



# Wavelengths

**Volume 55 – Issue 10**  
**October 2015**

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

## Section Chair's Message



**Elections:** The nomination process has closed. The Executive Committee voted to approve the nominations and the Election of our 2015 Section, Chapter, and Affinity Group officers is currently open but are going to close October 26, 2015.

### Please Vote:

You will receive an e-mail with a link to the election process. If you do not receive an e-mail, please e-mail Mohamad Berri at: [mberri@ieee.org](mailto:mberri@ieee.org).

At the Section Officer level, the positions of Chair and Vice Chair are now two year terms for 2016 and 2017. The positions of Secretary and Treasurer are still one year terms for 2016. We will move to all Section officers being elected for two year terms when the Secretary and Treasurer are elected for 2017. (See details on page #17.). Chapters and Affinity Groups Officers are still on one year terms.

### Write In Candidates:

There are a few cases in which no one was nominated. In these positions, you are encouraged to

write in candidates who you feel would be good leaders. If there are no write in candidates for a position, the current officers are expected continue in their positions or find a replacement. The Nominations and Appointments committee can assist.

### More Volunteer Opportunities:

Being elected to a position is not the only way to volunteer here in Southeastern Michigan IEEE. We need to fill open positions in our current organization, openings in our Standing Committees and openings in our special projects areas, such as judges in our yearly Future Cities event, instructors for our elementary school age STEM programs, and university Student Chapter mentors. All of these offer opportunities for you to contribute and grow.

### Fall Conference:

Our Fall Conference is scheduled for November 17 at UM Dearborn (see page #10). The committee has prepared a wonderful program that will be entertaining and educational. The very latest information, updates and registration are available at our SEM web site ( [www.ieee-sem.org](http://www.ieee-sem.org) ) and at the conference web site ( [www.ieee-sem.org/fall](http://www.ieee-sem.org/fall) ).

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

Robert Neff  
IEEE SEM Section Chair  
[RLNeff1@gmail.com](mailto:RLNeff1@gmail.com)

-30-

**Elections 2015:**

The IEEE SEM Section Elections are now underway:

Election ballots opened on September 28, and will close on October 26, 2015.

Each year we hold elections for the offices in our Section.

The elections include:

- Section Executive Committee (1)
- Affinity Groups (4)
- Chapters (17)

Last month the newsletter carried the complete description of candidate requirements and where the job descriptions for all officer positions can be found.

**Ballot Notification:**

Every eligible voting member in the Section should receive a number of ballots for different levels of Section Officers:

Section ExCom: All voting members  
 Affinity Groups: All Group members  
 Chapters: All Society members  
 Student Branches: N/A  
 HKN Branches: N/A  
 Standing Committees: N/A

(Note: Student Branches and HKN Branches hold their own elections at times selected by each.

Standing Committee officers are appointed by the Section Executive Committee and are not elected to their posts.)

Membership in Affinity Groups is determined by a common characteristic. For example, Life Members are us old guys.

Membership in Chapters is determined by which Technical Societies each member has elected to join.

If you are unsure of your particular Affinity Group or Chapter affiliation, please review the Officer Roster at:

[http://sites.ieee.org/sem/files/2015/07/Officers\\_Roster\\_IEEE\\_SEM\\_7.14.2015.pdf](http://sites.ieee.org/sem/files/2015/07/Officers_Roster_IEEE_SEM_7.14.2015.pdf)

Each Geo-unit is listed along with its associated Affinity Group or Technical Society(s). Compare these to your current IEEE affiliations to determine the offices in the Geo-units you may seek using the candidate nomination process.

**Schedule:**

The current schedule for elections this year is planned as follows:

- August 3 nominations open,
- September 21 nominations close,
- September 27 ballot ratification by the SEM Executive Committee (*completed electronically.*),
- September 28 elections open,
- October 26 elections close and
- November 5 election ratification by the SEM Executive Committee,

(Item is 'grey' have already passed.)

The Nominations and Appointments Committee will present the final election results for review and final ratification at the November 5<sup>th</sup> Executive Committee teleconference meeting,

The final two steps in the nomination and election process are notifying each elected candidate and publishing the election results in the December issue of Wavelengths.

When you receive your ballot, if you notice that there is no candidate for a particular position, there will also be a 'write-in' option. If you feel like stepping up to an officer position and helping run our section, we would welcome your application by writing in your name.

-30-

## 2015 Election & Terms

2015 will be a 'transition' year for Section Executive Committee officers.

Please see the chart below:

IEEE SEM Officer Term					
Governance Level	Chair	Vice-Chair	Secretary	Treasurer	
Section Executive Committee	2	2	1	1	<b>Note:</b>
Chapter	1	1	1	1	
Affinity group	1	1	1	1	
Student Branch	1	1	1	1	
HLN Branch	1	1	1	1	
Standing Committee (Appointed)	2	2	2	n/a	
<b>Note:</b> SEM ExCom Officer Term Transition Plan:					
2016: Chair & V-Chair serve 2 year terms:					
2017: Secretary & Treasurer serve 2 year terms:					
2018 forward: Even years elect Chair & V-Chair,					
2018 forward: Odd years elect Sec. & Treas.					
<b>Term Limits:</b> MGA guidelines suggest that all elected officers					
serve a maximum of 6 years without a 'break' in					
their service in any one position.					

