan United States Room Number: Community Room Click here for Map</p>	<p>Email event contact</p>	<p>Starts 28 October 2019 02:06 PM Ends 10 November 2019 10:00 AM All times are America/Detroit No Admission Charge</p> <p>Register Now</p>
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ZF Employment Ad



WHAT'S NEXT?

JOIN ZF

WORK AT THE FOREFRONT OF
AUTOMOTIVE INNOVATION WITH ZF,
ONE OF THE WORLD'S LEADING
AUTOMOTIVE SUPPLIERS.

ZF.COM/CAREERS

Disaster Preparation:

No one can predict when disaster will strike, or what form it might take. In order to establish systems to deal with the most frequent types of known disasters, cities and municipalities create institutions such as fire departments and police departments. The civilian component, consisting of concerned citizens, is the Civil Emergency Response Team (CERT)

In the Detroit – Wayne County area, the local CERT receives guidance and encouragement from the Montford Point Marines of America, Inc. Tactical Survival Management Unit, led by Robert Middleton, USMC Retired.

The Detroit CERT team members gathered on the lawn outside Martin Luther King High School on Saturday September 28th to engage the whole community in a day of training, demonstrations, and discussions as part of National Disaster Preparedness Month. Just a few of the demonstrations by members of the local community are shown here.



Members of the Detroit Fire Department demonstrated the use of each of three different types of fire extinguishers.



The Hazardous Materials Unit demonstrated the method used to ensure officers working in a dangerous materials area are 'de-contaminated' to ensure their safety, and the safety of others working with them.

Methods of remote monitoring of dangerous gasses in a hazardous spill area were also demonstrated, along with the use of protective clothing and breathing equipment.

The potential for the complete loss of power and communications has encouraged many CERT members to become Amateur Radio operators and to acquire hand held VHF communications radios (HTs). This helps fill the ‘gap’ left when all the cell phone towers are down but, is strictly short range (line of sight) when amateur radio ‘Repeater’ stations are also ‘off the air’.



The solution to longer range communications was demonstrated through the use of low power (5 watts or less) battery powered Morse code transceivers.

These low cost units allow communications beyond the local community in order to establish links with official response teams immediately after a disaster has eliminated the local infrastructure (power and communications).

During disaster recovery periods, the local Amateur Radio Emergency Service, and the American Radio Relay League (ARRL) Morse code traffic nets, provides ‘health & welfare’ communications services to the local community members in general in order to relieve that load from the ‘official’ emergency communications systems which would otherwise ‘clog’ those systems with personal messages.



Of interest was the demonstration of a flight training simulator used to train young pilots in the use of flight planning methods and their relation to the cockpit controls in a modern, civil aviation aircraft.

The Detroit 100th Composite Squadron of the Civil Air Patrol (CAP) trains young community members to fly and maintain civilian aircraft in order to be of service in emergencies, as well as training importance of personal integrity, volunteer service, a commitment to excellence, self-discipline and respect for others in their developing personal and professional lives.

For information on Civil Air Patrol (CAP):

<http://www.mi100.miwg.cap.gov/>

For information on Montford Point Marines of America, Inc

Info@montfordpointmarines.org

For information on the American Radio Relay League:

<http://www.arrl.org/home>

Construction Bee:

Active Attenuator Construction Bee

Stan Briggs – K8SB, will be conducting a Construction Bee to satisfy the many requests to build his **universal active attenuator**. (Photo at right.)

The attenuator is a powerful tool for use in radio direction finding and amateur radio 'Fox Hunts' and will work with any radio receiver.

Date: Saturday February 1, 2020

Time: 9:00 am to noon

Location: Trenton Faith United Method Church, 2530 Charlton Rd, Trenton, MI 48183

All parts and components to build the attenuator, including the enclosure, will be provided ready for attendees to solder and assemble their own units. Each unit will be tested / demonstrated to verify correct operation at the conclusion of the program.

Note: *Attendees must bring their own soldering equipment*
(Soldering Iron–15 watt, solder, needle nose pliers, etc..)



Registration / Order is required by **January 15, 2020**

Advance registration is required via the Motor City Radio Club website at:

Or, use: <http://www.w8mrm.net/event-3603333>

Or the QR Code at the right.

Fee: \$25.00 in advance to Motor City Radio Club via the club website (above).

Or... \$28.00 in cash, at the door.

