



# Wavelengths

## Section Chair's Message



It's been a busy month and much has happened.

### Spring Conference:

David Mindham has agreed to lead our Spring Conference Organizing Committee. Ravi Nigam has overwhelming business obligations that have taken precedence of his time commitments. We look forward to David's leadership and Ravi's return when he is able.

David's committee is having biweekly meetings. David has also called a Chapter and Affinity Groups Chairs meeting to seek conference marketing and organizational support. David's information may be viewed on the SEM website [www.ieee-sem.org](http://www.ieee-sem.org). Select the "About SEM" then click on "Current Officers".

### Volunteering:

Volunteers are needed for the spring conference. IEEE-SEM Conference, as are activities, are conceived, developed and carried out by IEEE-SEM members who serve as volunteers.

We do not have paid staff to support our programs. If a volunteer's other obligations, outside of IEEE increase while assisting with an important function, other volunteers need to step in and assist with tasks.

Please consider volunteering to assist with the spring conference. We will mentor you; the experience will be interesting and rewarding.

### Technical Activities:

Concerns are increasing concerning a few chapters that are not meeting twice a year. IEEE rules require chapter and affinity groups meet at least twice a year and file the L-31 form for each meeting in order to maintain active status within IEEE

A written warning is issued the first year that two L-31 forms are not submitted. The second consecutive year that the two forms are not submitted, IEEE Headquarters formally notifies IEEE-SEM, that unless action is taken, the chapter or affinity group will lose its active status with IEEE.

I along with our Technical Activities Committee am available to assist chapters and affinity groups with completing L-31 forms and maintaining their active status. Please take advantage of these resources if your chapter or group has not submitted two of the appropriate L-31 forms on an annual basis.

### Policies and Procedures:

Most policies and procedures that IEEE-SEM, follows are spelled out in the IEEE MGA Manual. A few are unique to our section. The policies and procedures that are unique to our section will be placed in a folder located in the On-Line Community for referral by our officers and members.

*Volume 56 – Issue 2  
February 2016*

## Contents

Section Chair's Message --	1
Science Fair Judging ---	2
Seminar: Power Inductors	3
EMI Seminar: -----	4
Future Cities 2016-----	5
H-1B Visa Petition: -----	6
Amp Up Your Career:-----	7
Nuclear Energy Today-----	8
Xfmr Design Seminar-----	9
ESD Events-----	10
Other Coming Events-----	11
Executive Committee ---	12
SEM Mission & Goals ---	13
SEM Monthly Meetings-	13
Editors Corner -----	14
Web & Social Sites -----	15
Section Officers -----	15
Leadership Meetings----	16
Advertising Rates-----	16

*Wavelengths Newsletter is produced by IEEE volunteers and published by Southeastern Michigan (SEM) Section for the members.  
Newsletter Archive: <http://sites.ieee.org/sem/>*

### Science Fair Judging

#### IEEE-SEM MEMBERS NEEDED AS SCIENCE FAIR JUDGES

By Don C. Bramlett, PE, SMIEEE

There are currently two policies and procedures that will be placed in the folder, namely, the Financial Request Procedure and Expense Reporting Procedure. The Financial Request Procedure details the procedure for requesting and obtaining funds for non-budgeted events and projects. The Expense Reporting Procedure defines the procedures for submitting expense reports to the section treasure. Additional information on section policies and procedures will be added to the folder as needed. A document with links to the MGA Manual will also be placed in the folder.

I look forward to hearing from you and seeing you at our events. As always, your ideas and suggestions are encouraged and welcomed.

**Robert Neff**  
**IEEE SEM Section Chair**

[RLNeff1@gmail.com](mailto:RLNeff1@gmail.com)

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 58th Annual Science and Engineering Fair of Metropolitan Detroit (SEFMD). This is the twentieth straight year that IEEE-SEM has provided judges and sponsored professional awards for projects associated with electrical, electronics and computer engineering.

Judging will be on **Wednesday March 9, 2016** at the Science Fair, located at Cobo Hall in downtown Detroit. **The Science Fair will be in the Michigan Hall this year on the Lower Level or Level (0).** Please plan your arrival at the Science Fair between **7:45 and 8:30 AM** to enjoy free coffee and muffins. We will be near the Professional Awards Judging Desk (front of hall near the muffins and coffee). The judge check-in may be bypassed upon entering the front of Michigan Hall.

