Upcoming Events

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

https://r4.ieee.org/sem

As well as vtools:

IEEE Region 4 - SE Michigan Section Upcoming

Listed below are some of the events, FYI.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ch8: AdCom Teleconference</td>
<td>09 Jan 2020</td>
<td>11:00 AM</td>
</tr>
<tr>
<td>SEM Administrative F2F Meeting</td>
<td>22 Jan 2020</td>
<td>5 PM</td>
</tr>
<tr>
<td>Ch8: AdCom Teleconference</td>
<td>13 Feb 2020</td>
<td>11:00 AM</td>
</tr>
<tr>
<td>SEM Section ExCom Monthly Meeting</td>
<td>04 Mar 2020</td>
<td>06:00 PM</td>
</tr>
<tr>
<td>(F2F) for March 2020</td>
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</tbody>
</table>
Chair's Message

This month I wanted to use the Chair’s message to tell you about a few great events that are coming up.

**Congressional Visits Day:**

The first is the Science, Engineering and Technology Congressional Visits Day (SET CVD). The CVD is an annual two-day event that brings engineers, scientists, mathematicians, researchers, educators, and technology executives to Washington to raise visibility and support for science, engineering, and technology. Uniquely multi-sector and multi-disciplinary, the SET CVD is coordinated by a coalition of professional societies, companies and educational institutions. It is open to all who support science and technology, especially federal support for STEM research. The program consists of a series of briefings and meetings, culminating with a full day of visits with your Congressional delegates.

For more information and to register go to: https://ieeeusa.org/advocacy/cvd/

**2020 Technology Engineering Management Conference (TEMSCOM):**

TEMSCON 2020 will be held at the Embassy Suites by Hilton in Livonia Michigan on June 3-6, 2020. The conference will bring together 200+ engineering leaders, researchers, educators, innovators, entrepreneurs, and students to gather at the conference to help advance the understanding and the state of practice related to successful technology and engineering management from around the world and focuses on the art and science of management and leadership driving innovation and change.

For more information and to register go to: https://temscon.org/

**IEEE Sections Congress**

IEEE Sections Congress is the triennial flagship event hosted by IEEE that brings together the grassroots leadership of IEEE from every member country so that they can share ideas, concerns & solutions. Through the congress, we aspire to create an environment for all the delegates to explore how IEEE can better serve its members, both now & going forward. The event will be held in Ottawa, Canada and will feature attendees from all over the world.

For more information and to register go to: https://sections-congress.ieee.org/

David Mindham: dmindham -At- ieee.org
As we begin to develop plans the New Year I thought you all might be interested in the numbers that define Southeastern Michigan Section based on the available data from IEEE HQ.

Membership:
Total Members in all categories: 2,999.
Members requesting 'No Contact': 403
Members requesting 'No Local Contact': 83
Members requesting both: 33

Clearly with 403 (13%) of our members asking 'not to be bothered' by an organization they have paid money to join, something is not kosher. This may be a factor that the Section leadership should look into.

The individual Geo-units (Affinity Groups & Technical Chapters) show robust numbers. (I must apologize for not being able to show the data for Consultants / Women in Engineering / and Young Professionals. Except for the Life Members, the current version of the vTools 'OU Analytics' does not have a useful method to show which members are in each AG.) However, for all but the Consultants, I am able to 'pull' some inferences, from related numbers in the db.

Affinity Groups #Members (Further Data)
Consultants ?
Life Members 353
Women in Eng. ? 252 Women in SEM
Young Prof. ? 772 Eligible for YP

Student Member Population:
All Students: 719
Graduate Students 444
Under Graduates 275

Students make up 24% of our members, and as such, deserve our serious attention. In 2020 we are beginning a series of Student Branch Officer training classes which may help build up the activity levels in our universities. We have eight (8) ‘IEEE’ universities, and they each deserve our attention and assistance.

For our Technical Chapters, the current db is much more forthcoming. See below:

It is interesting that Chapter 7 (Power Engineering) has now grown larger than Chapter 5 (Computers). A few years ago I would have thought that impossible! (There you go!)

