

# Wavelengths



## Volume 61 – Issue 5

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### Upcoming Events

We have a number of events coming up this month. Be sure to check out the Section Website: <https://r4.ieee.org/sem>

As well as vtools:

#### [IEEE Region 4 - SE Michigan Section Upcoming](#)

Listed below are some of the events, FYI.

Event	Date	Time
<a href="#">IEEE Virtual Distinguished Lecturer (VDL) Talk: "RFID for Human Activity Sensing: Challenges, Solutions and Applications"</a>	02 May 2021	08:00 PM
<a href="#">Ch8: AdCom Teleconference</a>	06 May 2021	11:00 AM
<a href="#">SEM Section ExCom Monthly Meeting (Teleconference) for May 2021</a>	06 May 2021	06:30 PM
<a href="#">Current state of 5G in 2021</a>	11 May 2021	06:00 PM
<a href="#">The Pioneers of Computing and The Imposter Syndrome</a>	18 May 2021	06:00 PM
<a href="#">Software Defined Radio - EMC Applications</a>	20 May 2021	05:30 PM
<a href="#">IEEE 2021 Rising Stars Winner: Combating COVID-19 with technology</a>	13 May 2021	06:00 PM

*Note: All times are EDT/EDT unless otherwise marked. Accurate at the time of going to press. If any events are missed do kindly bring them to the attention of [wavelengths@ieee-sem.org](mailto:wavelengths@ieee-sem.org). Thank you!*

Chair's Message



Welcome to the May edition of Wavelengths. The executive team is hopeful in the upcoming months we can hold a few events in person, but in the meantime the Section and Chapters continue to host several great virtual events. I'm also considering host an in-person fall conference for our membership. I welcome comments on host such an event.

In April, members of our Section contributed to Power & Energy Society (PES) day. Events were held all over the world to celebrate PES day. SEM contributed speakers and planners to the event. It was truly a great event and our volunteers were an important part of the that.

While you are browsing this month's newsletter, make sure to check out all the great conferences that are coming to our Section in the upcoming year. The IEEE International Midwest Symposium on Circuits and Systems is coming to Lansing in August. Section volunteers are actively aiding in the planning of this great event. More information is available in this edition.

Finally, there are several great virtual events to choose from this month. Make sure to check them out!

I look forward to continuing to represent our Section and am excited about all the upcoming 2021 IEEE events. I hold out hope that I can see everyone soon. Until that time, stay safe and don't hesitate to reach out if you need anything.

David Mindham  
[dmindham -At- ieee.org](mailto:dmindham-At-ieee.org)

## A View from a Hill

With as large and complex IEEE Section as ours, it is difficult to gain a comprehensive view of all the activities that take place. The method chosen by the IEEE HQ Member Geographic Association (MGA...the organization that watches over all of the 'Geo-unit' on this planet.) is to use a group of numerical counters that are under the complete control of each Geo-unit (Region / Section / Chapter / Affinity Group / Student Branch and Eta Kappa Nu Chapter). That numerical counter is the vTools Event.

For each event type (Technical / Administrative / Professional / Other) a final Event 'Report' indicating when the event took place and how many members and guests attended gives MGA a 'reading' on the activity of the organization.

From the perspective of our Section, the monthly 'Health Assessment' captures all the Events reported to the MGA from the beginning of the year to the present and lets us all know how we are doing. The insert below shows the current status for 2021.

### The Spreadsheet:

The spreadsheet is organized down the left side into the Affinity Groups and Technical Chapters, ending with the Section. Columns hold the average number of attendees and guests (non-IEEE members) associated with Technical meetings. Then the number of each type of meeting held by that Geo-unit.

MGA guidelines are that for Technical Chapters, a minimum of two Technical meetings a year and for Affinity Groups, two meetings of any type each year are sufficient to qualify for "Active" status. Geo-units that achieve that status each year are shown with the name highlighted in Green.