As was done last year, IEEE-SEM plans to provide judging for both the Junior (5<sup>th</sup> – 7<sup>th</sup> grade) Division and the Senior (High School) Division. It is anticipated that the IEEE-SEM awards judging will start at **8:45 AM and completed by 11:30 AM**. IEEE-SEM will tentatively present two Grand Awards that include framed certificates and cash prizes, and

several Honorable Mention Recognition Awards, consisting of framed certificates.

The planned routine is to separate into small groups at first and quickly roam assigned sections of the project displays to identify 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. One team of judges will be formed to evaluate in 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 use a less formalized process, as deemed appropriate.

Please direct questions to me at my office, (313) 235-7549 during normal weekday business hours or my home in the evenings, (734) 591-1452 I may be contacted on my cell phone, 313-608-6223, most any time as well. I may be contacted via e-mail either [d.bramlett@ieee.org](mailto:d.bramlett@ieee.org) or [bramlett@deenergy.com](mailto:bramlett@deenergy.com).

I look forward to seeing you **Wednesday, March 9th at the Science Fair located at Cobo Hall**. Parking is available at the Cobo Hall Roof Parking site. Free coffee and muffins are available in the morning.

**Seminar: Power Inductors**

**Friday  
Engineering Seminar and Webinar**

Sponsored by Würth Elektronik

**The Optimization of Inductors in Automotive Power Electronics**

Benjamin Doerr

**Friday, February 5, 2015**

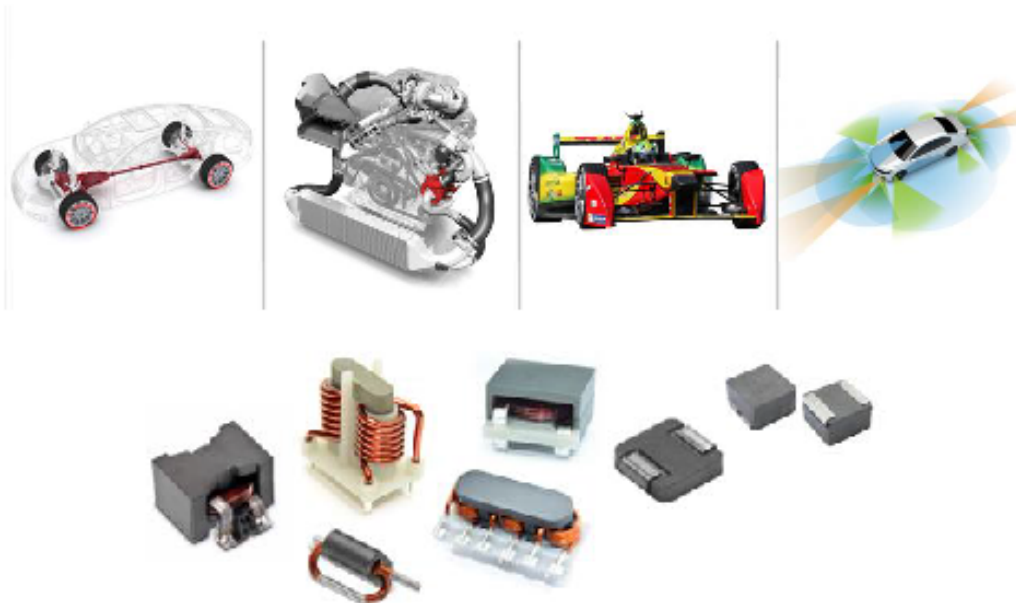
12 PM-1 PM EST, Engineering Building, TBD  
Lawrence Technological University

**Web conference details**

Guest URL: <https://my.ltu.edu/webapps/bb-collaborate-BBLEARN/launchSession/guest?uid=13011f2a-2dcf-4420-94a6-226feae649d6>

Participant Phone: [571-392-7703](tel:571-392-7703)

Participants PIN: 351284190649



The movement in the auto industry to optimize energy efficiency has drove the development of power conversion. Increasing the voltage of the system lowers the copper size in the wire harness running throughout the vehicle. In addition, the trend is to take full-time engaged mechanical accessories such as a compressor, cooling fan, water pump, oil pump, vacuum pump and alternator and transition them to an electrical on-demand component. This shift requires the power conversion of high voltages ~350vdc to middle voltages 30-60vdc and supply the traditional 12vdc. DC/DC converters are used to make this conversion between buses and supply the appropriate power. Packaging constraints require that the inductors be shrunk to fit into smaller places and optimize the inductor geometry.