2019 - Looking Back:
The year past had some interesting challenges, and that is reflected in the reported activity of each of our Geo-units as shown in the Section Health Chart below:

Technical Chapters:
Starting 2020-Continued
Notice that we have 6 Geo-units that report less meetings than required under the MGA rules to remain in the 'Active' status listing. This has several consequences for the Section as a whole, and especially for the members of those Geo-units who have not received the minimum of activity offerings they have a right to expect from their local units. (That is part of what they pay for as Members in the IEEE.)

**Financial Implications:**
This also means that the financial rebate from MGA will be less by:
$$6 \times $200 = $1,200$$
due to those Chapters not achieving the required minimum number of technical meetings. This means that those same Chapters will be putting more strain on the already meager Section financial resources when they come to the FinCom requesting operating funds.

**Overall:**
Overall activity also showed a drop from the previous year, in part perhaps because the local STEM activities lost momentum. I am sure the Education Committee will be working to correct that trend.

Looking forward to 2020 we hope to see lots of successful planning early in the year, resulting in increased activity throughout the entire year.

If any of our officers are having difficulties getting their planning 'off the ground' and would like to discuss ways and means of getting past any perceived problems, please do not hesitate to discuss this with any of the Executive Committee officers so that we can all work together to achieve the most benefit for our members.

kw
Science Fair Judges:

IEEE-SEM MEMBERS NEEDED AS 2020 SCIENCE FAIR JUDGES
By Don C. Bramlett, PE, LSMIEEE, FMSPE, FESD

Please volunteer to serve on the elite panel of judges for the professional awards being sponsored by the Southeastern Michigan Section of the Institute of Electrical and Electronics Engineer, Inc. (IEEE-SEM) at the 63rd Annual Science and Engineering Fair of Metropolitan Detroit (SEFMD). This is the 25th straight year that IEEE-SEM has provided judges and sponsored professional awards for projects associated with electrical, electronics, computer engineering and IEEE related fields.

Judging will be on Wednesday March 11, 2020 at the Science Fair, located at the TCF Center (formerly called Cobo Hall) in downtown Detroit. The Science Fair will be in the Michigan Hall this year on the Lower Level. Please plan your arrival for between 7:45 and 8:30 AM at the Science Fair, to enjoy some free coffee and muffins. We will be near the Professional Awards Judging Desk (front of hall near the muffins and coffee).

It is preferred that if you are not already registered as a Science Fair judge you do so on the Science Fair website, http://www.sefmd.org. Identify you will be judging as part of the IEEE professional awards judging team.

As last year, IEEE-SEM plans to provide judging for both the Junior (6th – 8th grade) Division and the Senior (High School) Division. It is anticipated that the IEEE-SEM awards judging will start at 8:30 AM and be completed by 11:30 AM. IEEE-SEM will tentatively make three Grand Awards, including personalized certificates and cash prizes, and several Outstanding Achievement Awards, consisting of personalized certificates.

This year, like last year, some projects in the IEEE related fields may be found in the categories of Systems Software, Robotics & Intelligent Machines, Physics & Astronomy, Environmental Engineering, Engineering Mechanics, Energy: Physical, Energy: Chemical, Embedded Systems, etc. Students in Wayne, Oakland, Macomb, Lenawee, Livingston, Monroe and Washtenaw counties will participate in the Science Fair. So this year again will be a real interesting experience judging the Junior Division and Senior Division projects.

The planned routine will be to separate into small groups at first and quickly roam assigned sections of the project displays to identify those projects related to electrical, electronics and computer engineering that are worthy of further review by the panel of IEEE-SEM judges. It is anticipated that the number of relevant projects will be rather small. We will then form one team of judges to evaluate at a greater depth the selected projects. Based on the number and quality of the selected project displays, the judges may choose to use the supplied Project Evaluation and Judging Forms to grade the projects in each Division or to use a less formalized process, as deemed appropriate.

Please direct any questions you may have to me at home (734) 591-1452, or on my cell phone at 313-608-6223; or you may contact me at my e-mail address d.bramlett@ieee.org.

Look forward to seeing you Wednesday, March 11 at the Science Fair at the TCF Center. Parking is available at the TCF Center Roof Parking site or basement.

