



Spring Conference

Volume 59 - Issue 4

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# 2019 **IEEE SEM Spring Conference**

# The Next Big Thing

May 2, 2019





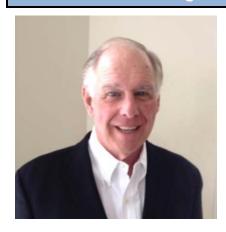
# U of M Dearborn **Fairlane Center North**

19000 Hubbard Dr Dearborn, Michigan



**Register at:** <a href="https://events.vtools.ieee.org/m/191793">https://events.vtools.ieee.org/m/191793</a>

#### **Section Chair's Message**



# Monthly Wavelengths Newsletter:

This first issue of 2019 renews our commitment to publish this newsletter on a monthly basis. We apologize for the missing issues over the last couple of months.

# **Busy Spring:**

There are many activities planned by your Chapters, Affinity Groups and our Section this spring. See the IEEE-SEM web site at <a href="https://r4.ieee.org/sem">https://r4.ieee.org/sem</a>.

Inter-chapter activities and participation is highly encouraged. Often there are technology or general interest overlaps for our members.

Please feel free to invite non-IEEE members. It's a great recruiting opportunity and offers the ability to network with others outside of IEEE

#### **Volunteering:**

Just because it is Spring and Summer is approaching does not diminish the need for volunteers in our Section or in our Chapters and Affinity Groups. Much of the planning for Fall and Winter take place during the summer months.

To volunteer, please contact leaders in the areas of your see roster at interests. https://r4.ieee.org/sem/wpcontent/uploads/sites/6/2019 /03/Organization\_Roster\_2.8 .2019b.pdf , or visit the Volunteer Portal at https://r4.ieee.org/sem/about -sem//volunteer-portal/ we will help you find a position of interest to you.

The benefits of volunteering include, but are not limited to, building your network, growing your social skills, building your leadership skills and mentoring others with your knowledge. I am positive you will find the experience interesting and rewarding.

#### Chair Elect:

David Mindham is our Chair Elect for the Chair's term beginning in 2020. He will be an occasional contributing author in this space in the upcoming months.

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

Welcome to

Robert Neff IEEE SEM Section Chair RLNeff1@gmail.com

#### **Election 2019**

This March we sent an eNotice to all our Section members in advance of our 2019 elections. IEEE MGA requires us to notify all eligible voters <u>6 months</u> before an election is planned, and this announcement was designed to satisfy that requirement.

This year's schedule is planned as follows:

Call for nominations:

September 9 - 30

Completion of Ballots:

October 15

Ballots out for vote:

October 17 - 31.

Compile and reconcile results: November 15

Report results to the ExCom at the December ExCom meeting.

This year we will elect our 2020 set of officers for all Geo-units (Affinity Groups & Technical Chapters).

Those officers will include the Chair / Vice-Chair / Secretary / Treasurer.

Links to most Job Descriptions may be found on the Volunteer Portal at:

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

Links to the Affinity Groups and to the Chapters may be found at: <a href="https://r4.ieee.org/sem/about-sem/sem-chapters/">https://r4.ieee.org/sem/about-sem/sem-chapters/</a>

<u>Note:</u> Student Branches and HKN Chapters elect their officers on their individual schedules independently on their own.

Direct questions to: K.williams@ieee.org Chair: N&A Committee.

#### **Officer Training**

We encourage members who are considering running for an officer position to take advantage of the 'Training Materials' available on the IEEE SEM Website at: <a href="https://r4.ieee.org/sem/about-sem/training/">https://r4.ieee.org/sem/about-sem/training/</a>

# FREE Voice over Power Point Training:

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

These videos will play directly and immediately from Google Chrome browser. They may not work well using Internet Explorer. Turn OFF your pop up blocker if you don't see it load or download. Blank Titles (Links) are in development.

(If you wish to rewind sections and play again, we suggest you download the module to your computer and play it using your systems 'media player'.)

Note: If you are beginning training, we recommend starting with Module # 46: Virtual Training Plan, and follow its recommendations for the training sequence.

Send Questions about these Training Modules to:

Virtual Training Q
A Forum@googlegroups.com

The Q&A Forum – Google Group site – is listed at the bottom of this page.

#### **'Other' Section Info:**

The "About SEM" TAB on the SEM Webpage:

https://r4.ieee.org/sem/about-sem/...contains links to lots of helpful and informative information about the Section, what it contains, and how it is organized and operated. Take a few moments to browse through tome of the links listed below on the "About SEM" page.

- SEM Organizational Chart
- Organization Roster
- Volunteer Portal
- Section Mission
- Email Notifications
- Membership
- Elections
- Officer Duties
- Region 4
- SEM Online Community
- vTools
- Training Material
- SEM Meetings List
- Old IEEE-SEM Website
- Student Activities
- IEEE Member Discounts
- Coming Events & Links
- West Michigan Section
- Windsor ON Section
- Expense ReportingRSS Feed
- Section History
- MGA Operations Manual
- Wavelengths Editor Forms

# Organization Roster:

Below we have extracted the officer titles and current office holder's names from the larger Organization Roster, which is available at:

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

Immediately below we show the current <u>Executive Committee</u> which composes the lead officers for the Section. In the pages to follow, we will detail the rest of the Section's 'Geo-units', (Affinity Groups and Technical Chapters) and then the Student Branches.

(We are still waiting for a formal organization of the Section's HKN (IEEE 'Honors) Chapters before we include them in the official Section Organization Roster.)

Executive Committee:	Officers	
Chair	Robert Neff	
Chair-Elect	David Mindham	
Secretary	Eric George	
Secretary-Elect		1
Asst Secretary		1
V-Ch	Nevrus Kaja	
V-Ch-Elect	Sharan Kalwani	
Treasurer	Michael Folian	
Treasurer-Elect		
Asst Treasurer		
Section Adviser	Don Bramlett	
Past-Ch	Kimball Williams	

Chair and Vice-Chair-'Elect' officers assume their final positions on January 1, 2020.

Secretary and Treasurer "Elect" positions will be elected this year and 'train' during 2020.

Assistant Secretary and assistant Treasurer positions are 'appointed' and currently vacant. (Shown in yellow)

The 'Color Key' below shows how to know when a current office is immediately available for appointment.

Color Key:	
Green - Request Replacement	
Yellow - Vacant	
Red - Missing	

On the following pages, we present the current status of our Affinity Groups, our Technical Chapters, then the overall Section Organization Chart, and finally we detail our Standing Committees.

We hope this presentation of the details of the organizational structure of the Section will help our members find a 'home' in an officer position at one of the levels shown.

**Note**: You must be an IEEE member, in good standing to hold any Section level office.

Vacant, Replacement, or Missing positions are 'open' and waiting for members to volunteer. For more information contact the Committee Chair, or see the Volunteer Portal for the Job Description.

# **Affinity Groups:**

Affinity Groups comprise members with common characteristics or focused interests that span across normal IEEE technical or professional areas.

Our current Affinity Groups and their officers are shown below:

Affinity Groups		
Consultants Network Affinity Group: (CN40035)		
	Sharan Kalwani	
	Ian Hutt	
Secretary		
	Benjamin Doerr	
Past-Ch	Charles Albrecht	
Life Member Affinity Group: (L	IFE)	
Chair	Harpreet Singh	
V-Ch		
Secretary	Ishan Jindal	
Treasurer		
Past-Ch		
Women in Engineering Affinity	Group: (WIE)	
Chair	Tia Twigg	
V-Ch		
Secretary		
Webmaster		
	Chaitali Naik	
Past-Ch	Kimball Williams	
Young Professionals Affinity Group: (YP)		
Chair	Ian Hutt	
V-Ch		
	Chaitali Naik	
	Aparna Addada	
Past-Ch		

Vacant positions are shown as titles without associated names, with the 'name' slot highlighted in yellow.