Note that 'staggering' the terms of officers is done to provide an 'overlap' period so that newly elected officers will serve with continuing officers that will have a "corporate memory" and help the newly elected 'climb the learning curve'.

It should be understood that this revision to officer terms currently applies to the SEM Executive Committee only. All other Geo-units remain with their current 1 year officer terms.

However, if SEM Geo-units believe staggering terms would be advantageous to their operation as well, discussion among your officers and members should be considered and a proposal or motion may be brought before the SEM Executive Committee at a regular meeting for discussion and potential action.

-30-

## Farewell to “-30-”

Some of our readers have noticed the indicator “-30-” at the end of the articles in the newsletter.

A few have asked ‘what does that mean’? I have always been happy to answer for two reasons:

1. I like this part of history, and
2. It told me they were actually reading the newsletter.

### So, what is it?

*From Wikipedia, the free encyclopedia*

“-30-” has been traditionally used by journalists to indicate the end of a story. It is commonly found at the end of a press release.

There are many theories about how the usage came into being,

e.g. from that number's use in the Code of telegraphic shorthand to signify the end of a transmission in the American Civil War era.

### In popular culture:

-30-, a 1959 motion picture about work in a Los Angeles newspaper directed, produced and starred in by Jack Webb.

"-30-", the series finale of the television series *The Wire* (2002-2008), itself capping a season concerning the media and the Baltimore Sun.

"30", an episode of the television series *Law & Order: Criminal Intent* about a poisoned reporter.

In several Superman stories from various titles, failure by a Daily Planet employee to use this signature proved to be a plot point revealing a character's impersonation, mind control, etc.

At the end of the 1952 film, *Park Row*, about the birth of the New York Globe in 1886, the film ends with the word "THIRTY" displayed instead of "THE END".

As a friend of mine once asked; “What is the superlative of ‘So What’?”

When I began editing the *Wavelengths*, I brought the ‘-30-’ into use after a background of editing newsletters for a number of organizations in my ‘past life’. Among them:

The Classical Guitar Society of Michigan,  
The Whitefish Bay Shoreline Erosion Association,  
The Motor City Radio Club, and finally,  
IEEE SEM *Wavelengths*.

In each I have used the -30- as homage to times past and to the pioneers who laid the ground work for the rest of us to build upon.

But, ‘the past is past’, as they say, and time marches onward, and the old ways eventually die out, along with those who give us the traditions.

### “The Times They Are A Changing”:

At the urging of our current editorial staff, we will be changing our policy and removing the ‘-30-’ from the end of our articles, beginning with the November issue of the *Wavelengths*.

I doubt that any but a very few will even notice, and fewer still will lament the passing of a tradition into history and eventually obscurity.

But, on reflection, is this not a fitting conclusion to a symbol that indeed meant “The End”?

**-30-**

**ESD SMArT Michigan:**

## **ESD Engineering SMArT Michigan Program**

**Where high school students have the opportunity to design an energy efficient home.**

### **What is Engineering SMArT Michigan?**

The 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. The program gets underway in late January and finishes up in late May at the competition.

During the 15 week program, students will work closely with their teachers and engineer mentors. 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 is the purpose of the program?**

Engineering SMArT Michigan provides students with experiences intended to engage their interest in STEM related careers in an effort to encourage more students to enter engineering and technical professions. Specifically, students will learn about energy, apply their knowledge to an engineering design project and be able to:

- Explain energy and how it can be used efficiently
- Utilize the Engineering Design Process
- Apply alternative energy findings to a design model
- Work collaboratively in a team setting
- Present findings to a larger audience
- 

### **Interested in becoming a mentor?**

Contact Elana Shelef at 248-353-0735, ext. 119 or [eshelef@esd.org](mailto:eshelef@esd.org).

-30-



## IEEE Embedded System Workshop:

**PROJECT MANAGEMENT WORKSHOP**SATURDAY, OCTOBER 10<sup>TH</sup> (8:30am – 2pm)

College of Engineering EDC Auditorium – Room 1507

<http://maps.wayne.edu/view/#engineering>**Dr. Tarek Lahdhiri: PhD, PE, PMP, BB-DFSS, SEM-IEEE**

The Project Management workshop is intended for engineers, technical leads, project leaders, and functional managers who want to practice the fundamentals of project management to help themselves and their groups accomplish their endeavors, whether at work, at home, or in the community. Participants will learn basic project management techniques, and most importantly, how to apply them in real life without excessive paperwork or overhead! The workshop will include templates and checklists to take away, and examples of how to apply project management techniques to engineering, and personal projects.