Free coffee and muffins are available in the morning.
Filling Gaps:

One of our members recently asked David Mindham, our Section Chair, if the SEM Roster positions that were ‘empty’ and highlighted in yellow would remain vacant until the next election. The short answer is ‘No’!

See the SEM Officer Roster at: https://r4.ieee.org/sem/wp-content/uploads/sites/6/2020/01/Organization_Roster_2020_Rev0.2A.pdf

As David has said he as the authority to appoint volunteers to fill any vacant position in the Section. In addition, each Chair of a Standing Committee or Geo-unit (Chapter, Branch or Affinity Group) has the authority to make appointments to fill positions within their own organization and to create new positions when they are required.

You may find many (hopefully most) of the Job Descriptions for volunteer positions on the IEEE SEM Webpage at: https://r4.ieee.org/sem/

Use the "About SEM" button in the top row then scan down the page to the "Volunteer Portal" where listings of the positions are in alphabetical order. Or jump directly there using this link: Volunteer Portal

Training for most of the positions is on the "Training Material" page. Use that button on the “About SEM” page, or by jumping to it using this link: Training Material

We know it is a lot to take in and we are here to answer questions that may come up so, do not hesitate to contact us when you need answers.

David Mindham: David.Mindham@edpr.com
Kimbball Williams: k.williams@ieee.org
Robofest 2020

For the 2020 competition season, IEEE SEM sponsored Robofest is seeking volunteers to judge and mentor students, grades 5 - college, through our events.

Robofest’s mission is to generate excitement and interest among young people for Science, Technology, Engineering, and Mathematics (STEM), to develop creativity and problem solving skills, and to prepare them to excel in higher education and engineering careers.

This year’s events include: GolfBowl Game, Exhibition, BottleSumo, RoboParade, Vision Centric Challenge, RoboArts, Unknown Mission Challenge and an exciting new category, RoboMed. Regional completions run Feb - April, culminating with the World Championship on May 14 - 16, 2020 at Lawrence Technological University in Southfield, MI. Detailed events held in Southeast Michigan are as follows:

<table>
<thead>
<tr>
<th>Day, Date</th>
<th>Time</th>
<th>Location</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat. Feb 15</td>
<td>1pm-5:30pm</td>
<td>LTU, Southfield</td>
<td>Warm-Up Competition and JUDGE TRAINING</td>
</tr>
<tr>
<td>Sat. March 7</td>
<td>9am-1pm</td>
<td>Washtenaw Christian Academy, Saline, MI</td>
<td>Junior Game and Senior Game</td>
</tr>
<tr>
<td>Sat. March 14</td>
<td>11am-3pm</td>
<td>Bethany Christian Academy, Troy, MI</td>
<td>Junior Game and Senior Game</td>
</tr>
<tr>
<td>Fri. March 20</td>
<td>5pm-9pm</td>
<td>University of Detroit Jesuit High School and Academy, Detroit, MI</td>
<td>Junior Game and Junior Exhibition</td>
</tr>
<tr>
<td>Sat. March 21</td>
<td>9am-1pm</td>
<td>Achieve Charter Academy, Canton, MI</td>
<td>Junior Game and Junior Exhibition</td>
</tr>
<tr>
<td>Sat. March 21</td>
<td>9am-1pm</td>
<td>Warren Woods Christian School, Warren, MI</td>
<td>Junior Game</td>
</tr>
<tr>
<td>Sat. March 21</td>
<td>10am-12pm</td>
<td>Napoleon Community Schools, Napoleon, MI</td>
<td>Senior BottleSumo Unlimited</td>
</tr>
<tr>
<td>Sat. March 21</td>
<td>2pm-5pm</td>
<td>Napoleon Community Schools, Napoleon, MI</td>
<td>Senior Game</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Location</td>
<td>Event</td>
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<tr>
<td>Sat. March 28</td>
<td>9am-1pm</td>
<td>Gallimore Elementary School, Canton, MI</td>
<td>Junior Game</td>
</tr>
<tr>
<td>Sat. March 28</td>
<td>9am-1pm</td>
<td>West Bloomfield High School, West Bloomfield, MI</td>
<td>Junior Game and Senior Game</td>
</tr>
<tr>
<td>Sat. April 4</td>
<td>9am-2pm</td>
<td>Canton Charter Academy, Canton, MI</td>
<td>Junior Game and Junior Exhibition</td>
</tr>
<tr>
<td>Sat. April 4</td>
<td>10am-12pm</td>
<td>Cranbrook School for Boys, West Bloomfield, MI</td>
<td>Junior Bottle Sumo and Senior Bottle Sumo</td>
</tr>
<tr>
<td>Sat. April 4</td>
<td>1:30pm - 5:30pm</td>
<td>Cranbrook School for Boys, West Bloomfield, MI</td>
<td>Junior Game, Senior Game and Junior Exhibition</td>
</tr>
<tr>
<td>Fri. April 24</td>
<td>5pm-8:30pm</td>
<td>LTU Robofest, Southfield, MI</td>
<td>Michigan Invitational Junior Game</td>
</tr>
<tr>
<td>Sat. April 25</td>
<td>9am-12:30pm</td>
<td>LTU Robofest, Southfield, MI</td>
<td>Michigan Invitational Junior Game</td>
</tr>
<tr>
<td>Sat. April 25</td>
<td>1pm-4:30pm</td>
<td>LTU Robofest, Southfield, MI</td>
<td>Michigan Invitational Junior Game</td>
</tr>
<tr>
<td>Sat. April 25</td>
<td>5pm-8:30pm</td>
<td>LTU Robofest, Southfield, MI</td>
<td>Michigan Invitational Senior Game</td>
</tr>
</tbody>
</table>