**Note**: You must be an IEEE member, in good standing and a member of the IEEE level Affinity Group to hold any Affinity Group office.

Links to the local SEM Affinity Groups and Technical Chapters may be found at:

https://r4.ieee.org/sem/about-sem/sem-chapters/

That page also provides links to the primary Affinity or Society organizations that 'sponsors' each of the local entities.









#### **Voice over Power Point Officer Training:**

Many <u>FREE</u> on-line virtual training modules are available through the SEM Website Training page at:

http://r4.ieee.org/sem/about-sem/training/

Download the complete Organization Roster at: https://r4.ieee.org/sem/about-sem/.

# **Technical Chapters**

#### **Chapters 01 - 05**

Below, and on the next few pages, we list the officers of our Technical Chapters:

Vacant positions are shown as titles without associated names, with the 'name' slot highlighted in yellow.

Chapter 01 (SP01) Signal Processing Soc, (CAS04) Circuits and Systems Soc, and (IT12) Information Theory Soc Chair Robert Adams V-Ch(SP Soc) V-Ch(C&S Soc) Kenji Aono V-Ch(IT Soc) Jeffrey Dulzo Secretary Treasurer Past-Ch Jeffrey Dulzo Chapter 02 (VT06) Vehicular Technology Soc Jennifer Dukarski Chair V-Ch Lawrence Baczkowski Secretary Jonathan Brouker Meeting & Facility Organizer Jennifer Dukarski Treasurer Eugene Saltzberg Past-Ch Lawrence Baczkowski Chapter 03 (AES10) Aerospace and Electronic Systems Soc, and (COM19) Communications Soc

Chapter 03 (AES10) Aerospace and Electronic
Systems Soc, and (COM19) Communications Soc

Chalr Patrick Seeling

V-Ch(AE Soc)

V-Ch(Com Soc)
Secretary
Treasurer Jeffrey Dulzo
Past-Ch Malcolm Lunn

Chapter 04 (AP03) AP03 Antennas and Propagation Soc, (ED15) Electron Devices Soc, (MTT17) Microwave Theory and Techniques Soc, Photonics Soc (PHO36)

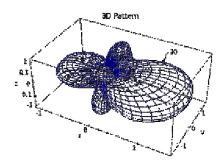
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Past-Ch	Kimball Williams
Chapter 05 (C16) Computer Soc	
Chair	Subramanian Ganesan
Secretary	Sharan Kalwani
Treasurer	Ashok Prajapati
Co-Treasurer	S Ramesh
V-Ch Admin & Member Devel	Nizar Alholou
V-Ch: Technical Activities	Sharan Kalwani
V-Ch: Software Activities	Ashok Prajapati
Automotive relations Liaison	S Ramesh
Tech activities Co-ordinator:	Jesus Salvador
	Almanza Garcia
Student & Education Liaison	Carla Gerst
Industrial Liaison	S Ramesh
Webmaster	Sharan Kalwani
Past-Ch	Subramanian Ganesan

**Note**: You must be an IEEE member, in good standing and a member of the Technical Society sponsoring the local Chapter, or at least one Society if the Chapter is a 'joint' Chapter, in order to hold any Technical Chapter office.

Where multiple Societies support the same local Chapter, individual Vice-Chairs maintain contact with each supporting Society to relieve the Chapter Chair of that responsibility.

Also see Chapters 3, 4, 7, 9& 16.







#### Voice over Power Point Training:

Many on-line virtual training modules are available through the SEM Website <u>Training page</u> at: <a href="http://r4.ieee.org/sem/about-sem/training/">http://r4.ieee.org/sem/about-sem/training/</a>

Chair Rebecca Peterson

Secretary Behzad Yektakhah Treasurer Xiuzhang Cai

V-Ch-Tech (AP Soc) Anthony Grbic
V-Ch-Tech (ED Soc) Fan-hsuan Meng
V-Ch-Tech (MTT Soc) Najme Ebrahimiseraji
V-Ch-Tech (Photonics Soc) Somin Eunice Lee

# **Chapters 06 - 12**

Below we list the second group of our Technical Chapters:

Sersing Soc  Chair V-Ch Adib Nashashibi  Secretary Mostafa Zaky Treasurer Past-Ch Adib Nashashibi  Chapter 07 (PE31) Power Engineering Soc, (IA34) Industrial Applications Soc  Chair V-ChTech Activity V-ChTech Activity V-Ch(Pwr Eng) V-Ch(Ind App) Binaya Joshi Secretary Treasurer Past-Ch Chapter 08 EMC (EMC27) Electromagnetic Compatibility Soc  Chair V-ChTech Activity V-ChTech Activity V-ChTech Activity Akio Fujimaki V-ChTech Activity V-ChTech Activity V-ChTech Activity Akio Fujimaki V-ChTech Activity V-ChTech Activity V-ChTech Activity Akio Fujimaki V-ChTech Activity V-ChTech Activity Secretary Treasurer Past-Ch Dennis Barberi  Chapter 09 (IE13) Industrial Electronics Soc, (PEL35) Power Electronics Soc Chair V-Ch(Pwr Elect) Secretary Treasurer Past-Ch Chapter 10 (TEM14) Technology and Engineering Management Soc Chair Treasurer Past-Ch Past-Ch Chapter 11 (EMB18) Engineering in Medicine and Biology Soc Chair Eric George V-Ch Maurice Snyder Past-Ch Past-Ch Maurice Snyder	Chapter 06 (GRS29) Geosciences and Remote	
Chair V-Ch Adib Nashashibi  Secretary Michael Benson Past-Ch Adib Nashashibi  Chapter 07 (PE31) Power Engineering Soc, (IA 34) Industrial Applications Soc  Chair V-ChTech Activity V-ChTech Activity V-Ch(Ind App) Binaya Joshi Secretary Michael Benson Past-Ch Adib Nashashibi  Chapter 07 (PE31) Power Engineering Soc, (IA 34) Industrial Applications Soc  Chair V-ChTech Activity V-Ch(Ind App) Binaya Joshi Koustubh Banerjee Chris Nelson Past-Ch Ian Hutt  Chapter 08 EMC (EMC27) Electromagnetic Compatibility Soc  Chair V-ChProf Activity V-ChProf Activity V-ChTech Activity V-Ch-Awards V-Ch-Awards V-Ch-Awards V-Ch-Com Scott Lytle V-ChMarketing Steve Tomba Secretary Treasurer Past-Ch Chapter 09 (IE13) Industrial Electronics Soc, (PEL35) Power Electronics Soc Chair V-Ch(IndElect) V-Ch(Pwr Elect) Secretary Treasurer Past-Ch Chapter 10 (TEM14) Technology and Engineering Management Soc Chair Chapter 11 (EMB18) Engineering in Medicine and Siology Soc Chair Chapter 11 (EMB18) Engineering in Medicine and Siology Soc Chair Treasurer Past-Ch Maurice Snyder Past-Ch Maurice Snyder Chapter 12 (CS23) Control Systems Soc Chair Maurice Snyder		
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V-Ch-Tech Activity   Candace Suriano     V-Ch-A wards   James Woodyard     V-Ch-Com   Scott Lytle     V-ChMarketing   Steve Tomba     Secretary   Steve Tomba     Treasurer   Matthew Feusse     Past-Ch   Dennis Barberi     Chapter 09 (IE13) Industrial Electronics Soc,     (PEL35) Power Electronics Soc     Chair   V-Ch(IndElect)     V-Ch(Pwr Elect)     Secretary     Treasurer     Past-Ch     Chapter 10 (TEM14) Technology and Engineering     Management Soc     Chair   V-Ch     Mark Robinson     Secretary     Treasurer     Past-Ch     Chapter 11 (EMB18) Engineering in Medicine and     Biology Soc     Chair     V-Ch   Maurice Snyder     Secretary     Van Yan     Treasurer     Past-Ch     Maurice Snyder     Chapter 12 (CS23) Control Systems Soc     Chair     Chapter 12 (CS23) Control Systems Soc     Chapter 14 (CS23) Control Systems Soc     Chapter 15 (CS23) Control Systems Soc     Chapter 16 (CS23) Control Systems Soc     Chapter 17 (CS23) Control Systems Soc     Chapter 18 (CS23) Control Systems Soc     Chapter 19 (C	V-ChProf Activity	Akio Fujimaki
V-Ch-Awards   James Woodyard   V-Ch-Com   Scott Lytle	V-ChTech Activity	Candace Suriano
V-Ch-Com Scott Lytle  V-ChMarketing Steve Tomba  Secretary Steve Tomba  Secretary Matthew Feusse  Past-Ch Chapter 09 (IE13) Industrial Electronics Soc, (PEL35) Power Electronics Soc  Chair  V-Ch(IndElect)  V-Ch(Pwr Elect)  Secretary  Treasurer  Past-Ch Chapter 10 (TEM14) Technology and Engineering Management Soc  Chair  V-Ch Mark Robinson  Secretary  Treasurer  Past-Ch Chapter 11 (EMB18) Engineering in Medicine and Biology Soc  Chair  Secretary  V-Ch Mark Robinson  Raymond Sasinowski  Treasurer  Past-Ch Maurice Snyder  Past-Ch Maurice Snyder  Chapter 12 (CS23) Control Systems Soc  Chair  Chapter Steve Tomba Steve Tomba Sridhar Nalla  Sridhar Nalla  Sridhar Nalla  Sridhar Nalla  Sridhar Nalla  V-Ch Mark Robinson  Raymond Sasinowski  Eric George  V-Ch Maurice Snyder  Past-Ch Maurice Snyder	V-Ch-Awards	James Woodyard
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Chapter 10 (TEM14) Technology and Engineering Management Soc  Chair  V-Ch Mark Robinson  Secretary Treasurer Past-Ch Raymond Sasinowski  Chapter 11 (EMB18) Engineering in Medicine and Biology Soc  Chair V-Ch Maurice Snyder  Yan Yan Treasurer Past-Ch Maurice Snyder  Chapter 12 (CS23) Control Systems Soc  Chair Chair	V-Ch(IndElect) V-Ch(Pwr Elect)	Sridhar Nalla
Management Soc  Chalir David Werden  V-Ch Mark Robinson  Secretary Raymond Sasinowski  Treasurer  Past-Ch Raymond Sasinowski  Chapter 11 (EMB18) Engineering in Medicine and Biology Soc  Chalir Eric George  V-Ch Maurice Snyder  Secretary Yan Yan  Treasurer  Past-Ch Maurice Snyder  Chapter 12 (CS23) Control Systems Soc  Chalir	V-Ch(IndElect) V-Ch(Pwr Elect) Secretary	Sridhar Nalla
V-Ch   Mark Robinson	V-Ch(IndElect) V-Ch(Pwr Elect) Secretary Treasurer Past-Ch	
V-Ch   Mark Robinson	V-Ch(IndElect) V-Ch(Pwr Elect) Secretary Treasurer	
Secretary Raymond Sasinowski Treasurer Past-Ch Chapter 11 (EMB18) Engineering in Medicine and Biology Soc  Chalr V-Ch Maurice Snyder Secretary Treasurer Past-Ch Maurice Snyder  Secretary Van Yan Treasurer Past-Ch Chapter 12 (CS23) Control Systems Soc  Chalr	V-Ch(IndElect) V-Ch(Pwr Elect) Secretary Treasurer Past-Ch Chapter 10 (TEM14) Technology and Engineering Management Soc Chalr	David Werden
Treasurer  Past-Ch Raymond Sasinowski Chapter 11 (EMB18) Engineering in Medicine and Biology Soc  Chalr  V-Ch Maurice Snyder  Secretary Yan Yan  Treasurer  Past-Ch Maurice Snyder  Chapter 12 (CS23) Control Systems Soc  Chalr	V-Ch(IndElect) V-Ch(Pwr Elect) Secretary Treasurer Past-Ch Chapter 10 (TEM14) Technology and Engineering Management Soc Chair V-Ch	David Werden Mark Robinson
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Chair	V-Ch(IndElect) V-Ch(Pwr Elect) Secretary Treasurer Past-Ch Chapter 10 (TEM14) Technology and Engineering Management Soc Chair V-Ch Secretary Treasurer	David Werden Mark Robinson Raymond Sasinowski
V-Ch         Maurice Snyder           Secretary         Yan Yan           Treasurer         Past-Ch         Maurice Snyder           Chapter 12 (CS23) Control Systems Soc         Chalr	V-Ch(IndElect) V-Ch(Pwr Elect) Secretary Treasurer Past-Ch Chapter 10 (TEM14) Technology and Engineering Management Soc Chair V-Ch Secretary Treasurer	David Werden Mark Robinson Raymond Sasinowski
Secretary Yan Yan Treasurer Past-Ch Maurice Snyder Chapter 12 (CS23) Control Systems Soc Chair	V-Ch(IndElect)  V-Ch(Pwr Elect)  Secretary  Treasurer  Past-Ch  Chapter 10 (TEM14) Technology and Engineering  Management Soc  Chalr  V-Ch  Secretary  Treasurer  Past-Ch  Chapter 11 (EMB18) Engineering in Medicine and Biology Soc  Chalr	David Werden Mark Robinson Raymond Sasinowski Raymond Sasinowski
Treasurer Past-Ch Maurice Snyder Chapter 12 (CS23) Control Systems Soc Chair	V-Ch(IndElect)  V-Ch(Pwr Elect)  Secretary  Treasurer  Past-Ch  Chapter 10 (TEM14) Technology and Engineering  Management Soc  Chalr  V-Ch  Secretary  Treasurer  Past-Ch  Chapter 11 (EMB18) Engineering in Medicine and Biology Soc  Chalr	David Werden Mark Robinson Raymond Sasinowski Raymond Sasinowski
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	V-Ch(IndElect)  V-Ch(Pwr Elect)  Secretary  Treasurer  Past-Ch  Chapter 10 (TEM14) Technology and Engineering  Management Soc  Chalr  V-Ch  Secretary  Treasurer  Past-Ch  Chapter 11 (EMB18) Engineering in Medicine and  Biology Soc  Chalr  V-Ch  Secretary  Treasurer  Past-Ch  Chapter 11 (EMB18) Engineering in Medicine and  Biology Soc  Chalr  V-Ch  Chapter 12 (CS23) Control Systems Soc  Chalr  V-Ch	David Werden Mark Robinson Raymond Sasinowski Raymond Sasinowski Eric George Maurice Snyder Yan Yan Maurice Snyder Khalid Rahman
	V-Ch(IndElect)  V-Ch(Pwr Elect)  Secretary Treasurer Past-Ch  Chapter 10 (TEM14) Technology and Engineering Management Soc  Chalr V-Ch Secretary Treasurer Past-Ch  Chapter 11 (EMB18) Engineering in Medicine and Biology Soc  Chalr V-Ch Secretary Treasurer Past-Ch  Chapter 11 (EMB18) Engineering in Medicine and Biology Soc  Chalr V-Ch Secretary Treasurer Past-Ch Chapter 12 (CS23) Control Systems Soc  Chalr Chalr	David Werden Mark Robinson Raymond Sasinowski Raymond Sasinowski Eric George Maurice Snyder Yan Yan Maurice Snyder Khalid Rahman
Past-Ch Rajeev Verma	V-Ch(IndElect)  V-Ch(Pwr Elect)  Secretary  Treasurer  Past-Ch  Chapter 10 (TEM14) Technology and Engineering  Management Soc  Chair  V-Ch  Secretary  Treasurer  Past-Ch  Chapter 11 (EMB18) Engineering in Medicine and  Biology Soc  Chair  V-Ch  Secretary  Treasurer  Past-Ch  Chapter 12 (CS23) Control Systems Soc  Chair  V-Ch  Secretary  Treasurer  Past-Ch  Chapter 12 (CS23) Control Systems Soc	David Werden Mark Robinson Raymond Sasinowski Raymond Sasinowski Eric George Maurice Snyder Yan Yan Maurice Snyder Khalid Rahman