There is no charge for attending the construction bee. The fee will pay for attenuator only.



bre.is/vxY2pDks

components and parts



Stan Briggs, K8SB, was first licensed in 1953 as WN8MPD and W8MPD. Stan was active in the Kalamazoo Amateur Radio Club while attending Western Michigan University. He joined the Motor City Radio Club after obtaining a Physics teaching position in Wyandotte, MI in 1958. Stan taught Electronics at Henry Ford Community College in Dearborn, MI starting in 1973 and was the trustee of the college club station K8EEH until his retirement in 1999.

Stan consults in technical training in automotive instrumentation and testing.

Stan held the ARRL leadership positions as Emergency Coordinator for Wayne County and the Section Communications Manager for one term in 1978-79. K8SB operates on all bands and holds down a regular net control slots on the Michigan QMN CW net. He operates QRP on a regular basic and still enjoys Field Day. Stan's XYL is WB8AFO, Oldest daughter is WB8WGP, 2nd oldest daughter is KB2EHU and his son holds his old call; W8MPD. He has been doing Radio Direction Finding since the mid-1950s.

Section Matters**Joint Chapter Meetings: A Painless Way to Keep Current**

Engineering, as are most disciplines in the world, is evolving. Electrical engineering is evolving very rapidly. How many of today's EEs know the function of a suppressor grid or the task of a 6SN7? Software was the domain of mathematicians and the occasional scientist. Solid state was the domain of physicists and chemists. The challenge for today's engineer is to stay apace with rapid technological advancements..

IEEE has Sections that focus on EEs staying current in their field and exploring other areas through a variety of ways, including conferences, meetings and courses. IEEE SEM has all of these available. Since there is a finite amount of time to attend meetings, conferences and take courses, the challenge is to become more efficient in staying current and expanding one's networks of contacts and interests. Holding joint meetings with other Chapters is an easy solution. Joint Chapter meetings lighten the administrative burden while reducing the cost for each Chapter. A joint meeting can allow exploration of an area that is a complimentary field of interest, or is one you always wanted to know about. What better way to do this than by having a joint meeting?

Chapter officers should contact one (or more) of their fellow Chapter officers to explore scheduling a joint meeting. Chapter members should let their officers know which Chapters they would like to join with for a meeting. Joint meetings are easy, reduce administrative burden and expenses, and can even be fun. Joint meetings are a painless way to expand everyone's horizon.

Joe Giachino

Section Focus

The IEEE SEM Section Officers have reaffirmed the Mission and Goals of the section with the guidance of the Region 4 leadership. The Mission and Goals conform to those of IEEE worldwide.

You have probably seen the Mission and Goals before. However, it is important to keep these clearly in mind and remind ourselves often that this is what we are about and what we are trying to accomplish.

Section Mission

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For the purpose of:

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Section Goals

- Increase member engagement,
- Improve relationships with and among members,
- Increase operational efficiency and effectiveness, within the section and its interfaces,
- Enhance collaboration – serve as the local face of IEEE to the community,
- Increase membership, and
- Ensure the collection of appropriate information necessary to assist the IEEE to become a data driven organization.

It is now the task of the section leadership to guide and coach all section officers and elements to focus their activities on achieving those goals

ORG UNITS cheat sheet

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

Consultants Network Affinity Group: (CN40035)

Life Members:

Young Professionals:

Women in Engineering:

Chapter: 01 (SP01) Signal Processing Society,
(CAS04) Circuits and Systems Society and
(IT12) Information Theory Society

Chapter: 02 (VT06) Vehicular Technology Society

Chapter: 03 (AES10) Aerospace and Electronic Systems Society and
(COM19) Communications Society

Chapter: 04 "Trident" (AP03) Antennas and Propagation Society,
(ED15) Electron Devices Society,
(MTT17) Microwave Theory and Techniques Society,

Chapter: 05 "Computer" (C16) Computer Society

Chapter: 06 (GRS29) Geosciences and Remote Sensing Society

Chapter: 07 (PE31) Power Engineering Society,
(IA34) Industrial Applications Society

Chapter: 08 "EMC" (EMC27) Electromagnetic Compatibility Society

Chapter: 09 (IE13) Industrial Electronics Society,
(PEL35) Power Electronics Society