**RSVP Required to attend**CLICK ON LINK TO RSVP: [HTTP://WSU-IEEE-PM-WORKSHOP.EVENTBRITE.COM](http://WSU-IEEE-PM-WORKSHOP.EVENTBRITE.COM)**WORKSHOP AGENDA****8:30 – 9:00 am****Breakfast & Coffee Bar****9:00 a.m. – 11:30 am****Introduction****Starting and Planning a Project****Managing the Project****11:30 am – 12:00 pm****Lunch Break****12:00 – 1:00 pm****Running Meetings****Closing the Project****1:00 pm – 2:00 pm****Networking & Employment Opportunities****DR. LAHDHIRI:**

- MS-EE in Communication Systems
- PhD in Control Systems
- Currently working for General Motors LLC in Warren, Michigan, where he is the Strategy Leader for Real-Time Control Systems Simulations within the Global Electrical Department
- Licensed Professional Engineer (PE)
- Licensed Project Management Professional (PMP) by the Project Management Institute (PMI)
- Master Black Belt DFSS certified by General Motors LLC
- Senior IEEE member and has been leading several activities within the IEEE organization.
- IEEE Region 4 (Central USA) PACE Chair
- Member of the IEEE-USA PACE committee
- Member of the IEEE-USA Career Workforce Policy committee (CWPC)
- Member of the IEEE-USA Employment & Career Service (ECS) Committee
- Recipient of the IEEE-USA Professional Achievement Award, IEEE-USA Professional Leadership Award, and the IEEE-USA Citation of Honor Award, and the 2012 IEEE Region 4 Jack Sherman Award.

## Consultants Workshop:

# The 2<sup>nd</sup> Annual Consultant Workshop

## IEEE Southeastern Michigan Consultants' Affinity Group: The Consultant Workshop

**Date:**  
**03 October 2015**

\$20 IEEE Members; \$25 Non-Members

**Time:**  
**8:30 AM to 4:00 PM**

**Location:**  
**Lawrence  
Technological  
University  
Southfield, MI 48126  
Room: UTLC T429**

### Space is limited

To reserve your seat,  
please register at

<https://meetings.vtools.ieee.org/m/34035>

### Agenda

8:30	–	9:00	Check In, Coffee & Muffins
9:00	–	9:10	Welcome Remarks
9:10	–	12:00	Morning Presentations
12:00	–	1:10	Lunch (not included) and Networking
1:10	–	3:00	Afternoon Presentations
3:00	–	4:00	Panel Discussion

### Speakers / Presentation Titles

Bob Krause, IEEE-USA Alliance of IEEE Consultants' Networks Coordinating Committee

"How to Stimulate and Hone your Networking Skills"

Larry Nelson, IEEE-USA Alliance of IEEE Consultants' Networks Coordinating Committee

Gary Blank, IEEE-USA Past President

"How to Find Clients Using Networking and the Internet"

William R. Kassebaum P.E., IEEE-USA Alliance of IEEE Consultants' Networks Coordinating Committee

"Start-up Tactics"

## IEEE Embedded System Workshop:



Region 4



IBM



# IEEE Embedded System Workshop

October 24, 2015, 8:30 a.m. to 5 p.m. (Saturday)

Dodge Hall – Room 201  
Oakland University  
Rochester, Michigan 48309

IEEE Region4, South East Michigan Computer Chapter, GLSPIN and Oakland University are offering a one-day (**free**) workshop on Embedded Systems on October 24, Saturday 2015. This is a **free** workshop open to all engineers, students and this is the eleventh year of this annual workshop.

The aim of this workshop is to disseminate knowledge, benefit the IEEE members and indirectly **improve the technology and Michigan economy**. Speakers and experts from the embedded systems industry will be making presentations, and will also be available for discussions and networking throughout the day (see page two for a tentative agenda). Please be sure to publicize this event in your organization for maximum participation in this workshop. In addition to presentations, there will be vendor display tables and recruitment tables. Use this opportunity to do networking with other engineers.

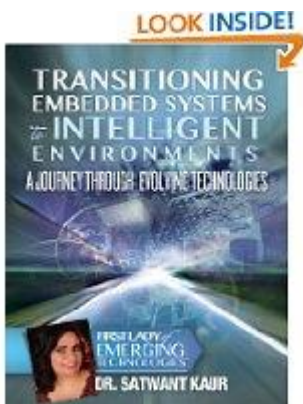
Please confirm your participation with Prof. Ganesan by **registering on the web:**

<http://meetings.vtools.ieee.org/m/35694> When responding, please indicate **your lunch preference: turkey, chicken or cheese sandwich**. For Technical questions, contact: **Prof. Subra Ganesan** at: [ganesan@oakland.edu](mailto:ganesan@oakland.edu) or by phone: 248 370 2206.