**EMI Seminar:**

1/15/2016

Troubleshooting EMI Seminar with Lee Hill

**Troubleshooting EMI Seminar with Lee Hill**  
Identify, Characterize, and Prevent Interference Problems**Hosted by Rohde & Schwarz and Interference Technology**

Join this highly focused one-day seminar and learn how to uncover, characterize, and solve the most elusive EMI problems. Troubleshooting and localizing intermittent signals or multiple layers of broadband and narrowband signals can be frustrating even for the most seasoned EMC troubleshooter and RF engineer. We will discuss and demonstrate a number of test setups that can help identify hidden or emerging EMC failures and then demonstrate how real-time analysis can literally make previously-hidden signals leap into plain view.

This seminar is intended for engineers and technicians involved in the development, pre-compliance, testing and certification of electronic products, systems and assemblies.

**Agenda:**

8:30 AM - 9:00 AM  
Welcome/Registration

9:00 AM - 12:00 PM  
Practical RF measurement techniques & probing tools for EMC troubleshooting

12:00 PM - 1:00 PM  
Lunch, Provided by Rohde & Schwarz

1:00 PM - 4:00 PM  
Using real-time spectral analysis to visualize, measure, and troubleshoot EMI signals

[> View course descriptions](#)**Can't attend the seminar?**[Schedule a one-on-one demo](#) with an industry expert.**Available Dates and Locations:**

Thursday, March 10 - Austin, TX  
Tuesday, March 15 - Los Angeles, CA  
Thursday, March 17 - Santa Clara, CA  
Tuesday, March 22 - Detroit, MI  
Thursday, March 24 - Boston, MA

**About the Speaker**

Lee Hill is an industry expert in electromagnetic compatibility. He provides EMC troubleshooting services, design reviews, and training to a wide variety of industries nationally and around the world.

Rohde & Schwarz USA, Inc. | 8821 Benjamin Franklin Dr, Columbia, MD 21046 | 888-837-8772



### Future Cities 2016

Don Bramlett, IEEE-SEM section adviser, led the section's Special Awards Team in the annual judging of the Future Cities Competition which took place on January 25<sup>th</sup> at Suburban Collection Showplace in Novi, Michigan.



While it was a cold morning, there was no significant snow and all 21 of the competing middle schools were able to attend the event. Of course, those driving from the Upper Peninsula came the night before and stayed in a hotel

The judges who volunteered for the event are shown in the photo below, clockwise starting on left are:

**Don Bramlett,**  
**Larry Dishman,**  
**David Morris,**  
**Ralph Mackiewicz,**  
**Chuck Cohen,**  
**Bill Quinlan,**  
**Mohammad Abdul-Hak,**  
**Basil Sherlund, and**  
**Kimball Williams** (not shown).



With 9 judges, the group divided into 4 teams that reviewed all 21 school presentations. Upon completing the individual team reviews, the judges collectively reviewed the 'top' ranked schools again and made final recommendations for awards.

The IEEE SEM Electro Technology award went to the team from **North Star Academy Team 2, Marquette**. (Shown below is the photograph of the three presenting team members.)



In the general judging categories, the following schools received awards for their work:

#### First Place

St. John Lutheran School, Rochester

#### Second Place

Crescent Academy International, Canton

#### Third Place

St. Valentine School, Redford

Supporting the winning team were their teacher, John Gilbert, and mentor, Robert J. Pliska, Jr., (not shown).

#### Fourth Place

Grand Blanc West Middle School, Grand Blanc

#### Fifth Place

Patrick Henry Middle School, Woodhaven

We thank all the IEEE judges who donated their morning to the effort and helped encourage another class of students to consider careers in STEM (Science, Technology, Engineering and Mathematics).

IEEE members who are interested in participating in next year's judging event should contact Don Bramlett at [d.bramlett@ieee.org](mailto:d.bramlett@ieee.org) , or... [bramlett@dteenergy.com](mailto:bramlett@dteenergy.com) .

## H-1B Visa Petition:

From: **Russell Harrison** <[r.t.harrison@ieee.org](mailto:r.t.harrison@ieee.org)>  
Date: Sun, Jan 24, 2016 at 2:37 PM  
Subject: IEEE-USA Petition Needs Support  
To: Russell Harrison <[r.t.harrison@ieee.org](mailto:r.t.harrison@ieee.org)>

### IEEE Leaders:

Many of you have seen the article in Insight about IEEE-USA's new attack on the H-1B visa program.  
(<http://insight.ieeeusa.org/insight/content/policy/255071>)

In brief, we believe that the use of H-1B visa to replace American workers represents intentional discrimination against Americans because of their citizenship - which is illegal under the law.