Ch's & AG's	Ave Tech Mtg. Attend	Ave Tech Mtg Guest	#L31 -Technical	#L31 -Admin	#L31 Professional	#L31 -Other	Geo-Unit Name
Cnslt	0	0	0	4	0	0	Consultants Network
LIFE	0	0	0	0	0	0	Life Members
WIE	0	0	0	4	2	0	Women In Engineering
YP	0	0	0	0	0	0	Young Professionals
1	0	0	0	0	0	0	Circuits & Systems, Signal Proc., Info Th.
2	0	0	0	0	0	0	Vehicular Technology
3	0	0	0	0	0	0	Aerospace & Elec. Sys., Communications
4	32	4	1	0	0	0	Trident (Ant, Elect Dev., uWave, Photo)
5	536	16	16	1	5	2	Computers
6	0	0	0	0	0	0	Geoscience & Remote Sensing
7	145	1	4	1	0	0	Power Engineering, Industrial App.
8	203	100	5	4	0	0	Electromagnetic Compatibility (EMC)
9	0	0	0	0	0	0	Power Electronics, Industrial Electronics
10	8	0	2	1	0	0	Engineering Management
11	0	0	0	0	0	0	Eng. in Medicine & Biology
12	0	0	0	0	0	0	Control Systems
13	358	29	8	1	2	0	Education
14	0	0	0	0	0	0	Robotics & Automation
15	274	171	5	0	0	0	Nuclear Plasma Science Society
16	0	0	0	0	0	0	Computational Intelligence / Sys.Man.Cyber.
17	64	51	3	0	0	0	Nano Technology Council
SEM	0	0	0	8	2	1	SEM (Section)
Tot	1620	372	44	24	11	3	NOTE: Highlight Green = Active
		23%					NOTE: Highlight clear = Concern

A quick look at the spreadsheet and you should notice that we have about half of our Geo-units currently shown as 'dead'.

With the abundance of virtual presentations being put on by our Societies, the IEEE USA, and technical businesses we should see more activity. So, what is going on?

In some cases, Geo-units meet then one of the officers who should fill in the meeting report fails to do so.

In other cases, no member of the Geo-unit leadership takes the initiative to ask the organizing entity to allow them to become a co-host for the event. (That puts them into the official record of supporting the event.)

In a few, members notice an event and never bring it to the attention of their leaders. But, who is in the lead? Check the link below in blue and see:

Kimball Williams:  
SEM Information Management Coordinator  
k.williams@ieee.org

[https://r4.ieee.org/sem/wp-content/uploads/sites/6/2021/04/Organization\\_Roster\\_4.6.2021.pdf](https://r4.ieee.org/sem/wp-content/uploads/sites/6/2021/04/Organization_Roster_4.6.2021.pdf)

## Senior Elevation Report



We recently held our first Senior Elevation event ONLINE (see <https://events.vtools.ieee.org/m/264729>), which I am happy to report went off successfully, better than what I had expected. Besides myself, we had 3 other outstanding senior members assist in providing references and guidance to the new folks. They were:

- Mohamed Berri
- Kimball Williams and
- Ben Gonzalez

To help answer many potential questions that recent applicants may have and also provide a guide for future potential senior *elevatees* (I just coined that new word), here is an article which discusses the elevation 'round up' process. As I stated before, this is done in anticipation of the potential number of inquiries on the status of those applications. This is the general outline of what you can do, and how you can check on this (online):

1. Login in to your IEEE.org portal
2. Locate the Senior member area.
3. Scroll down till you locate the "Track Status of Application and References"
4. Review Senior Member Status Report; and finally
5. Notification of Result

Reproduced here are relevant sections for your perusal.

### *Track status of application and references*

Once your application has been received and is in the Submitted and Pending Referrals or Submitted and Pending Review status, your name will appear on the Senior Member Status Report. Please allow about five to seven business days after submission for this to occur, as reports are not updated automatically upon submission. You can also sign in to your application at any time and view the status. (Applications in "Draft" are not posted to the web.)