#### **Voice over Power Point Training:**

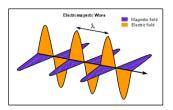
Many on-line virtual training modules are available through the SEM Website <u>Training page</u> at:

http://r4.ieee.org/sem/about-sem/training/

Vacant positions are shown as titles without associated names, with the 'name' slot highlighted in yellow.











Volunteers please contact Rajeev Verma, past Chapter Chair who is leading the current 'Search' for Chapter 12 officers: rajverma@ieee.org

**Note**: You must be an IEEE member, in good standing and a member of the Technical Society sponsoring the local Chapter, or at least one Society if the Chapter is a 'joint' Chapter, in order to hold any Technical Chapter office.

# **Chapters 13 - 17**

Finally, here we list the last group of our Technical Chapters:

Vacant positions are shown as titles without associated names, with the 'name' slot highlighted in yellow.

**Note**: You must be an IEEE member, in good standing and a member of the Technical Society sponsoring the local Chapter, or at least one Society if the Chapter is a 'joint' Chapter, in order to hold any Technical Chapter office.

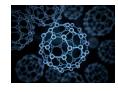
Chapter 13 (E25) Education Soc	
	Sharan Kalwani
V-Ch	
	Nizar Alholou
Treasurer	
Past-Ch	Richard Johnston
hapter 14 (RA24) Robotics And Automation Soc	
Chair Chair	Grant Kruger
V-Ch	Hamid Reza Vejdani
	Noghreiyan
Secretary	Jonathan Berent
	Chan-Jin Chung
Past-Ch	ALI EYDGAHI
chapter 15 (NPS05) Nuclear Plasma Sciences society	
	Nicholas Jordan
V-Ch	
Secretary -	
Treasurer	
Past-Ch	
hapter 16 (CIS11) Computational Intelligence oc, (SMC28) Systems, Man and Cybernetics Soc	
	Jeffrey Dulzo
V-Ch(CI Soc)	
V-Ch(SMC Soc)	
Secretary	
Treasurer	
	Osman Ahmed
hapter 17 (NA NO42) Nanotechnology Council	
	Randy Boone
	Junghoon Yeom
Secretary	
	Amar Basu
D 1 21	Wen Li











#### **FREE - Voice over Power Point Officer Training:**

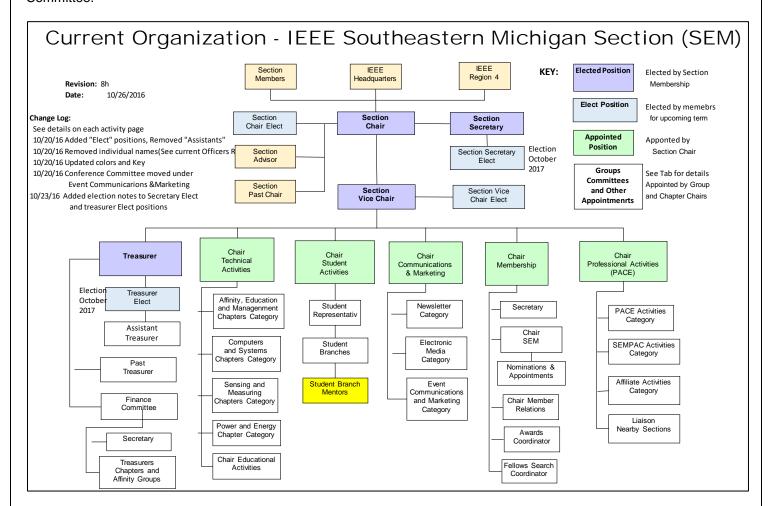
Many on-line virtual training modules are available through the SEM Website <u>Training page</u> at: http://r4.ieee.org/sem/about-sem/training/

# Organization Chart

Below is the overall (Top Level) of the IEEE SEM Organization Chart.

The complete chart, with all the detail subpages, may be downloaded at <a href="https://r4.ieee.org/sem/about-sem/">https://r4.ieee.org/sem/about-sem/</a>

Note the Standing Committee structure is fundamentally the same but, with changes to the Communications & Marketing Committee.



#### **Constant Updates:**

The SEM Organization Chart is an overall 'plan' of organization, not a 'carved in stone' requirement. Any organization as complex and diverse as an IEEE Section, and especially a large Section, such as Southeastern Michigan Section, cannot 'stand still' as conditions and requirements change.

The general plan shown here will be updated soon to reflect recent changes in the composition of its Standing Committees. (See the following pages.)

Note: This is the only 'Elected' Committee. All others

are comprised of appointed positions.

# **Standing Committees**

Below we list the Section Standing Committees and the acronym for each. Each of the Committee name is also a link to the Committee Charter (if one currently is on file.) 'Hover' your curser over each Committee name. and read the 'note' that appears. If it says something about the "Charter not yet available", don't bother downloading it. (It won't be very informative.)

Standing Committees	<u>Acronym</u>
<b>Executive Committee</b>	ExCom
Finance Committee	FinCom
Technical Activities	TACom
<b>Education Committee</b>	EDUCom
Student Activities	SACom
<b>Student Branch Mentors</b>	MentCom
Web Communications	WebCom
Conference Committee	ConCom
News - Print &	NewsCom
Member Development	MDCom
Nominations &	N&Acom
PACE Activity	PACE
Affiliation Activities:	AACom
Nearby Section	NSCom

On the next page we begin a detailed listing of our Standing Committees and the officers and vacant opportunities for appointment.

Note that appointment to a Committee Chair position requires the direct appointment of the Section Chair.

Appointment to a Committee position (other than chair) requires appointment by the Committee Chair.