As part of this effort, we have created an online petition asking the U.S. Attorney General to launch an investigation into H-1B outsourcing. We already have 200 signatures on the petition, but we need more.

The petition can be found here: [https://www.change.org/p/attorney-general-of-the-united-states-stop-h-1b-discrimination-against-americans?recruiter=460476742&utm\\_source=share\\_petition&utm\\_medium=copylink](https://www.change.org/p/attorney-general-of-the-united-states-stop-h-1b-discrimination-against-americans?recruiter=460476742&utm_source=share_petition&utm_medium=copylink)

Please take a moment to add your name to the petition. In politics, numbers matter. The more names on the petition, the more likely it will generate a response. We believe that the law is on our side, but the U.S. Department of Justice is a busy place. It will take many voices to get their attention.

After you have signed, please send this e-mail to anyone else you think might be willing to help.

Thank you for your help. This should only take you a minute or two to do, but could have a profound impact on the H-1B visa program.

Russ

--

Russell Harrison  
Director, Government Relations

IEEE-USA  
2001 L St, NW: Suite 700  
Washington, DC 20036  
(202) 530-8326

**Amp Up Your Career:**



**SAVE THE DATE!!**

COMPES Professional Development Conference  
*Coalition of Minority Professional Engineering Societies*

**Where:**



1 Energy Plaza, Detroit, MI 48226

**When: Saturday April 23, 2016**

Registration @ 7:30am

Conference @ 8am – 4pm

Catered lunch

**Theme: “Amp Up Your Career”**

Including: Exciting Technical Topics, Soft Skill Development, and How to Take Risks in Your Career.

Benefits to All:

- Network with our target attendance of 200+ professionals
- Opportunity to attend breakout sessions on technical topics
- Access to resources to aid in career planning and development

Benefits to Volunteers and Corporate Sponsors:

➤ *Volunteers:*

- Network with a diverse core planning team
- Gain experience planning a large scale event

➤ *Corporate Sponsors:*

- Opportunity to further train and support diverse workforce
- Support minority engineering societies through COMPES PDC

Nuclear Energy Today

## TOPIC: *Nuclear Energy Today – What in the World is Going On?*



David Vaglia, a 2015-2016 Industrial Applications Distinguished Lecturer, presents an overview of the status of electricity generating nuclear power plants around the world. It discusses the current status and probable future of nuclear power in those countries. This talk also covers the different nuclear power plant designs in relation to recent nuclear incidents and the impacts those incidents have had on the industry. The presentation also looks at the problems and opportunities created by the aging nuclear workforce, the safety of nuclear facilities, the drive to extend the life of current plants, and the challenges of building new

David Vaglia has his roots in the energy engineering. He began his career in the coal mining industry, working as an applications engineer in power distribution, and electric train haulage systems, both above and below ground. He has also worked in the renewable energy sector, investigating new concept wind generation applications and solar thermal systems. Mr. Vaglia transitioned to instrumentation and control working with supervisory control and data acquisition systems, and then to the man-machine interface design of nuclear power plant control rooms. Mr. Vaglia is presently a Principal Engineer in the Control Room Design Group, Operating Plants Business, at the Westinghouse Electric Company. In Westinghouse, he has held positions in management, marketing, and engineering.

Mr. Vaglia has a Bachelor of Science in Electrical Engineering and a Bachelor of Arts in General Arts and Sciences, both from the Pennsylvania State University. He also has a Master of Business Administration from the University of Pittsburgh and is a registered Professional Engineer working in the state of Pennsylvania.

Mr. Vaglia has been an active in the IEEE for over 40 years. He is a Senior Member serving the Pittsburgh Section (Region 2) in various capacities. Mr. Vaglia's volunteer positions have included Section Awards Chair, Treasurer, and Section Chair. In the IAS-PES Pittsburgh Joint Chapter, he has served as Secretary, Treasurer, and Chair. He has also served as the General Chair of the 2008 PES Annual Meeting. Mr. Vaglia was nominated and appointed an IAS Distinguished Lecturer for 2015-16. He is presently Chair of the joint chapters of the IAS and PES, Pittsburgh Section, which has won numerous IAS and PES chapter awards.