After your application has reached the **Complete** stage (applications in Word or PDF) or Submitted and Pending Review, it will be scheduled for review at the next available Senior Member Elevation Review Panel. This must occur at least ten days prior to the Review Panel meeting to allow ample time for processing.

### *Notification of results*

You will receive a congratulatory letter and email if you have been approved or an email notification as to whether you have been deferred or denied.

About two weeks following a review panel meeting, an update report with the names of the newly elevated Senior members is published on the web as well as sent electronically to individual subscribers and group mailing lists comprised of Section chairs and newsletter editors.

### *Approved applicants will:*

- Have their name posted in the newly elevated Senior members report after all applicants have been notified
- Receive a formal letter confirming grade elevation after approval
- Receive a wood-and-bronze commemorative plaque and a voucher for up to US\$25, which can be used to join a new IEEE Society of your choice
- Request for employer to be notified using the employer notification form

Denied or Deferred applicants will normally be asked to submit additional documentation in support of their application. This generally means the committee was unable to ascertain whether all the requirements have been met. Failure to document relevant dates of positions or details of how your experience is to be considered significant are frequent reasons that applications are deferred. The meaning of job titles varies from company to company and may not be sufficient to confirm significant performance. For example, if you were a Team Leader, describe the size and scope of the projects worked on. Once further documentation has been submitted, the application will be sent for reconsideration at the next available A&A Review Panel.

Applicants who have resubmitted information and are still not elevated after multiple panel reviews have the right to an appeal of the decision through the Appeal Committee. The Appeal Committee is comprised of the Vice President of Member and Geographic Activities, the Vice President of Technical Activities, and the Vice President of Educational Activities. Appeals are not automatic and must be requested by the applicant.

The Appeal Committee shall review documentation submitted to the Review Panel and make a determination to uphold or overturn the Panel's decision. The applicant is allowed, but not required, to send along further documentation in support of his/her case. For example, if the Review Panel determined that the applicant had only nine years of professional experience, it may be helpful to provide a calculation of how you meet the requirement. Overlapping work and education experience will not be counted in both categories.

If that is not sufficient for any inquiries, suggest they phone the IEEE Contact Center at (1 800 678 4333) for member assistance.

Now since the A&A committee meets several times a year, we found out that a future session is scheduled for mid-June 2021. So in anticipation of that, we have already scheduled June 12<sup>th</sup> for the next online SE Michigan Senior Round up ! (see <https://events.vtools.ieee.org/m/268968>) and mark thy calendars!

**Sharan Kalwani,**  
**Chair, Membership Development Committee**  
**Editor, Wavelengths,**  
**2018~2019~2020~2021**

## IEEE SENIOR MEMBER



*Congratulations to Kenji Aono, for his recent elevation to Senior Member!*

Kenji Aono (StM'09-M'11-GSM'12-M'17-SM'21) received a B.S. in electrical engineering, a B.S. in computer engineering, and a M.S. in electrical engineering from Michigan State University (MSU), East Lansing, MI, U.S.A. in 2011, 2011, and 2013, respectively. A Ph.D. in computer engineering from Washington University in St. Louis (WashU), MO, U.S.A. was completed in 2018.

He was a National Science Foundation (NSF) Graduate Research Fellow on tenure at MSU and WashU. In 2014 he was an NSF GROW Fellow stationed at The University of Tokyo, Japan. He is currently a Postdoctoral Research Associate at WashU and staff researcher at MSU. He will be transitioning away from academia with multiple roles at the following ventures: Kasol Ltd., Infrastructure Analytics Company, Free Dynamics Inc., and StructuRUL LLC.

Dr. Aono was an officer and advisor of IEEE/Eta Kappa Nu and Tau Beta Pi at MSU and has been elected to roles in IEEE SEM as Vice-Chair for Young Professionals and Director for Circuits and Systems. He is a recipient of the Michigan Space Grant Consortium graduate fellowship for the 2012-2015 years and the Skandalaris LEAP fund for 2019-2021.