* Judge Training will also be available on-line following the live training*

Please consider joining us to use your talents to inspire the upcoming generation of scholars. Contact SEM Education Committee CJ Chung at cchung@ltu.edu to participate in this rewarding competition.

At Regional Competitions, all students will receive the following IEEE sponsored medals.
IEEE SEM Volunteers at the Robofest World Championship, May 2019
Amateur Radio Class

Motor City Radio Club General Ham Classes in February

The Motor City Radio Club will be teaching for the General Class license this month. The first class will be on Saturday, February 22nd at 10:00 AM. There will be 11 classes, and the exam will be held on May 9th.

As with the past Technician classes, these will be taught at the Wyandotte Bacon Memorial Library. The Bacon Memorial Library is located just off West Jefferson at 45 Vinewood in Wyandotte. Register by calling the library at 734 246-8357.

The General Class, the ARRL manual is the teaching text.

The book is available thru the club at a discount price compared to what it cost online thru the ARRL. Everyone in the club is also cordially invited to teach a class (or two). Please contact Education Coordinator Bob K8HV (rbtlaw@att.net) for more details, and to buy the book.
TEMSCON 2020

Call for Papers
2020 International Conference
IEEE Technology and Engineering Management Society (TEMS)

TEMSCON 2020
The Embassy Suites by Hilton Detroit
Livonia Novi, Michigan (USA)
19525 Victor Parkway
Livonia, MI 48152
2020.temsccon.org

June 3-6, 2020

Managing the Development of Connected Systems

The greater Detroit area has a long history as a hub for engineering and manufacturing automobiles. With the ever-accelerating progress on innovation and a push for market-ready automated, connected and electrified vehicles, Detroit remains the heart of the automotive industry. Southeast Michigan has also diversified its economic base in emerging technology areas including information technology, health care and biomedical, power and energy, advanced manufacturing, and higher education and research. We invite contributions from engineering leaders, researchers, educators, innovators, entrepreneurs, and students to help advance the understanding and the state of practice related to successful technology and engineering management. Contributions may be research or practical. Research papers may be conceptual, empirical, or theoretical, but they must discuss how the results could be applied in practice. Practice-focused papers may consist of case studies, description of best practices, or application experiences, but they should also shed light on new challenges and unresolved future issues, which could be addressed by the research community. We thus provide a venue where different points of view interact to yield new understanding and ideas on leading innovation as well as the future of technology and engineering management.

Selected papers will be invited to submit to the IEEE Engineering Management Review or IEEE Transactions on Engineering Management.