Register and attend for a chance to win multiple door prizes (Books/ Boards/T-shirts/Tablet)

**Dr. Satwant Kaur, First Lady Of Emerging Technologies, will sign/autograph her June 2013 book “Transitioning Embedded systems to Intelligent Environments” and sell at 60% discount \$20/- \$8. She will also raffle 6 copies of her books after her talk.**

Certificate of Attendance will be available for participants who do preregistration and attend the full event. The Workshop event may be live broadcasted by **WebEx** (audio and power point) to other IEEE sections and Computer Chapters. It is not for individuals, but for IEEE groups.





*IEEE Embedded System Workshop (Continued)*

October 24, 2015, 8:30 a.m. to 5 p.m. (Saturday)

Sponsors: IEEE SEM CS and Oakland University

Co-Sponsors



IBM



**Free one-day workshop. Register on the web: <http://meetings.vtools.ieee.org/m/28753>**

2015 Agenda Tentative

1. Registration and Coffee 8:30- 8:50 AM
2. Welcome by Dr. Subra Ganesan, IEEE SEM CS chapter Chair, 8:55 AM
3. Inauguration by Dr. Louay Chamra, Oakland Univ., Dean SECS, Dr.Dan Aloï, Chair ECE, 9:00: 9:10 AM
4. Keynote speech "Challenges in Embedded Systems" by First Lady of Emerging Technologies "  
Dr. Satwant Kaur, 9:10 – 9:50 AM
5. "Writing Portable & Robust Firmware for Embedded Systems" Jacob Beningo, Beningo Engineering 9:50 to 10:30 pm  
**Break (Coffee) 10:30 to 10:55 a.m.**
6. "Automotive Technical Trends: Security, CAN FD, Ethernet" Dave Robins, Intrepidcs 10:55 to 11:25 am
7. "Embedded system Application Innovation " Ron Felice, IBM 11:25 to 12:10 PM  
**\*\*Drawing for Door Prizes, \*\***  
**Complimentary Boxed Lunch from all sponsors. Networking Session 12:10 to 12:45 p.m.**  
**Vendors' informal Job- career opening information**
8. "Embedded Systems development-" David Merrill, Polarion, CA 12:45 – 1:30 pm
9. "Real time analysis and Modeling Engine Control" Tobias Gutjahr, ETAS (?) 1:30 to 2: 15 pm.  
**Break (Coffee) 2:15 to 2:30 p.m.**
10. "AUTOSAR and Functional Safety: Overview" Salvador Almanza-Garcia, Vector CANTech 2:30 to 3: 10 pm
11. Will Tu, "Multi-Core ARM processors in Embedded systems" 3:10 to 4:00 pm  
**Break 4:00 to 4:10 p.m.**  
**\*\*Drawing for Door Prizes,**
12. Closing Remarks and Vote of Thanks:

**OPEN to All.** Direction to Oakland University: Take I 75 North, Take Exit 79 East. You will find the university within a mile. Parking is Free. Look for Dodge Hall Room 201. **Industry sponsors (tentative) Intrepidcs, Vector CANTech., ETAS, Polarion, IBM...** Vendors Tables with Demos, pamphlets, Job recruiting will be available. FREE Event. Free Lunch. Door prizes. All welcome. **Pre-registration is a must. Do post** this flyer in your office and inform your friends about this workshop. It is a great way to network with other professionals. **We need your help to make this event a success. Register on the web: <http://meetings.vtools.ieee.org/m/35694>**

## Fall Section Conference:

**Autonomous Vehicles, Their Legacy and Future**

**Date:** November 17, 2015

**Location:**

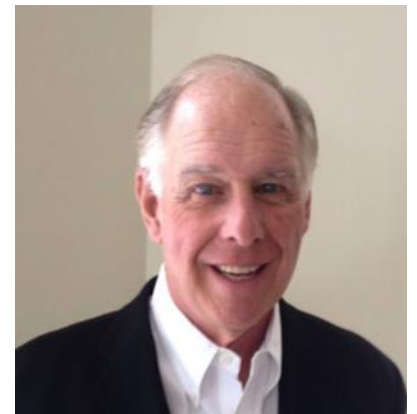
U of M Dearborn – Fairlane Conference Center  
(North Building)

**Keynote Speaker:**

Bob Neff – SEM Section Chair

**Topic:**

“Autonomous Vehicles, Their Legacy and Future”



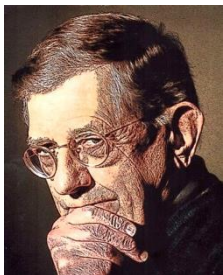
What will our life be like with autonomous vehicles?

Will it be the anticipated utopia or will there are new concerns that have to be considered?

Autonomous vehicles are not a new idea. In 1925, the Houdina Radio Control Company demonstrated a driverless radio controlled called the "Linrrican Wonder" at New York City. The General Motors Futurama Exhibit at the 1939 World's Fair depicted radio-controlled electric cars that were propelled with electromagnetic fields embedded in the roadway. Interest and research has continued thorough out the years up to the present time. Only since the 1990s has the development focus shifted to autonomous vehicles that have to operate in the current traffic patterns.