Chapter: 10 (TEM14) Technology and Engineering Management Society

Chapter: 11 (EMB18) Engineering in Medicine & Biology

Chapter: 12 (CS23) Control Systems Society

Chapter: 13 (E25) Education Society

Chapter: 14 (RA24) Robotics And Automation Society

Chapter: 15 (NPS05) Nuclear Plasma Sciences Society

Chapter: 16 (CIS11) Computational Intelligence Society,
(SMC28) Systems, Man and Cybernetics Society

Chapter: 17 (NANO42) Nanotechnology Council

Section Unit Name or Affinity Group or Chapter Name (Organizational Unit 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)

Curated & Formatted By

Sharan Kalwani,
Editor, Wavelengths,
2017-2018-2019

Non-IEEE 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 changing to its new home, kindly make a note of it! The new home is located at <http://r4.ieee.org/sem/>.** The old links will continue to work for sometime, but will be changing permanently in the near future.

SEM e-Wavelengths:

www.e-wavelengths.org

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 Web Calendar:

<http://r4.ieee.org/sem/>

Select "SEM Calendar" button in the top row of the website.

SEM Web Meetings:

<http://r4.ieee.org/sem/>

Select "SEM Meeting List" button in the left-hand column.

vTools Meetings:

<http://sites.ieee.org/vtools/>

Select "Schedule a Meeting" button in the left-hand column of buttons.

Other IEEE Local Meetings:

<http://www.e-wavelengths.org/>

Other Happenings

Here are some of the non-IEEE events 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.

Send details to: wavelengths@ieee-sem.org

Michigan Institute for Plasma Science and Engineering: Seminars for the 2018-2019 academic year: <http://mipse.umich.edu/seminars.php>

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

Model Rocketry
<http://team1.org/>

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

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

Robots
<http://www.therobotgarage.com/about-us.html>

Science Fiction Conventions
<https://2019.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/>

Executive Committee

The SEM Executive Committee is the primary coordination unit for Southeastern Michigan (SEM) IEEE operations. The basic organization chart below shows the 2019 arrangement of communications links designed to provide inter-unit coordination and collaboration.

The SEM Executive Committee meets in a teleconference each month on either the first Wednesday or first Thursday at noon. 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 Eric George, the section secretary at: eric.george.us@ieee.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.

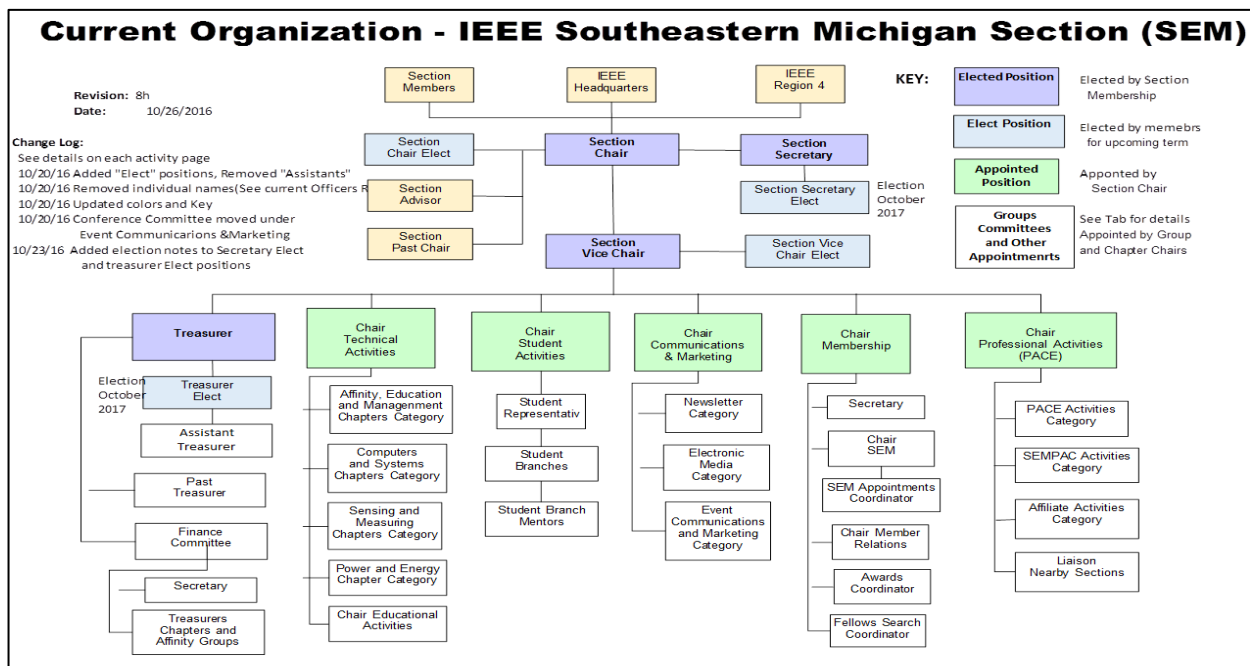
However, members of the section may have multiple technical interests and would like to have meeting information of other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to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