Topic areas include, but are not limited to, the following:

- Innovating in rapidly changing markets and sectors, e.g., biotech and health systems, manufacturing, etc.
- Leading and managing innovation and transformation
- Adopting new technologies: challenges and risk mitigation
- Management of software versions and their interoperability among different vehicle ages and makers
- Understanding trends and applicability of new technologies
- Leveraging enterprise data, e.g., successful use of AI, analytics, blockchain, IoT
- Leading societal change, e.g., mobility, intelligent transportation, health care, public policy
- Enhancing industry, university, and/or government collaboration
- Developing personal skills for leading innovation initiatives

In addition, we invite proposals for half-day workshops, including special sessions from other technical societies, related to the conference theme.

Industry perspectives will be featured throughout the meeting via panels and plenary talks.

Conference attendees will have the opportunity to visit nearby Detroit area landmarks including the Henry Ford Museum, Greenfield Village, Detroit Institute of Arts, Motown Museum, and Automotive Hall of Fame.

Organizing Committee:
Conference Chair – Liang Downey, liang.downey@ieee.org
Program Co-Chairs – Jason Hull, jason.k.hull@ieee.org, Tugrul Daim, tdaim@ncsu.edu
Publications Chair – Ed Perkins, e.perkins@ieee.org

- Paper Submissions Due: 29 Feb 2020
- Notification of Acceptance: 28 Mar 2020
- Revisions Due [For Papers Requiring Revisions]: 18 Apr 2020
- Final Papers Due: 2 May 2020
S.E. Michigan TEMS Society Chapter 10 Challenge:

I had the privilege of meeting and talking with some of the TEMS Society EXCOM members during the event and the reoccurring topic was the support by the local chapter for TEMSCON2020. I strongly believe that for our chapter members to grow and stay well-informed with changes in managing people and technology you need to take an active role & support this event. You will have the opportunity to network, hear great paper presentations, and speakers. Your role in support of this event can be limited to a small block of time helping the day to day running of the event. I encourage you to contact Mark Robinson or myself to help with the conference. Our contact Information can be found in an issue of Wavelengths.

Ray Sasinowski

TEMSCON 2020

TEMSCON 2020 will bring together 200+ engineering leaders, researchers, educators, innovators, entrepreneurs, and students to gather at the conference to help advance the understanding and the state of practice related to successful technology and engineering management from around the world and focuses on the art and science of management and leadership driving innovation and change.

TEMSCON 2020’s theme is Managing the Development of Connected Systems. The greater Detroit area has a long history as a hub for engineering and manufacturing automobiles. With the ever-accelerating progress on innovation and a push for market-ready automated, connected and electrified vehicles, Detroit remains the heart of the automotive industry. Southeast Michigan has also diversified its economic base in emerging technology areas including information technology, health care and biomedical, power and energy, advanced manufacturing, and higher education and research.

The conference provides a venue where different points of view interact to yield new understanding and ideas on leading innovation as well as the future of technology and engineering management.

About IEEE TEMS

TEMSCON 2020 topics include

- Innovating in rapidly changing markets (e.g. biotech and health care, manufacturing)
- Leading and managing innovation and transformation
- Adopting new technologies: challenges and risk mitigation
- Management of in-vehicle software versions and interoperability among different vehicle ages & brands
- Understanding trends and applicability of new technologies
- Leveraging enterprise data, e.g., successful use of AI, analytics, blockchain, IoT
- Leading societal change, e.g., mobility, intelligent transportation, health care, public policy
- Enhancing industry, university, and/or government collaboration
- Developing personal skills for leading innovation initiatives

Call for papers TEMSCON 2020!!

On the TEMSCON 2020 website you find information on paper topics and submission dates.

- Paper Submissions Due: 29 Feb 2020
- Notification of Acceptance: 28 Mar 2020
- Revisions Due (For Papers Requiring Revisions): 18 Apr 2020
- Final Papers Due: 2 May 2020

http://www.ieee-tems.org/
ZF Employment Ad

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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

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

For the purpose of:

- Filling 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.