The presentation provides a brief history of Automated Vehicles and Highways and highlights the National Automated Highway Demonstration in 1997. Many automated features have evolved since the demonstration driven by many forces as shown in this presentation. The presentation will discuss the challenges facing the usage of these features including adoption and education, and show how vehicle to vehicle communication can facilitate the future of autonomous vehicles. Finally, the presentation will offer a vision of what life will be like with autonomous vehicles. The registration website is [https://meetings.vtools.ieee.org/meeting\\_registration/register/34367](https://meetings.vtools.ieee.org/meeting_registration/register/34367)

### IEEESEM Fall Conference



The **Fall Conference Chair is Basil Sherlund who** has 40 years of experience in Computer Design and Information Technology. As a professional he received a BS in Electrical Engineering, with honors, and a MS in Computer Science. He is a life member of Eta Kappa Nu, the electrical engineering honor society.

Basil is a former member of the executive board of the IEEE Software Engineering Standards Committee, the Technical Committee on Software Engineering and has held two offices and three chapter positions in IEEE Region 4 and SEM; he is also a member of the Region 4 Educational Activities Committee. The conference committee, in support of Basil and the 2015 Fall Section Conference, also need volunteers to help this event achieve its full potential as an educational and networking opportunity for all our section members. Anyone who wishes to help out with the planning and preparation for the conference is encouraged to contact Basil and discuss positions on the planning Gantt Chart that he will be filling in the next few weeks.

If your interest is to be of help at the actual event, you are encouraged to contact Basil ([bsherlund@ieee.org](mailto:bsherlund@ieee.org)) and let him know that you wish to assist on the day of the conference. **-30-**



**IEEE SMART TECH**  
**METRO AREA WORKSHOP SERIES**  
 Professional workshops in a learning environment

**IEEE** Advancing Technology for Humanity

**IEEE** Central Indiana Section  
 EnCON Presents - IEEE Metro Area Workshop

**November 13 - 14, 2015**  
**8:00 am - 5:00 pm**  
**Indianapolis Marriot North**  
 (Keystone/Fashion Mall area)  
 3645 River Crossing Parkway  
 Indianapolis, IN 46240

**Register Now to Secure Your Spot!**

**For Conference Information & Registration, Please Visit:**  
<http://cis-ieee.org/EnCON>

**Conference Contact Info:**  
**Phil Walter -**  
[Phil.Walter@ieee.org](mailto:Phil.Walter@ieee.org)  
 Phone# 812-223-6520  
**David Koehler -**  
[david.koehler@ieee.org](mailto:david.koehler@ieee.org)

**Industry Exhibitor Sponsorship Opportunities, Contact:**  
**Phil Walter -**  
[Phil.Walter@ieee.org](mailto:Phil.Walter@ieee.org)  
 Phone# 812-223-6520 OR  
 Earl Hill - [eshill.loma@gmail.com](mailto:eshill.loma@gmail.com)

**Technical Program**

- Power Engineering
- Electric/Hybrid Vehicle
- Computer and Network
- Cyber Security/ Cyber Crime
- Biotechnology
- Medical
- Life Science

**Professional Development**

- Career Assistance
- Effective Job Search
- Intellectual Properties
- Project Management

**Student Poster Contest**

- Evening Closing Remarks and
- Student Poster Contest awards ending at 6:00 pm

**Tech Industry Exhibitors**

- In the Lobby all day both days
- Industry exhibits and sponsorships are available

**Latest Trends in Emerging Topics for Practicing Engineers, Students & Retired Engineers**

- Friday Night Reception from 5:00 to 7:00 pm
- \* Registration for both days includes Friday Reception
- Plenary Speakers
- Networking Breakfast, Breaks and Lunch

**Professional Development Hours: PDH & Continuing Education Units: CEUs Will be Available**

IEEE Smart Tech Metro Area Workshops provide participants with a unique learning experience with topics on the cutting-edge of technical innovation today. This unique two-day conference is not only geared towards practicing engineers, but also students and retired engineers. This is an excellent opportunity for networking, knowledge sharing and professional development.

The material will be presented by some of the industry leaders. Whether you are just starting a career or have been practicing for many years, Saturday's program will give the attendees the skills necessary to find a job or help keep them competitive in today's ever changing business world.

Please join us to enhance your current knowledge and skill set and further your career.

## 2015 IEEE Canada EPIC:

**Smarter Resilient Power Systems**

# Join us at EPEC 2015

## IEEE Canada Electrical Power and Energy Conference

<http://epec2015.ieee.ca>

October 26-28, 2015, London, Ontario, Canada

The annual IEEE Canada Electrical Power and Energy Conference (EPEC 2015) will take place in London, Ontario, Canada from October 26 to 28, 2015. London is located in the heart of Southwestern Ontario, midway between Toronto and Detroit.