## Rising Stars Presentation

**IEEE SE Michigan Section**  
**Presents the 2021 IEEE Rising Stars Competition Winner:**  
***“Two novel, low-cost sterilization systems”***



In response to the COVID-19 pandemic, Katie’s team has designed and constructed two cost-effective, scalable, and sustainable sterilization systems for the inexpensive deactivation of SARS-CoV-2. The first system utilizes ozone gas to inactivate viral particles, while the second uses vaporized hydrogen peroxide. The team hopes to expand these inexpensive technologies to provide developing or rural regions with better access to sterilization devices.

Katie Pascavis is a sophomore at Arizona State University studying mechanical engineering and global health. She is a co-team lead for the ASU’s Engineers Without Borders – an international team. She works as a researcher and team lead for Luminosity Lab, an interdisciplinary research and development lab, on COVID-19 response projects, including the XPRIZE Next Gen mask and gaseous sterilization systems.

Nathaniel, is a 2nd year Barrett Honors College student at ASU, majoring in Biological Sciences, Applied Quantitative Science, Political Science, and History. Nathaniel’s work has been important in building partnerships and creating educational tools through Luminosity Lab, a prominent research and development lab that prototypes innovative solutions to societal challenges.

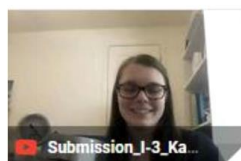
**At Glance**

- **When:**  
 Date: May 11<sup>th</sup>, 2021  
 Time:  
 6:00 – 7:00 PM EST/EDT  
 (3:00 PM Arizona Time)
- **Where:**  
 Online via Webex (to be shared only after you have a confirmed registration)
- **Audience:** OPEN to ALL\*

**Sponsored by**  
**IEEE**  
**SE Michigan**

**Pre-Registration Required!**

<https://events.vtools.ieee.org/m/271245>



## Women Pioneers

IEEE SE Michigan  
Presents

*“Women Pioneers and the Imposter Syndrome”*



At Glance

- **When:**  
Date: May 18<sup>th</sup>, 2021  
Time: 6:00 – 7:20 PM  
EST/EDT
- **Where:**  
Online (requires a pre-confirmed registration)
- **Audience:** All eligible members and potential members (only if slots available)

\*

*Sponsored by  
IEEE  
SE Michigan  
Education Society  
& Computer Society  
Chapters*

**Speaker Bio:**

Anne is an accomplished telecom veteran and Bell Labs Fellow with over 25 years of experience. She is a technologist at heart - electrical engineer and computer scientist by training. Anne is in the Bell Labs Corporate CTO group analyzing the evolution of key technologies and the overall network architecture to identify new directions for the industry and the impact and requirements on the company's portfolio. She is an Alcatel-Lucent pioneer and original technical team leader for the IP Multimedia Subsystem.

Anne has multiple patents and publications. Bell Labs Technical Journal and IEEE guest editor.

**Pre-Registration Required!**

<https://events.vtools.ieee.org/m/256683>



## Technical Activities Report

From the desks of the Technical Activities Coordinating committee folks!