**Where:** Southfield, MI 48076

**When:** Thursday, March 24<sup>th</sup> 6:00 – 8:00 P.M.

**PDH:** 2 PDHs issued by IEEE Southeastern Michigan

**Price:** Free registration requested for accurate food count

**Register at:** <https://meetings.vtools.ieee.org/m/38112>



**Xfmr Design Seminar**

## TOPIC: *Power Transformer Design and Manufacturing*

### Part 1: Transformer Design and Design Parameters

#### Abstract:

The presentation will be on the basics of transformer design. The presentation will explain how a transformer designer interprets parameters such as MVA, lightning impulse, switching impulse, percentage impedance that are supplied by customers. It will touch on power rating [MVA], core rated voltages, insulation coordination, short-circuit impedances, short-circuit forces, loss evaluation, temperature limits, cooling, sound level, Etc. It will also explain overload and life expectancy of a transformer as well as comparing when delta windings and wye windings are needed. The presentation will answer why in North America transformers are regulated from low voltage side where in Europe

### Part 2: Transformer Manufacturing Processes

#### Abstract:

The presentation will be on the industry wide manufacturing processes used to build transformers on the shop floor. It will cover core construction, insulation, windings, coil, processing, tanking, testing and shipping. Some of the common trouble points during the manufacturing process will be explained as well what a customer should look into while doing factory inspection. The presentation will also cover reconnection both in LV and HV, LTC Tap changer (both in tank and separate tank), and lead works.



### **Speaker:** Ronnie Minhaz, P.E.

Ronnie holds B.Sc. degree in Electrical Engineering from University of Manitoba, Canada. Before founding his own company "Transformer Consulting Services Inc. ([www.tc-servicesinc.com](http://www.tc-servicesinc.com))", Ronnie worked as a Transformer Designer at Pauwels Canada (Manufacturer), as an Equipment Engineer at SNC Lava Lin (EPCM) and at Enmax Power (Utility), as Substation Lead Engineer at McGregor Construction (Substation Construction). Ronnie is a registered professional engineer in the province of Alberta, Canada and an IEEE member. Ronnie held various leadership positions at IEEE Section level and a regular member of IEEE PES society.

#### Where:

**Engineering Society of Detroit**  
**20700 Civic Center Drive, Suite 450**  
**Southfield, MI 48076**

**When:** Thursday, March 31<sup>st</sup> 12:00 – 4:00 P.M.

**PDH:** 4 PDHs issued by IEEE Southeastern Michigan

**Price:** \$25 Students, \$30 IEEE Members, \$40 Non-Members

**Register at:** <https://meetings.vtools.ieee.org/m/37895>

## ESD Events

IEEE Southeastern Michigan Section maintains a supporting membership as an Affiliate with the Engineering Society of Detroit (ESD), and supports many of its activities.

We try to publish ESD events that we feel our members may want to attend. Below is a listing of some of the ESD events planned for 2016:

### **The Engineering Society of Detroit's (ESD) Professional Engineer Licensing Review Courses**

Since 1941, The Engineering Society of Detroit has successfully prepared thousands of candidates for the State licensing exam in a variety of disciplines ranging from civil and environmental to mechanical and electrical engineering. You'll learn in a small classroom-like setting from instructors who have first-hand knowledge of the course material. Let ESD's 70-plus years of experience help prepare you to pass the exam on your first try.

#### **FE (Part I) Review Course February 3 – April 9, 2015**

The Fundamentals of Engineering (FE) Part I Review Course provides 84 hours of instruction in engineering fundamentals for candidates planning to take Part I of the Professional Engineers Exam.

The classes are held Tuesdays and Thursdays from 6-9 p.m. and on Saturdays (morning or afternoon depending on discipline) at ESD headquarters in Southfield. The Saturday sessions start on February 14, 2015.

#### **PE (Part II) Review Course February 14 – March 28, 2015**

The Principles & Practice of Engineering (PE) Part II Review Courses consists of 28 hours of

instruction, on seven half-day Saturday sessions, focusing on problem solving techniques needed for the Professional Engineers (Part II) exam.

All classes are held on Saturdays at ESD headquarters in Southfield. The civil engineering course meets 8:30 a.m. – 12:30 p.m. Mechanical, environmental and electrical courses are 1 – 5 p.m. The state exam will be held on April 17, 2016.

#### **For more information or to register:**

Visit [www.esd.org](http://www.esd.org) or contact Fran Mahoney at 248-353-0735, ext. 116, or [fmahoney@esd.org](mailto:fmahoney@esd.org).