EPEC 2015 is an excellent opportunity for electric power and energy systems experts from industry, academia and government research to discuss the latest developments in the field: academic and industrial research, industrial/business trends and challenges. This may include debate on the potential impact of these developments including discussions on regulatory and policy aspects.

### Topics: The conference will cover topics under the theme of "Smarter Resilient Power Systems."

- Asset Management /Sustainment
- Communications Aspects of Smart Grids
- Computational Methods
- Electrification of Transportation and its Impact
- Energy Conservation and Efficiency
- Energy Conversion
- Energy Storage, Transformers
- Future Urban Energy Systems
- Grid Security
- HVDC and FACTS, Power Flow Control
- Integrated Energy System Planning
- Microgrids
- Power Electronics
- Power System Economics
- Related IEEE Standards
- Renewable Energy: Generation and Integration
- Resiliency of Electrical Power Systems
- Smart/Integrated Grids and Metering
- Smart Protection
- Wind and Solar Energy Systems

### Program: Paper presentations, Keynotes, Industry panels, Tutorials, Exhibits, Tours

For up-to-the-minute information please consult the website.

**Platinum Patrons**

London Hydro  
Partners in Power/Conservation

**Silver Patrons**

Ontario Society of Electrical Engineers  
Western Engineering

**Sponsored by**

IEEE Canada  
IEEE Canada Central Area Sections

**Technical Co-sponsors**

50th Anniversary of IEEE Canada

### Exhibition:

Showcase your products and services to Canadian and international audiences.

For more details please go to:

<http://epec2015.ieee.ca/exhibitors/>



### For more information please contact:

**Dr. Maïke Luiken,**  
Conference Chair  
Director, BTAC | Lambton College  
Email: [maike.luiken@ieee.org](mailto:maike.luiken@ieee.org)

**Dr. Gerry Moschopoulos,**  
Technical Program Committee Chair  
Professor, Western University  
Email: [gmoschap@uwo.ca](mailto:gmoschap@uwo.ca)

**Honorary Chair**  
**Carmine Marcello**  
President & CEO, Hydro One Inc.

**General Conference Chair**  
**Maïke Luiken**  
BTAC | Lambton College

**Steering Committee Chair**  
**Om Malik**  
University of Calgary

**Technical Committee**  
**Gerry Moschopoulos, Chair**  
Western University  
**Bala Venkatesh Co-Chair**  
Ryerson University

**Industry Program Committee Chair**  
**Kee Walsh**  
London Hydro

**Workshops/Tutorials Chair**  
**Mehrdad Rostami**  
Worley Parsons Company

**Publications Committee Chair**  
**Sean Dunne**  
Canadian Instrumentation Services Group

**Awards Chair**  
**Alireza Saleem**  
Osram SYLVANIA

**Treasurer**  
**John Harris**  
J.Harris Consulting

**Publicity Chair**  
**Luke Seewald**  
London Hydro

**Exhibition Chair**  
**Murray MacDonald**  
Murray MacDonald Consulting

**Patrons Chair**  
**Maïke Luiken**  
BTAC | Lambton College

**Local Arrangements**  
**Ashfaq Kish Hasein**  
Dillon Consulting  
**Allan Van Damme**  
London Hydro

**Web Site Committee Chair**  
**Dennis Michaelson**  
Western University

**Registration Chair and Administration**  
**Cathie Lowell**  
CL Consulting

**IEEE Canada President**  
**Amir Aghdam**  
Concordia University

**General Inquiries:**  
Email: [info@epec2015.ieee.ca](mailto:info@epec2015.ieee.ca)  
Web: <http://epec2015.ieee.ca>  
Twitter: @EPEC2015



**EPEC 2015 Industry Tours:****2015 IEEE CANADA ELECTRICAL POWER AND ENERGY CONFERENCE  
TOURS ARE FUN FOR EVERYONE**

The EPEC 2015 conference organizers have lined up two industry tours to showcase innovative technologies that have been deployed in Southern Ontario

[Click Here To See The Details Of The Tours](#)

The first tour highlights various "Renewable Energy" technologies and provides participants with the opportunity to visit the following three sites:

- a 40 MW wind farm consisting of 18 wind turbines
- an 80 MW solar farm (one of the largest in Canada)
- a Landfill-To-Energy generation site that uses landfill methane to produce clean energy.

The second tour enlightens the participants on the topics of "Hydro Power & Energy/Environmental Research" through visits to the following two sites:

- the Fanshawe Hydro Electric Dam
- the WinDEEE Dome which is the world's first hexagonal wind tunnel capable of highly complex simulations.

For tour details and registration information please visit the following website:

<http://epec2015.ieee.ca/tours/>

Please note that space is very limited, so be sure to sign up now to reserve your space!

Registration is through the EDAS system <http://edas.info/r18753> (note also that new users will need to create an account on the EDAS system).