Eric George - SEM Asst. Secretary

Download the complete SEM Organization Chart, in PDF format, from our Website at: <http://r4.ieee.org/sem/> Click on “About SEM” Tab and “Current Officers” (NOTE: this is now password protected)



ExCom Meeting Schedule

Below is the 2019 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. Information on each Face-to-Face (in-person) Meeting will be sent out once the venue is confirmed.

Please mark your calendars for the 2019 meetings. Or, link your personal calendar to the SEM Web calendar.

ExCom: Meeting Schedule for 2019:

~~F2F, Wednesday Jan 9, [New Officers Meet and Greet]~~

~~Teleconference, Thursday Feb 7~~

~~Teleconference, Wednesday March 6~~

~~F2F, Thursday, April 4~~

~~Teleconference, Wednesday May 1~~

~~Teleconference, Thursday June 6~~

~~F2F, Wednesday July 10 [Moved for the 4th of July]~~

~~Teleconference, Thursday August 1~~

~~Teleconference, Wednesday September 11; Vtools link <https://events.vtools.ieee.org/m/202560>~~

~~F2F, Thursday October 5; Vtools link <https://events.vtools.ieee.org/m/203338>~~

Teleconference, Wednesday November 6; Vtools link <https://events.vtools.ieee.org/m/203339>

Teleconference, Thursday December 5; <https://events.vtools.ieee.org/m/203340>

Note: All IEEE Members are welcome at any IEEE meeting, at any time but, please register so we can be sure to accommodate you.

Eric George
SEM Assistant Secretary

Editor's 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

k.williams@ieee.org
sharan.kalwani@ieee.org
nilesh.dudhaia@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.

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.

Heads Up

We are contemplating making the submissions of articles and events for the Wavelengths, a little easier and a little more inviting. Ideas are of course welcome and to this end, we are toying with setting up a little "newsletter portal". Stay tuned for some news on that end!

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 OR any one of the following:

sharan.kalwani@ieee.org
k.williams@ieee.org
nilesh.dudhaia@ieee.org

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	



Web & Social Sites**SEM Website**

<http://r4.ieee.org/sem/>

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

Section Website Event Calendar

(Select the “SEM Calendar” button - top row.)

SEM Facebook Page

(Select the “” button under the top row.)

SEM LinkedIn Page

(Select the “” button under the top row.)

SEM Officers:

For a complete listing of all - Section - Standing Committee - Affinity Group - Chapter and Student Branch Officers, see the SEM Officers Roster on the SEM web page under the “About SEM” button and select “Current Officers.”

Online Community <http://sem.oc.ieee.org>

Section Officers

Section Chair
Robert Neff

Section Secretary
Eric George

Section Vice-Chair
Nevrus Kaja

Section Treasurer
Michael Folian

Standing Committees:

Section Adviser
Don Bramlett

Chair Communications & Marketing

Chair Educational Activities

Chair Finance
Nevrus Kaja

Chair Membership Development
Sharan Kalwani

Chair Nominations & Appointments
Kimball Williams

Chair Professional Activities (PACE)
Sharan Kalwani

Chair Student Activities
Mel Chi

Student Representative

Chair Technical Activities
Kimball Williams



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Visit Us on the Web at:

<http://r4.ieee.org/sem>



Advertising Rates

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

http://www.ieee-sem.org/ewavelengths/?page_id=181.

Please see the information listed on
the site, and contact our web editor
of e-Wavelengths, Nevrus Kaja, for
further details.

Leadership Meetings

SEM Executive Committee Monthly Teleconferences:

- 1st Wednesday or Thursday of Each Month @ Noon
- Check the Section Web Calendar at:
<http://r4.ieee.org/sem/sem-calendar/>
(Select the "SEM Calendar" button in the top row.)

SEM Executive Committee Face-to-Face Meetings:

- Once every Qtr. Find the location, and Registration at:
<https://meetings.vtools.ieee.org/main>

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:

- <https://meetings.vtools.ieee.org/main>