# **Committee Details – 1 of 3**

Details of the Standing Committees follow in three steps:

Treasurer Activities:	
	Michael Folian
Asst Treasurer	
	Kimball Williams
Finance Committee:	
Finance Committee Chair	
	David Mindham
	Michael Folian
Section Chair	Robert Neff
Section Chair-Elect	David Mindham
Grant Coordinator	
All Geo-Unit Treasurers:	
Technical Activities:	
Chair	Jeffery Mosley
	ANEESH MATHAI
V-Ch	
	Joseph Giachino
Technical Coord	
Info Mgnt Coord	Kimball Williams
Asst. Info Mgnt Coord	
v Tools Coord	
Education Committee:	
	Christopher Guirlanda
	Malcolm Lunn
	Benjamin Sweet
Section STEM Coordinator	
Bacon Library Coord	
CKL Library Coord	Ahmad Habbal
Future Cities Coord	
Library Science Coord	
Science Fair Coord	Don Bramlett
Rofobest Coord	Chan-Jin Chung
Mi. State STEM Liasion	Lin Van Nieuwstadt
Student Activities:	
Chair	Jiann-Cherng Chi
Secretary	
Student Representative *	
Communication Coordinator	Hesham Alghodhaifi
Student Branch Mentors:	
Chair	Don Price
V-Ch	
Secretary	
Mentors (See each Branch)	









Continued on the next page.

# **Committee Details – 2 of 3**

Finally, here we list the last group of our Technical Chapters:

Web Communications Committ	ee:
Chair	
V-Ch	
Secretary	
Webmaster	Scott Lytle
Associate Webmaster	Irina Sullivan
Associate Webmaster	Sharan Kalwani
Social Media Coord	Sharan Kalwani
Collabratec Coord	
ListServ Coord	Christopher Johnson
Additional Committee Staff	
Conference Committee:	
<i>Chair</i>	
V-Ch	
Secretary	David Mindham
Conference Treasurer	
Sponsorships	
Event Publications	Ravi <b>Ni</b> gam
Media Relations	
Additional Committee Staff	
News - Print & Electronic Communications	
Chair	
V-Ch	
Secretary	
e-Wavelengthe Editor	
e-Wavelengths Dvlpt Coord	
e-Wavelengths ListServ Ops	
Newsletter Editor	i e
Newsletter Co-Editor	
Newsletter Assistant	Nilesh Dudhaia
Publications Review	
Additional Committee Staff	







Continued on the next page.

# **Committee Details – 3 of 3**

Finally, here we list the last group of our Standing Committees.

Member Development:	
	Irina Sullivan
Secretary	
V-Ch	Amanda Mohan
Awards Coord	
Fellows - Coord	William Moylan
New Member Relations	
Member Engagement	Charles Albrecht
Member Elevation	
Member Retention	
Student Elevation & Retention	
Nominations & Appointments (	Committee:
	Kimball Williams
Secretary	
Adminstrative V-Ch	
Director Elections	
Director Appointments	Yiming Deng
PACE Activity:	
Chair	Sharan Kalwani
Secretary	
PACE Event Coord	Fernando Maymi
Affiliation Activities:	
Government Relations	David Mindham
Academic Relations	Marcelo Araujo Xavier
Industrial Relations	
ESD Liasion	Kimball Williams
Nearby Section Liaisons:	
N Mi Section Liaison	Ahmed Mohamed
	Abdelgawad
Toledo Section Liaison	Dominic Wilson
Windsor Section Liaison	
West Mi Section Liaison	







## **Volunteer Portal**

#### **Non-Elected Geo-Unit Positions:**

While we elect our basic officers (Chair, Vice-Chair, Secretary, Treasurer), many geo-units utilize the talents and energy of 'appointed' volunteers. For these positions, contact the Chair of the particular geo-unit, and discuss the opportunities. Alternatively, look at the article on the following page about the new Volunteer Portal, which may be a more comfortable.

Note: Chairs of all Geo-units and Standing Committees have full authority to appoint (or remove) appointed volunteers on their staff.

Nominations and Appointments Committee (N&ACom) supports a <u>Google Form</u> designed to identify <u>volunteer opportunities</u> available at all levels of our Section, including:

Executive Committee, Standing Committees, Affinity Groups, Technical Chapters, and Student Branches.

The tasks and volunteer needs within our organization change with time, and it is not unusual for these tasks to require more time and energy than one elected or appointed officer can handle alone. When we find ourselves in that situation, we reach out to our members for assistance.

#### From Officers to Members:

With the help from our officers, the new <u>Volunteer Portal</u> will become a central depository for all our volunteer needs easily accessible to all members. This site will feature links to details for each volunteering opportunity being advertised, including estimated time commitment, a detailed job description, where applicable, and the name of the geo-unit and officer requesting the assistance along with pertinent contact information.

You can view a preliminary version of the Portal at: <a href="http://r4.ieee.org/sem/about-sem/volunteer-portal/">http://r4.ieee.org/sem/about-sem/volunteer-portal/</a>

Currently there are about 20 vacant positions for consideration and we encourage all members to view them and select those that may help them grow in knowledge and experience through volunteering.

The Portal will be a 'one stop shop' for all members interested in volunteering with any of the SEM organizations. And each potential volunteer can select those opportunities that look most interesting to them and contact the particular officer seeking help to discuss the opportunity in more detail.

**Note:** While <u>elected officer positions</u> require membership level above the Student level, as well as, membership within the geo-unit, neither of those restrictions apply to <u>appointed volunteer positions</u>. This means that a volunteer position obtained through the Portal may be a great introduction to operations of a particular geo-unit and its management team.

#### Web Site Access:

The new Volunteer Portal is now accessible and shows a small selection of volunteering opportunities currently available with SEM. We expect that new opportunities will be added as the officers seeking help enter them into the system.

We hope that our members will find Volunteer Portal helpful in becoming actively engaged with the local IEEE organization that interest them and will give them the experience to grow new talents and skills.

IEEE SEM Geo-Unit Officers, Committee Chairs, etc. have been asked to fill in the Volunteer Survey form in order to populate the Volunteer Portal with the positions information about the area where you need volunteer help, or to replace vacant positions in their Administrative Committees.

SEM Officers may find the form at:

https://drive.google.com/open?id=1DAyfMNIzv4W0IhhwlsKKvvIPGNLHexoEi99FFmhnilE

# Electric Aircraft Symposium

# AIAA/IEEE ELECTRIC AIRCRAFT TECHNOLOGIES SYMPOSIUM

#### 22-24 AUGUST 2019 | INDIANAPOLIS, INDIANA

Building upon a successful event in 2018, the 2019 Electric Aircraft Technologies Symposium will look at progress over the past year and continue the discussion about the aerospace industry goals for future aircraft. To accommodate rapid growth in emerging markets and ensure sustainability of air travel, one approach being explored is using nontraditional aircraft propulsion: electric, turboelectric, or hybrid-electric powertrains. AIAA and IEEE crafted this unique symposium to bring the aerospace engineers and the electrical engineers together to discuss these topics and their challenges.

The 2019 symposium will focus on electric aircraft technology across three general areas: electric-power-enabled aircraft configurations and systems requirements, enabling technologies for electric aircraft propulsion, and electric aircraft system integration and controls.





#### TOPIC AREA 1

#### Aircraft Configurations and Systems Requirements

- > System feasibility studies
- Electric-enabled innovative aircraft design and propulsion concepts
- Electrical powertrain performance requirements
- Safety, critical failure modes, certification
- Lifecycle energy, operational cost, and emission analysis

#### TOPIC AREA 2

#### Enabling Technologies and Components

- Machines and drives integration for optimum performance
- Conventional, cryogenic, and superconducting
- Energy storage devices and systems
- Electric machine and gas turbine integration
- New material solutions or applications
- Novel thermal management solutions

#### TOPIC AREA 3

#### System Integration and Controls

- > Electric powertrain architectures
- Fault isolation and reconfigurable systems
- Energy management systems
- Integrated electro-thermal systems
- System modeling tools
- Monitoring and diagnostics
- > Verification and testing

#### Learn More

# propulsionenergy.aiaa.org/EATS

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# ITC2019 Conference



Networking Events



And many more! Visit www.itec-conf.com/exhibition for more information about exhibiting.