**For more information on EPEC 2015 activities, please visit our  
website <http://epec2015.ieee.ca>.**



### 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 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) and  
[h.s.hill@ieee.org](mailto:h.s.hill@ieee.org)

An announcement may be placed in the newsletter.

\*\*\*\*\*

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/aaa/aaa-chapters/find-an-aaa-chapter>

#### Robots

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

#### Science Fiction Conventions

ConClave October 9-11, 2015,  
Dearborn, MI

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

#### Mad Science

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

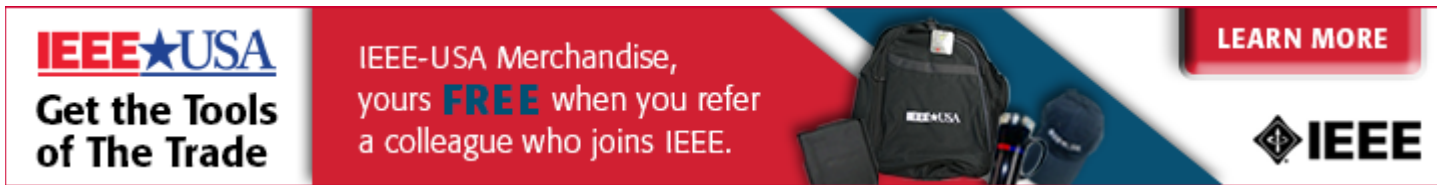
#### ESD PE Review Class

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

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Links:

## Refer a Colleague:



**IEEE★USA**  
**Get the Tools of The Trade**

IEEE-USA Merchandise, yours **FREE** when you refer a colleague who joins IEEE.

**LEARN MORE**

**IEEE**

**Refer a Colleague, Get Great Merchandise**

In conjunction with IEEE-USA, we are pleased to continue this special offer for US members.

[Refer a colleague to join IEEE](#). They'll get a US\$25 discount off their first year membership, and you'll get a gift. But this discount expires on 28 February - submit your referrals now!

IEEE-USA gift items you can choose from include:

- Cooler backpack
- Computer backpack
- Portable battery charger
- Tablet case
- Portable speaker
- Parker pen and mechanical pencil set
- Parker ballpoint pen
- Travel coffee mug and tumbler set
- Golf balls
- Baseball hat
- Golf umbrella
- Travel umbrella

You will also be eligible to receive incentives through the IEEE Member-Get-a-Member (MGM) program.

How it works:

- Refer your colleague via the [online form](#).
- Your referral will receive an e-mail inviting them to join at a US\$25 discount off their first-year membership dues.
- This discount expires on 28 February.
- Your referral will provide your IEEE member number as they join.
- Within 1-3 weeks after your referral joins, you will receive an e-mail confirming your recruiting success, including a link to select your IEEE-USA merchandise item.
- You will receive a separate e-mail for each new member you recruit.

Please help spread the word and share your IEEE experience - no one knows how beneficial IEEE Membership is for technical and career development better than you, the member. [Refer your friends and colleagues today!](#)

Sincerely,

Elyn Perez

*IEEE Member & Geographic Activities*

Important to know: There is no limit to the number of merchandise items you can earn; as long as your referrals join as professional members. Student members and Society Affiliates are not eligible for this promotion. You also remain eligible for the [MGM incentive awards](#) given out once per year in September.

IEEE • 445 Hoes Lane, Piscataway, NJ 08854 USA

## Executive Committee

The SEM Executive Committee is the primary coordination unit for Southeastern Michigan (SEM) IEEE operations. The basic organization chart below shows the 2015 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.