## Engineering SMARt Michigan Program

ESD's Engineering SMARt Michigan program is a rigorous, hands-on science, math, architecture and technology (SMARt) project in which high school students design energy-efficient homes.

Through a series of learning modules, students will be introduced to the basics of energy, alternative energies, and the energy grid, in an atmosphere of fun activities and team building. They will apply these concepts to create real-life solutions by working in teams to design a house. The culmination of the program is a presentation of their team-designed house at a competition between all participating schools where they will vie for scholarships and other prizes.

#### **What role do mentors play?**

Volunteer mentors are a critical element to the success of the program and are needed to help teach and coach in the classroom. There are two groups of mentors - Energy Module and Presentation Module.

#### **What is the time commitment for a mentor?**

The 15 week program gets underway in late January and finishes up in late May at the competition. Energy Module mentors are asked to teach a minimum of one class period per week for two weeks. Presentation Module mentors are assigned to a school and asked to teach a minimum of one class period per week for eight weeks. Efforts will be made to schedule multiple Presentation Module mentors at each school in order to ensure at least one mentor is in the classroom each week. Mentors can volunteer for one or more schools.

#### **Interested in mentoring?**

For more information on mentoring or to volunteer, contact Jasmine Sisson, PE, at [sisson@pbworld.com](mailto:sisson@pbworld.com).

## Other Coming 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.

### SEM Web Calendar:

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

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

### SEM Web Meetings:

<http://sites.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 Happenings

However, since our IEEE members tend to have eclectic interests, we want to give everyone a heads up for some of the non-IEEE events that may be of interest.

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 the particulars to

[k.williams@ieee.org](mailto:k.williams@ieee.org)

An announcement may be placed in the newsletter.

### Links:

#### Michigan Institute for Plasma Science and Engineering:

Seminars for the 2015-2016 academic year:

<http://mipse.umich.edu/about/seminars.htm>.

Below are links to local SEM Clubs engaged in technical hobbies as well as links to sites that may be useful for locating clubs in the area.

### Amateur Radio Clubs in Southeastern t Michigan

(This is a fairly comprehensive listing of all the 'Ham' clubs in SEM.)

<http://www.wa2hom.org/ham-radio-clubs-in-se-michigan/>

### 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/ea/eaa-chapters/find-an-eaa-chapter>

### Robots

<http://therobotgarage.com/about-us.aspx>

### Science Fiction Conventions

<http://www.conclavesf.net/>

### Mad Science

<http://www.madscience.org/>

### ESD PE Review Class

[www.esd.org](http://www.esd.org)

### Makers Faire:

<http://www.thehenryford.org/events/makerFaire.aspx>

## Executive Committee

The **SEM Executive Committee** is the primary coordination unit for Southeastern Michigan (SEM) IEEE operations. The basic organization chart below shows the 2016 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://sites.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 David Mindham, the section secretary at: [dmindham@ieee.org](mailto:dmindham@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