#### **Recent Events:**

#### **One-Day: Amateur Radio license class:**

Saturday, January 12, 2019\_was a cold, windy day outside but, perfect weather inside the management building at Lawrence Technological University (LTU) for 23 students to take part in the One-Day License Class, conducted by Dan Romanchik, Amateur Radio Call Sign KB6NU. Room M336 was warm and cozy, with coffee and rolls for breakfast to get the day started

(Special thanks to <u>Ben Sweet</u> for all the arrangements at LTU.)

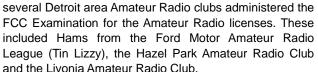


Dan also publishes a free study guide, "No Nonsense Technician Class License Study Guide" which students may download as a PDF version for free from <a href="https://kb6nu.com/study-guides/">https://kb6nu.com/study-guides/</a>.

Students are encouraged to read through the study guide a few times before class, take some online practice test and bring questions to class so that any fuzzy points can be cleared up before taking the test.



Volunteer examiners (VEs) from



At the end of the class, after the exams were concluded, final results were:

18 new Technician Class Licenses! 1 new General Class License! 2 will need to take the exam again. (2 did not take the exam.) Of those who took the exam, 95% passed!

**Note:** Several local Amateur Radio Clubs conduct 8 to 12 week classes for those who need more study time and coaching to get their 'Ham Radio Ticket'. Find them through the American Radio Relay League site at: http://www.arrl.org/find-a-club

Coordination for the class refreshments and lunch were sponsored by the IEEE Southeastern Michigan – Chapter 8 (EMC). With this first successful 'trial run' they plan to work with local university IEEE Student Branches to hold more such class opportunities throughout the year.

For more information, contact Dan Romanchik, KB6NU: 734-930-6564, <a href="mailto:cwgeek@kb6nu.com">cwgeek@kb6nu.com</a>



Dan, who is based in Ann Arbor, Michigan has taught these classes for several years with a better than 85% successful 'pass' rate for the FCC examination.



Recent Events: Future City Judging 2019

By Don C. Bramlett, PE, LSMIEEE, FESD, FMSPE

The annual, national Future City Competition is a STEM pre-university program for 6th, 7th and 8th grade students. The national Future City Competition judging is held at the National Building Museum in Washington DC during National Engineers Week in late February. It is preceded by state/regional competitions, the winners of which compete in the national competition.

Judging for the Michigan Regional Future City Competition was conducted on Tuesday, January 29, 2019. This year there were 22 middle school projects submitted for judging in the competition held at the Suburban Collection Showplace in Novi. The overall competition judging is based on how the student team addressed several project elements. The student team, composed of at least 3 members, is supported by a teacher and an engineer mentor. The "SimCity" computer program is used as a basis for the design of the city. One element for judging is an essay on a defined specific subject to be addressed in the city design; this year the subject was mitigating damage and enabling timely recovery to electric power systems. Another element for judging was a 3-D scale model of a section of the city built with excess materials having a value less than \$100. The final important element for judging is a less than 3 minute oral project presentation on the design merits of the city by three student team members to a group of adult judges.

For the 19th straight year the IEEE Southeastern Michigan (IEEE-SEM) Section has provided a team of volunteer professional award judges to evaluate the student projects and award the Electro-Technology Award to the project that best demonstrates features associated with IEEE related fields of interests. The Section would like to express its appreciation to the IEEE-SEM members who volunteered to be members of the IEEE professional organization judging team. The team of judges included Charles Cohen, Ph.D; Laurence Dishman; Don Bramlett, PE; Kimball Williams and David Morris, Ph.D.

The IEEE-SEM team of judges awarded the Electro-Technology Award for the second year in a row to a team of students from Trinity Lutheran School in Utica. The three student presenters were Joshua Byars and Andrew Miller, both 7th graders, and Ethan Rozek, a 6th grader. The student team was supported by their teacher, Loren Sheppard, and an engineering mentor, Chris Miller, who works for PMP Developers.

The future city is Anacortes in the state of Washington, USA in the year 2160. The city has 4 sources/types of

electrical power, wind (windmills), hydroelectric (water turbines), natural gas (Food Storage Elevator), and solar (Analift). The city has two special characteristics the Analift (a scissor lift mechanism that raises the city 300 feet into the air to protect it from Natural Disasters) and SAM (supercomputer network). The transportation is autonomous vehicles controlled

by SAM.s.



The St. John Lutheran School team from Rochester won the local Michigan Regional Future City Competition and represented Michigan in the national competition. The Trinity Lutheran School took second place in the local competition.



All involved students, parents, teachers, mentors, judges, and staff had great time and look forward to next year.



Recent Events: IEEE-SEM Science Fair Awards

By Don C. Bramlett, PE, LSMIEEE, FMSPE, FESD, IEEE-SEM Section Advisor

The 62nd Annual Science and Engineering Fair of Metropolitan Detroit (SEFMD) was held from March 12 through March 15, 2019 in the Oakland Hall of the Cobo Conference Exhibition Center in downtown Detroit. Judging of student projects was performed on Wednesday, March 13. This year the SEFMD had over 130 schools participate from Wayne, Oakland, Macomb and Washtenaw counties with approximately 1,353 students having projects on display in two Divisions, the Junior Division (6<sup>th</sup> thru 8<sup>th</sup> grade students) and the Senior Division (9<sup>th</sup> thru 12<sup>th</sup> grade students). Exhibits were classified into 23 general categories for judging; including Embedded Systems, Energy: Physical, Robotics, and System Software.

For the 24th straight year the IEEE Southeastern Michigan (IEEE-SEM) Section has provided a team of volunteer judges to evaluate student projects associated with IEEE fields of interest. The Section would like to express its appreciation to the IEEE-SEM Section members who volunteered to be members of the IEEE professional organization awards judging team or serve in other roles this year.

The Section wishes to thank the five (5) IEEE-SEM members, and their companies/institutions, for taking the time to volunteer and help to make the Science Fair a more pleasurable and meaningful experience for the middle school and high school students who participated. The IEEE-SEM judging team was composed of the following four (4) volunteers:

Don C. Bramlett, DTE Electric (DTE Energy) – retired Ralph Mackiewicz, SISCO, Inc. Bill Quinlan, AAM Kimball Williams, DENSO-retired

Other IEEE/SEM Section members served in other capacities at the SEFMD, such as: **Dave Morris**, (General Category Judge), Mitre

The judges had the opportunity to view and evaluate a number of exhibits, especially some interesting projects in areas pertinent to IEEE fields of interest. The judges and the high school students in the Senior Division had the pleasure to interface and discuss in depth some of the principles, scientific techniques, engineering approach, experimental results and applications pertinent to the projects.

The IEEE-SEM Section, based on the evaluations of the panel of judges, awarded three (3) First Place Grand

Awards in the Senior Division, consisting of a personalized certificate and a cash award for each awardee. These awards were presented to:

#### Senior Division:

**Matthew Tan**, senior at Cranbrook Kingswood Upper School in Bloomfield Hills, for his project entitled "Hardware Integrated LiDAR Simulation for Collision Avoidance Algorithms."