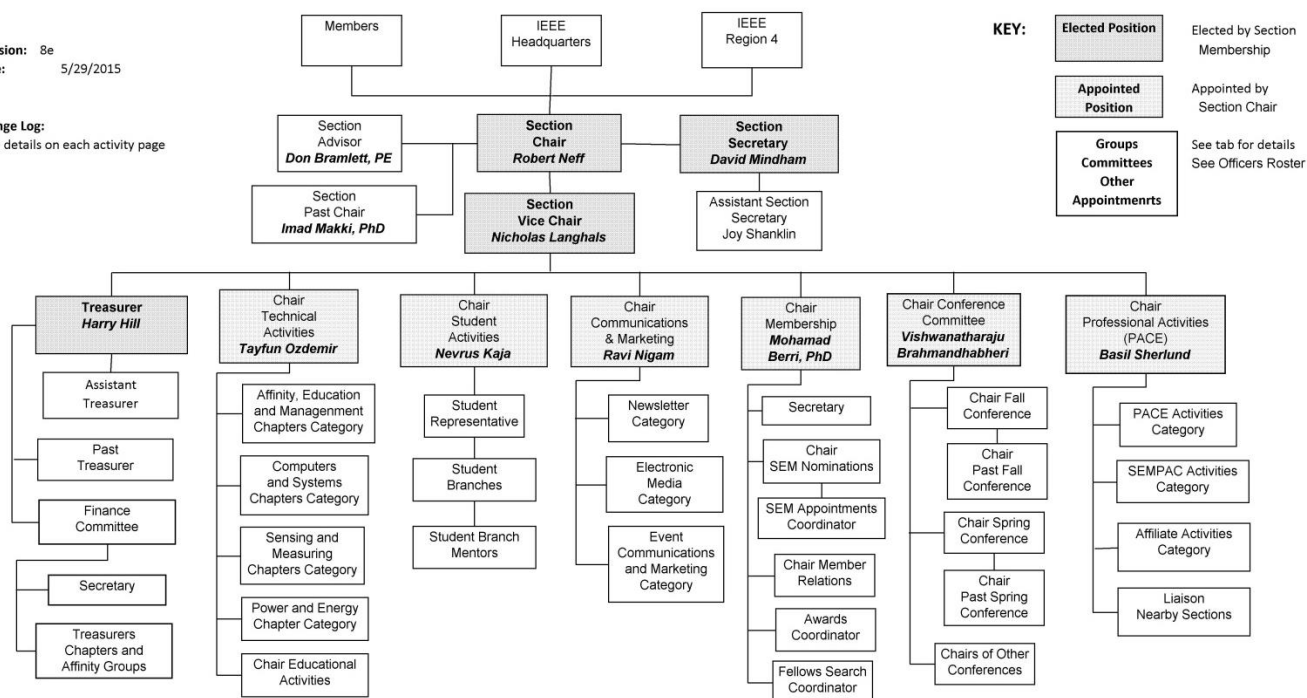
Automatic e-mail notification of web updates may be received using the “**Email Notifications**” button at the top of the **SEM Tools/Links** side banner.

**David Mindham** - SEM Secretary

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

Revision: 8e  
Date: 5/29/2015

Change Log:  
See details on each activity page



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, followed by, click on “Current Officers”

## 2015 Election & Terms

2015 will be a 'transition' year for Section Executive Committee officers.

Please see the chart below:

IEEE SEM Officer Term					
Governance Level	Chair	Vice-Chair	Secretary	Treasurer	Note:
Section Executive Committee	2	2	1	1	
Chapter	1	1	1	1	
Affinity group	1	1	1	1	
Student Branch	1	1	1	1	
HLN Branch	1	1	1	1	
Standing Committee (Appointed)	2	2	2	n/a	
<b>Note:</b> SEM ExCom Officer Term Transition Plan:					
2016: Chair & V-Chair serve 2 year terms:					
2017: Secretary & Treasurer serve 2 year terms:					
2018 forward: Even years elect Chair & V-Chair,					
2018 forward: Odd years elect Sec. & Treas.					
<b>Term Limits:</b> MGA guidelines suggest that all elected officers					
serve a maximum of 6 years without a 'break' in					
their service in any one position.					
<b><i>"All officers shall not serve in any one position,</i></b>					
<b><i>in any single organizational unit,</i></b>					
<b><i>more than six years in total."</i></b>					

Note that 'staggering' the terms of officers is done to provide an 'overlap' period so that newly elected officers will serve with continuing officers that will have a "corporate memory" and help the newly elected 'climb the learning curve'.

It should be understood that this revision to officer terms currently applies to the SEM Executive Committee only. All other Geo-units remain with their current 1 year officer terms.

However, if SEM Geo-units believe staggering terms would be advantageous to their operation as well, discussion among your officers and members should be considered and a proposal or motion may be brought before the SEM Executive Committee at a regular meeting for discussion and potential action.

**Section 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.):**

- November 5, 2015
- December 2, 2015

**F2F Meeting Schedule:**

- **October 7, 2015**
- January 7, 2016

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

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)

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### Editors Corner

Previous editions in this series 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, Chaitanya Setti at: [chaitanyagini@ieee.org](mailto:chaitanyagini@ieee.org).

The newsletter does not have a staff of reporters to 'investigate' what is going on in the section and write up informative articles.

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.

### Co-Editors:

Harry Hill and I co-edit the monthly Wavelengths newsletter. However, 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.

If you feel you might join the team, or would like to train with us, please let us know.

[h.s.hill@ieee.org](mailto:h.s.hill@ieee.org)

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

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### 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	



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## 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>

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## Section Officers

**Section Chair**  
Robert Neff

**Section Secretary**  
David Mindham

**Section Vice-Chair**  
Nicholas Langhals

**Section Treasurer**  
Harry Hill

### Standing Committees:

**Section Adviser**  
Don Bramlett

**Chair Communications & Marketing**  
Ravi Nigam

**Chair Conferences**  
Raju Brahmandhabheri

**Chair Educational Activities**  
Chaomin Luo

**Chair Finance**  
Basil Sherlund

**Chair Membership**  
Mohamad Berri

**Chair Nominations**  
Kimball Williams

**Chair Professional Activities**  
Basil Sherlund

**Chair Student Activities**  
Nevrus Kaja

**Student Representative**  
Samer Koda

**Chair Technical Activities**  
Ali Eydghi

**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>