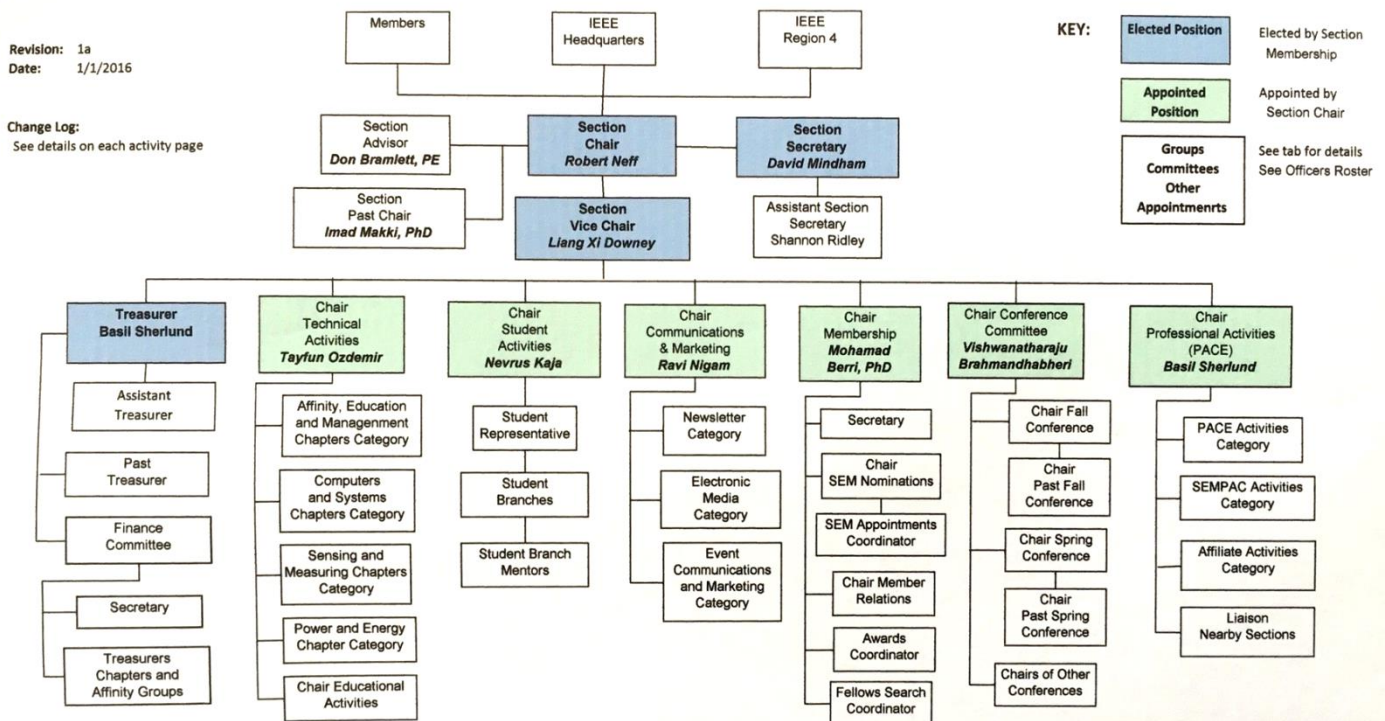
other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to send meeting information to our webmasters for posting on section's calendar.

More detailed information on meetings may be found by using the IEEE meetings site. This may be found through the IEEE SEM Website: <http://sites.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.

**David Mindham** - SEM Secretary

## Current Organization - IEEE Southeastern Michigan Section (SEM)



Download the complete **SEM Organization Chart**, in PDF format, from the SEM Website at:

[www.ieee-sem.com](http://www.ieee-sem.com)

Then, click on "About SEM" Tab, then, click on "Current Officers"



**SEM Mission & Goals****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 with 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:

- Fulfilling the mission of IEEE (...**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.

**SEM Monthly Meetings****Scheduled Meetings:**

The regular meetings of the SEM Leadership (Executive Committee) are scheduled well in advance to allow everyone to place them in their personal planning calendars, and then defend those dates against encroachment. *(Not always possible.)*

Two types of Monthly meetings are normally scheduled:

**Monthly Teleconference / WebEx** as well as:

**Quarterly Face-to-Face (F2F).** See schedule below.

**Note: All IEEE meetings are 'Open' for all members to attend.**

The only caveat is that you please register using the specific meeting form on the vTools site at:

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

Registering will ensure there is sufficient space, refreshments and support for attendees.

**Teleconference Schedule (held from 12-1 p.m.):**

<b>Wednesday</b>	<b>February</b>	<b>3rd</b>
Thursday	March	3rd
Thursday	May	5th
Wednesday	June	1st
Wednesday	August	3rd
Thursday	September	1st
Thursday	November	3rd
Wednesday	December	7th

**F2F Meeting Schedule:**

Wednesday	April	6th
Thursday	July	7th
Wednesday	October	5th
Wednesday	January(2017)	4th

More information for F2F meetings will be emailed in a timely manner before the meeting dates.

Contact **David Mindham** the SEM Section Secretary at: [dmindham@ieee.org](mailto:dmindham@ieee.org) for more information.

Also consider checking for additional information as the meeting dates approach at the SEM website (<http://sites.ieee.org/sem/>). The links to the SEM Facebook or LinkedIn pages on the SEM website may also be checked for updates.

All the normally scheduled meetings of each of the other section chapters, affinity groups etc. are listed each month in the vTools area of our SEM website at:

[http://ewh.ieee.org/r4/se\\_michigan/calendar1.php](http://ewh.ieee.org/r4/se_michigan/calendar1.php)

The information is for:

**Standing Committee Meetings**  
**Affinity Group Meetings**  
**Technical Chapter Meetings**  
**University Student Branch Meetings**

**Calendar Schedule:**

Meetings are also announced on the SEM Calendar web page

<http://sites.ieee.org/sem/>  
 (Select the "SEM Calendar" button in the top row.)