**Alexander Wan**, a sophomore at Novi Senior High School in Novi, for his project entitled "Cycle Generative Adversarial Networks for Automatic Cell Segmentation."

Yang Chen, a junior at Cranbrook Kingswood Upper School in Bloomfield Hills, for his project entitled "Active Learning over DNN: Automated Engineering Design Optimization for Fluid."

The panel of judges also determined that the IEEE-SEM Section would provide s number of Outstanding Achievement Awards to other noteworthy projects in the Junior and Senior Divisions. Each Outstanding Achievement Award consisted of a personalized certificate for each awardee. Some of these awardees include:

**Keinan Alaref**, a seventh grade student at Michigan Islamic Academy Middle School in Ann Arbor, for his Project entitled "Increasing the Efficiency of Solar Panels."

**Anirudh Cowlagi**, a junior at Huron High School in Ann Arbor, for his project entitled "Novel IOT-basedMonitoring and Feedback System for Off-Grid PV Modules."

**Sally Kim**, a seventh grade student at Boulan Park Middle School, for her project entitled "Do Our Devices Listen to Us?"

Aditi Sharma, a senior at Detroit Country Day Upper School in Beverly Hills, for her project entitled "InvasiMap: An Invasive Species Tracker Utilizing Gamification NN and CBDC."

For further information on the Science Fair judging, awards and project abstracts go to <a href="https://www.sefmd.org">www.sefmd.org</a>.

The IEEE/SEM Section plans to continue to staff other panels of special awards judges at both the Michigan Regional Future City Competition and the SEFMD in 2020, and in subsequent years. These are just a couple of the pre-university education programs that the IEEE-SEM Section promotes.

## **Recent Events:**

# Raspberry Pi

Our presenter, Jim Baksa, KD8HFX, one of the past presidents of the Motor City Radio Club, attended Henry Ford Community College where he earned his Associate's Degree in Computer Information Systems. Then attended the University of Michigan where he earned a Bachelor's Degree in Education. He has spent the last 28 years working for the YMCA of Metropolitan Detroit as their Director of Information Systems. Jim spends much of his free time working with computers, tinkering with electronics, and enjoying ham radio.

Members of IEEE Southeastern Michigan (EMC-Society) Chapter 8 were treated to Jim's presentation on the evolution and applications available to users of the Raspberry Pi computer and some of its uses. Jim provided a brief introduction to the ease (and low cost) applications of this versatile small computing system the 'Standing Room Only' crowd of IEEE members and fellow Amateur Radio Operators at the KeySight facility in Farmington Hills.



The Raspberry Pi was created in February 2012 – Originally setup to promote and teach basic computer science in schools and universities in the UK, it ran lightweight versions of Linux. The PI Model A was priced at \$35, was small, durable and with eight programmable GPIO pins, they soon became very popular with the Maker Community so that 4.5 Million devices were sold by February 2014.

After reviewing the history of the development of the first Raspberry Pi, through its subsequent follow on releases, Jim showed us the range of software that first comes embedded with the fundamental Linus operating system. These software tools enable Web Browsing, Office Applications, Programming,



Email, Printer Server, Media Center, Retro Gaming Console and Time-lapse photography.

For the time lapse photography Jim showed us the results of setting up a small Raspberry Pi with a camera, programmed to take one photograph each minute that sat in his office window for 77 weeks and photo documented the construction of a new hotel across the street.



Jim walked us through multiple applications from browsing the web, to capturing weather Fax maps, decoding Amateur Radio digital communications signals, playing almost every known past computer game, monitoring and controlling devices in your home, serving as the driver for a software defined radio (SDR) system,

Officers and members of the EMC Chapter took a light hearted approach to the evening and brought enough <u>actual Raspberry Pie</u> for everyone to have a slice, along with pizza and the presentation.

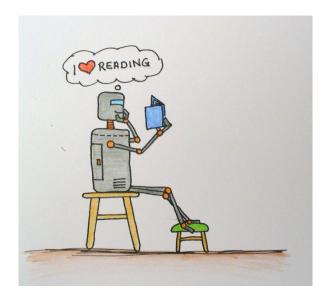


# **STEAMers Think Tank:**

STEAMers Think Tank: A Maker Unconference

## May 2, 2019, 9:00am - 5:00pm

Rochester Hills Public Library



#### Adult

A free participant-driven gathering of knowledgesharing and brainstorming for makers, educators, library professionals and students of all experience levels.

#### **REGISTER**

Rochester Hills Public Library provides life-long learning opportunities, instills a love of reading, and offers equal access to information. The library serves as a community town square, where over 45,000 monthly visitors enjoy innovative ways to learn and socialize through a variety of programs including Sunday concerts, a summer reading challenge, parent-child workshops and weekly lectures.

The library's expansive and user-friendly database system allows its 70,000 card holders to utilize ebooks, movies, and music downloads, language and genealogy services, and consumer reports from the comfort of their own home at no cost.

# ZF Employment Ad



#### **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:

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

#### **Section Goals**

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

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

# **ORG UNITS cheat sheet**

Section Unit Name or Affinity Group or Chapter Name (Organizational Unit is in parentheses)			
Consultants Network Affinity Group: (CN40035)			
Life Members:			
Young Professionals:			
Women in Engineering			
Chapter: 01	(SP01) Signal Processing Society,		
	(CAS04) Circuits and Systems Society and		
	(IT12) Information Theory Society		
Chapter: 02	(VT06) Vehicular Technology Society		
Chapter: 03	(AES10) Aerospace and Electronic Systems Society and		
	(COM19) Communications Society		
Chapter: 04 "Trident			
	(ED15) Electron Devices Society,		
	(MTT17) Microwave Theory and Techniques Society,		
Chapter: 05 "Computer			
Chapter: 06	(GRS29) Geosciences and Remote Sensing Society		
Chapter: 07	(PE31) Power Engineering Society,		
	(IA34) Industrial Applications Society		
Chapter: 08 "EMC"	(EMC27) Electromagnetic Compatibility Society		
Chapter: 09	(IE13) Industrial Electronics Society,		
	(PEL35) Power Electronics Society		
Chapter: 10	(TEM14) Technology and Engineering Management Society		
Chapter: 11	(EMB18) Engineering in Medicine & Biology		
Chapter: 12	(CS23) Control Systems Society		
Chapter: 13	(E25) Education Society		
Chapter: 14	(RA24) Robotics And Automation Society		
Chapter: 15	(NPS05) Nuclear Plasma Sciences Society		
Chapter: 16	(CIS11) Computational Intelligence Society,		
	(SMC28) Systems, Man and Cybernetics Society		
Chapter: 17	(NANO42)Nanotechnology Council		
Section Unit Name or Affinity Group or Chapter Name (Organizational Unit is in parentheses)			
University Of Detroit-Mercy: (STB00531)			
Michigan State University: (STB01111)			
University Of Michigan-Ann Arbor: (STB01121)			
Wayne State University: (STB02251)			
Lawrence Technological University: (STB03921)			
Oakland University: (STB06741)			
Eastern Michigan University: (STB11091)			
University of Michigan-Dearborn: (STB94911)			

#### **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 <a href="http://r4.ieee.org/sem/">http://r4.ieee.org/sem/</a>. The old links will continue to work for sometime, but will be changing permanently in the near future.

#### **SEM e-Wavelengths:**

www.e-wavelengths.org

This is our 'Active' event listing site where everyone should look first to see what events are scheduled for our Section in the near future.