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

<table>
<thead>
<tr>
<th>Section Unit Name or Affinity Group</th>
<th>Chapter Name</th>
<th>Organizational Unit is in parentheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultants Network Affinity Group</td>
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<tr>
<td>Life Members</td>
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<tr>
<td>Young Professionals</td>
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<td>Women in Engineering</td>
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<td>(SP01)</td>
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<td></td>
<td>(CAS04)</td>
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<td>Chapter: 02</td>
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<td>Chapter: 06</td>
<td>(GRS29)</td>
<td>Geosciences and Remote Sensing Society</td>
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<td>Chapter: 07</td>
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<td>(IA34)</td>
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<td>Chapter: 08 “EMC”</td>
<td>(EMC27)</td>
<td>Electromagnetic Compatibility Society</td>
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<td>Chapter: 10</td>
<td>(TEM14)</td>
<td>Technology and Engineering Management Society</td>
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<td>Engineering in Medicine &amp; Biology</td>
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<td>(CS23)</td>
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<td>(E25)</td>
<td>Education Society</td>
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<td>Chapter: 14</td>
<td>(RA24)</td>
<td>Robotics And Automation Society</td>
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<td>(NPS05)</td>
<td>Nuclear Plasma Sciences Society</td>
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<td>(SMC28)</td>
<td>Systems, Man and Cybernetics Society</td>
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<td>Chapter: 17</td>
<td>(NANO42)</td>
<td>Nanotechnology Council</td>
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<th>Chapter Name</th>
<th>Organizational Unit is in parentheses</th>
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<td>Lawrence Technological University</td>
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<td>Oakland University</td>
<td>(STB06741)</td>
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<td>Eastern Michigan University</td>
<td>(STB11091)</td>
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<tr>
<td>University of Michigan-Dearborn</td>
<td>(STB94911)</td>
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</table>

**Curated & Formatted By**

**Sharan Kalwani,**  
*Wavelengths,*  
2017 ~ 2020
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 some time, 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

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**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**

**Experimental Aircraft Association**

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

**Science Fiction Conventions**
https://2019.penguicon.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/](http://r4.ieee.org/sem/) Click on the “Calendar” button in the top banner on the first page of the website.

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/](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 2019 Asst. Secretary

Download the complete SEM Organization Chart, in PDF format, from our Website at: [http://r4.ieee.org/sem/](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 2020 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 2020 meetings. Or, link your personal calendar to the SEM Web calendar.

Section Administrative Committee (ExCom) Meeting Schedule for 2020:

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

Teleconference, Wednesday Feb 5 - [No ExCom meeting in February. See you in March.]

Teleconference, Thursday March 5 VTOOLS LINK HERE..........................

FACE TO FACE, Thursday, April 2 VTOOLS LINK HERE..................

Teleconference, Wednesday May 6 VTOOLS LINK HERE.....................

Teleconference, Thursday June 4 VTOOLS LINK HERE.....................

FACE TO FACE, Wednesday July 8 VTOOLS LINK HERE.....................

Teleconference, Thursday August 6 VTOOLS LINK HERE.....................

Teleconference, Wednesday September 2 VTOOLS LINK HERE..................

FACE TO FACE, Thursday October 7 VTOOLS LINK HERE.....................

Teleconference, Wednesday November 4 VTOOLS LINK HERE..................

Teleconference, Thursday December 2 VTOOLS LINK HERE..................

Chris Johson
SEM Secretary
cgjohnson@ieee.org
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

sharan.kalwani@ieee.org
nilesh.dudhaia@ieee.org
k.williams@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
nilesh.dudhaia@ieee.org
k.williams@ieee.org
Wavelengths Annual Publication Plan for Articles