**Note:** Often meetings of the Executive Committees of Chapters and Affinity Groups (and standing committees, of course) are listed only in the SEM Calendar page, since it is felt that most members would not wish to sit through administrative meetings.

However, if this type of meeting is just your 'cup of tea', then contact the officers of the unit that is conducting the meeting, and ask to be 'linked' into their teleconference, SKYPE, Google Hangout, or WebEx meeting. They will be happy to have you as a participant.

Many volunteers become interested in section activities when they get a chance to attend a monthly meeting and 'peek under the hood' to find out how the machinery of the section actually runs. It can be a rewarding experience.

**David Mindham**  
 SEM Section Secretary.  
[dmindham@ieee.org](mailto:dmindham@ieee.org)

## Editors Corner

Previous editions of Wavelengths, the monthly newsletter of IEEE-SEM, may be found on the IEEE-SEM website at: <http://sites.ieee.org/sem/>. Click on the "Wavelengths" button in the top row of selections.

Comments and suggestions may be sent to the editor at [k.williams@ieee.org](mailto:k.williams@ieee.org). We also recommend a cc to the chair of the Communications and Marketing Committee, Ravi Nigam at: [rnigam154934mi@comcast.net](mailto:rnigam154934mi@comcast.net).

We rely on our officers and members to provide the 'copy' that is presented to our readers.

The **Wavelengths Annual Publication Plans for Articles and Personal Profiles** are shown in the matrix below is presented to [k.williams@ieee.org](mailto:k.williams@ieee.org)

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 members to share the duties, and help keep the newsletter alive and lively by providing alternative points of view.

### Review:

Each month Jim Woodyard reviews the current issue, adding more "formal" English and correcting typos Jim likes to work in the background but, a special thank you is deserved for his continuous efforts and dedication to the quality of the publication. Thank you Jim!

### Join the Team:

If you feel you might like to join the team, or would like to train with us,

## Wavelengths Annual Publication Plan for Articles

Month	AG's	Ch's	Ch's	SB's	Specal 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	GOLD Award
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!		Humanatarian	
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://sites.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”.

### SEM On Line Community

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

### Section Officers

#### Section Chair

Robert Neff

#### Section Secretary

David Mindham

#### Section Vice-Chair

Liang Xi Downey

#### Section Treasurer

Basil Sherlund

#### Standing Committees:

##### Section Adviser

Don Bramlett

##### Chair Communications & Marketing

Ravi Nigam

##### Chair Conferences

Raju Brahmandhabheri

##### Chair Educational Activities

Chaomin Luo

##### Chair Finance

Nevrus Kaja

##### Chair Membership

Mohamad Berri

##### Chair Nominations

Kimball Williams

##### Chair Professional Activities

Basil Sherlund

##### Chair Student Activities

Nevrus Kaja

##### Student Representative

Maoxu Liu

##### Chair Technical Activities

Tayfun Ozdemir

##### Past Section Chair

Imad Makki



IEEE Southeastern Michigan

**Visit Us on the Web at:**

**<http://sites.ieee.org/sem>**

### Leadership Meetings

**All IEEE members are welcome to join us at any regularly scheduled meeting:**

#### Advertising Rates

SEM Website & Newsletter

Advertising Rates / Month:

Our readers specify & purchase a wide range of electronic components, equipment and services.

Our sponsors come from industry, education, and nonprofit organizations.

**Full page \$500,**

**Half page \$250**

**Quarter page \$125,**

**Eighth page \$65.**

#### **SEM Executive Committee Monthly Teleconferences:**

1<sup>st</sup> Wednesday or Thursday of Each Month @ Noon

Check the Section Web Calendar at:

**<http://sites.ieee.org/sem/>**

(Select the "SEM Calendar" button in the top row.)

#### **SEM Executive Committee Face-to-Face Meetings:**

1/Qtr. Usually held at U/M-D Fairlane Center

Registration at:

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

**SEM Standing Committee Meetings:**

**SEM Affinity Group Meetings:**

**SEM Technical Chapter Meetings:**

**SEM University Student Branch Meetings:**

**Meeting schedules are announced on SEM Web Calendar**

**<http://sites.ieee.org/sem/>**

(Select the "SEM Calendar" button in the top row.)

**Registration for all at:**

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