#### **SEM Web Calendar:**

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

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

#### **SEM Web Meetings:**

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

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

#### vTools Meetings:

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

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

#### Other IEEE Local Meetings:

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

#### **Other Happenings**

Here are some of the non-IEEE events that may be of interest to you or someone you know. Let us know if you have a special interest in a field that encourages technical study and learning, and wish to share opportunities for participation with members of the section.

Send details to: wavelengths@ieee-sem.org

#### Michigan Institute for Plasma Science and

**Engineering:** Seminars for the 2017-2018 academic year: http://mipse.umich.edu/seminars.php

#### Model RC Aircraft

http://www.skymasters.org/

#### Model Rocketry

http://team1.org/

#### **Astronomy**

http://www.go-astronomy.com/astro-clubsstate.php?State=MI

#### **Experimental Aircraft Association**

https://www.eaa.org/en/eaa/eaa-chapters/find-an-eaa-chapter

#### **Robots**

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

#### **Science Fiction Conventions**

https://2019.penguicon.org/

http://www.confusionsf.org/

#### Mad Science

http://www.madscience.org/

#### **ESD PE Review Class**

https://www.esd.org/programs/pe/

#### Maker Faire:

https://swm.makerfaire.com/

#### **Executive Committee**

The SEM Executive Committee is the primary coordination unit for Southeastern Michigan (SEM) IEEE operations. The basic organization chart below shows the 2018 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: <a href="http://r4.ieee.org/sem/">http://r4.ieee.org/sem/</a> Click on the "Calendar" button in the top banner on the first page of the web site.

If you wish to attend, or just monitor the discussions, please contact Eric George, the section secretary at: <a href="mailto:eric.george.us@ieee.org">eric.george.us@ieee.org</a> 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.

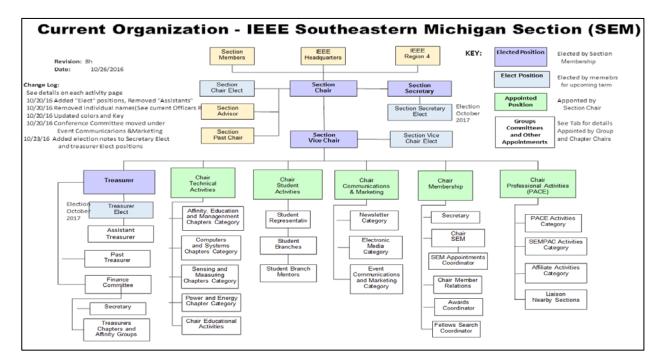
However, members of the section may have multiple technical interests and would like to have meeting information of other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to 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: <a href="http://r4.ieee.org/sem/">http://r4.ieee.org/sem/</a> and clicking on the SEM meetings list button near the bottom of the left-hand banner.

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

Eric George - SEM Asst. Secretary

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



# **ExCom Meeting Schedule**

Below is the 2018 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 2018 meetings. Or, link your personal calendar to the SEM Web calendar.

#### **ExCom: Meeting Schedule for 2019:**

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

Teleconference, Thursday Feb 7

Teleconference, Wednesday March 6

F2F, Thursday, April 4

Teleconference, Wednesday May 1

**Teleconference, Thursday June 6** 

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

**Teleconference, Thursday August 1** 

Teleconference, Wednesday September 4

F2F, Thursday October 5

Teleconference, Wednesday November 6

**Teleconference, Thursday December 5** 

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

**Eric George SEM Assistant Secretary** 

#### **Editor's Corner**

Previous editions in this series may be found on the IEEE SEM website at: <a href="http://r4.ieee.org/sem/">http://r4.ieee.org/sem/</a>. Click on the "Wavelengths" button in the top row of selections.

Comments and suggestions may be sent to the editorial team at <a href="mailto:wavelengths@ieee-sem.org">wavelengths@ieee-sem.org</a>

OR

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

We rely on our officers and members to provide the 'copy' that we finally present to readers of the newsletter. The **Wavelengths Focus Plan and Personal Profiles** plan shown in the matrix below is presented to ensure coverage of section activities and events.

We try to complete the newsletter layout a week before the first of the month to allow time for review and corrections. If you have an article or notice, please submit it two weeks before the first of the month or earlier if possible.

The plan below relies on the contributions of our members and officers, so please <u>do not be shy</u>. 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: <a href="mailto:wavelengths@ieee-sem.org">wavelengths@ieee-sem.org</a> OR any one of the following:

sharan.kalwani@ieee.org jrwwoodyard@gmail.com k.williams@ieee.org isullivan@ieee.org nilesh.dudhaia@ieee.org

# **Wavelengths Annual Publication Plan for Articles**

<b>Month</b>	AG's	Ch's	Ch's	SB's	Special Notice	Reporting Events	Monthly Focus	<u>Awards</u>
Jan		1		OU	Future Cities Judges	Election Results	Resolutions	
Feb	Cons	2		MSU	Science Fair Judges	Officer's Welcome	Surviving Winter	Future Cities
Mar		3	13	EMU	Spring Conf. Flyer	Spring Conference	Spring Conference	Science Fair
Apr		4		U/M-D	National Engrs Wk.	Future Cities	Chapter Focus	ESD - GOLD
May	Life	5	14	>-<	Outstanding Eng Awd	Science Fair	Elections - Prep	New Fellows
Jun		6		>-<	IEEE-USA Apmts.	ESD Banquett	Leadership Skills	SEM Awards
Jul		7	15	>-<	Nominations Call	MD-Webcasts	Students Issues	Region 4
Aug	WIE	8		>=<	MGA - Apmts.	Tech-Webinars	Womens Issues	
Sep		9	16	LTU	Region 4 Apmts.	Engineers Day	Professional Skills	
Oct		10		U/M-AA	Fall Conf. Flyer		Fall Conference	
Nov	ΥP	11	17	WSU	ELECTIONS!		Humanitarian	
Dec		12		U/D-M	IEEE-Com Apmts.	Fall Conference	Happy Holidays	

# Wavelengths Annual Publication Plan for Personal Profiles

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



# Web & Social Sites

# **SEM Website**

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

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

# Section Website Event Calendar

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

# **SEM Facebook Page**

(Select the "f" button under the top row.)

# **SEM LinkedIn Page**

(Select the "in" button under the top row.)

# **SEM Officers:**

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

Online Community <a href="http://sem.oc.ieee.org">http://sem.oc.ieee.org</a>

#### **Section Officers**

**Section Chair** Robert Neff

Section Secretary Eric George

Section Vice-Chair Nevrus Kaja

Section Treasurer Michael Folian

#### **Standing Committees:**

Section Adviser
Don Bramlett

Chair Communications & Marketing

Chair Educational Activities

Chair Finance Nevrus Kaja

Chair Membership Irina Sullivan

Chair Nominations & Appointments Kimball Williams

Chair Professional Activities (PACE) Sharan Kalwani

**Chair Student Activities Mel Chi** 

**Student Representative** 

Chair Technical Activities Kimball Williams



**Electrical and Electronic Engineers Creating Our Future** 

IEEE Southeastern Michigan

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

Engineer (End31'nia)
(Noun)

# Definition:

Someone who does precision guesswork based on unreliable data provided by those of questionable knowledge

Also see: Wizard, Magician

# Advertising Rates

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

http://www.ieeesem.org/ewavelengths/?page id=181.

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

# **Leadership Meetings**

# SEM Executive Committee Monthly Teleconferences:

- 1<sup>st</sup> 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 <u>http://r4.ieee.org/sem/</u>
   (Select the "SEM Calendar" button in the top row.)
- Registration for all at:
- https://meetings.vtools.ieee.org/main