<table>
<thead>
<tr>
<th>Month</th>
<th>AG's</th>
<th>Ch's</th>
<th>Ch's</th>
<th>SB's</th>
<th>Special Notice</th>
<th>Reporting Events</th>
<th>Monthly Focus</th>
<th>Awards</th>
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<tr>
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<td>OU</td>
<td>Future Cities Judges</td>
<td>Election Results</td>
<td>Resolution</td>
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<td>MSU</td>
<td>Science Fair Judges</td>
<td>Officer's Welcome</td>
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<td>Future Cities</td>
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<td>Mar</td>
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<td>13</td>
<td>EMU</td>
<td>Spring Conf. Flyer</td>
<td>Spring Conference</td>
<td>Spring Conference</td>
<td>Science Fair</td>
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<td>Apr</td>
<td>4</td>
<td>U/M-D</td>
<td>National Engs Wk.</td>
<td>Future Cities</td>
<td>Chapter Focus</td>
<td>ESD - GOLD</td>
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<tr>
<td>May</td>
<td>Life</td>
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<td>14</td>
<td>Outstanding Eng Awd</td>
<td>Science Fair</td>
<td>Elections - Prep</td>
<td>New Fellows</td>
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<td>IEEE-USA Apmts.</td>
<td>ESD Banquet</td>
<td>Leadership Skills</td>
<td>SEM Awards</td>
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<td>Jul</td>
<td>7</td>
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<td>Nominations Call</td>
<td>MD-Webcasts</td>
<td>Students Issues</td>
<td>Region 4</td>
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<td>Aug</td>
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<td>MGA - Apmts.</td>
<td>Tech-Webinars</td>
<td>Womens Issues</td>
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<td>Sep</td>
<td>9</td>
<td>16</td>
<td>LTU</td>
<td>Region 4 Apmts.</td>
<td>Engineers Day</td>
<td>Professional Skills</td>
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<td>Oct</td>
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<td>U/M-AA</td>
<td>Fall Conf. Flyer</td>
<td>Fall Conference</td>
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<td>Nov</td>
<td>YP</td>
<td>11</td>
<td>17</td>
<td>WSU</td>
<td>ELECTIONS!</td>
<td>Humanitarian</td>
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<td>Dec</td>
<td>12</td>
<td>U/D-M</td>
<td>IEEE-Com Apmts.</td>
<td>Fall Conference</td>
<td>Happy Holidays</td>
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Wavelengths Annual Publication Plan for Personal Profiles

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<tr>
<th>Month</th>
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<th>Committees</th>
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<tbody>
<tr>
<td>Jan</td>
<td>Chair</td>
<td>New Officers</td>
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<tr>
<td>Feb</td>
<td>V-Chair</td>
<td>Secretary</td>
<td>Communications</td>
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<td>Mar</td>
<td>Treasurer</td>
<td>Sect-Adviser</td>
<td>Conference</td>
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<td>Apr</td>
<td>Stud-Rep</td>
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<td>May</td>
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<td>Jun</td>
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<td>Finance</td>
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<td>Jul</td>
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<td>Aug</td>
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<td>Nominations</td>
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<td>Sep</td>
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<td>PACE Activities</td>
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<tr>
<td>Oct</td>
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<td>Student Activities</td>
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<tr>
<td>Nov</td>
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<tr>
<td>Dec</td>
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<td>Editor-WL</td>
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IEEE Southeastern Michigan

Electrical and Electronic Engineers Creating Our Future
### 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 “facebook” button under the top row.)

#### SEM LinkedIn Page
(Select the “linkedin” button under the top row.)

### Section Officers

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
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</thead>
<tbody>
<tr>
<td>Section Chair</td>
<td>David Mindham</td>
</tr>
<tr>
<td>Section Secretary</td>
<td>Chris Johnson</td>
</tr>
<tr>
<td>Section Vice-Chair</td>
<td>Sharan Kalwani</td>
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<tr>
<td>Section Treasurer</td>
<td>Michael Folian</td>
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### Standing Committees:

<table>
<thead>
<tr>
<th>Committee</th>
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<tbody>
<tr>
<td>Section Adviser</td>
<td>Don Bramlett</td>
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<td>Chair Communications &amp; Marketing</td>
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<tr>
<td>Chair Educational Activities</td>
<td>Christopher Guirlanda</td>
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<tr>
<td>Chair Finance</td>
<td>Nevrus Kaja</td>
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<td>Chair Membership Development</td>
<td>Sharan Kalwani</td>
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<td>Chair Nominations &amp; Appointments</td>
<td>Kimball Williams</td>
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<td>Chair Professional Activities (PACE)</td>
<td>Sharan Kalwani</td>
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<td>Mel Chi</td>
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<td>Student Representative</td>
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</tr>
<tr>
<td>Chair Technical Activities</td>
<td>Jeffery Mosley</td>
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### 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.”
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

Advertising Rates

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

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