's & AG's	Ave Tech Mtg. Attend	Ave Tech Mtg Guest	#L31 - Technical	#L31 -Admin	#L31 Professional	#L31 -Other	Geo-Unit Name	# Unreported	Total Mtgs
Cnslt	0	0	0	3	1	0	Consultants Network	1	4
LIFE	0	0	0	0	0	0	Life Members	0	0
WIE	0	0	0	2	2	0	Women In Engineering	2	4
YP	0	0	0	0	0	0	Young Professionals	0	0
1	0	0	0	0	0	0	Circuits & Systems, Signal Proc., Info Th.	0	0
2	55	27	4	0	0	0	Vehicular Technology	0	4
3	179	45	1	0	0	0	Aerospace & Elec. Sys., Communications	2	1
4	32	4	1	0	0	0	Trident (Ant, Elect Dev., uWave, Photo)	0	1
5	38	1	22	1	5	2	Computers	0	30
6	0	0	0	0	0	0	Geoscience & Remote Sensing	0	0
7	51	11	10	1	0	0	Power Engineering, Industrial App.	3	11
8	90	42	10	4	0	0	Electromagnetic Compatibility (EMC)	0	14
9	55	27	4	0	0	0	Power Electronics, Industrial Electronics	0	4
10	4	0	2	1	0	0	Engineering Management	0	3
11	0	0	0	0	0	0	Eng. in Medicine & Biology	0	0
12	0	0	0	0	0	0	Control Systems	0	0
13	51	4	7	1	2	0	Education	1	10
14	0	0	0	0	0	0	Robotics & Automation	0	0
15	69	43	4	0	0	0	Nuclear Plasma Science Society	3	4
16	0	0	0	0	0	0	Computational Intelligence / Sys.Man.Cyber.	0	0
17	21	17	3	0	0	0	Nano Technology Council	0	3
SEM	0	0	0	4	2	1	SEM (Section)	4	7
Tot	645	221	68	17	12	3	NOTE: Highlight Green = Active	16	100
		34%					NOTE: Highlight clear = Concern		



Circuits Symposium 2021



**2021 IEEE 64<sup>th</sup> International Midwest Symposium on Circuits and Systems**

**Lansing, Michigan, USA | Aug. 9-11, 2021**

***Now Fully Virtual & On-line!***



Greetings from the IEEE CAS [MWSCAS 2021](#).

We have extended the submission deadlines in response to numerous requests. **See Important Dates below.**

We warmly invite you to submit original contributions to the 2021 Symposium. *This year's theme is **artificial intelligence (AI) and autonomous circuits and systems**. Please visit the website [mwscas2021.org](http://mwscas2021.org) for current information.*

MWSCAS2021 General Chair  
Fathi M Salem  
& the Organizing Committee of MWSCAS 2021

**Important Dates (submission deadlines)**

- April 5, 2021** - Special Sessions Proposals
- April 12, 2021** - Regular Paper (Lecture & Posters)
- May 3, 2021** - Tutorial Session Proposals ((including Live Demos)
- May 24, 2021** - Notice of Paper Acceptance
- June 7, 2021** - Camera-Ready Paper Due

## Circuits Symposium 2021 (continued....)



**The IEEE International Midwest Symposium on Circuits and Systems (MWSCAS)** is the oldest, and now the flagship, Circuits and Systems symposium. The 64<sup>th</sup> meeting of the MWSCAS is being hosted by Michigan State University, in East Lansing, Michigan, USA, and technically co-hosted with Wayne State University in Detroit, Michigan, from Aug 8-11, 2021. The MWSCAS 2021 has pivoted to fully virtual symposium to add a sense of certainty. Live presentations will be supported and managed by the convenient [CONFlux virtual platform](#). It will include oral and poster sessions, a student paper contest, keynote addresses, regular and special sessions, and tutorials presented by world experts in wide range of circuits and systems topics.

Prospective authors are invited to submit a full paper (4 pages) describing original work through the on-line submission system for the conference through a link on the MWSCAS 2021 conference web- site. Papers should follow the formatting instructions given in the author's kit on the website. Papers will be accepted for either lecture or poster presentation. Review criteria for both lecture and poster presentation formats are identical; the presentation format will be chosen to facilitate topical session grouping and time constraints. Students are encouraged to participate in the Best Student Paper Award contest. Submissions of demos and proposals for tutorials and special sessions are also solicited. Accepted papers will be published in the MWSCAS 2021 Proceedings subject to advance registration of at least one of the authors at the author rate. All papers published in the MWSCAS 2021 Proceedings will be submitted for inclusion into IEEEExplore.

Moreover, three special issues will be streamlined from papers presented and appearing in the proceedings. Two cutting-edge special issues will be published in the IEEE transactions on circuits and systems (CAS\_I and TBioCAS) based on extended versions of selected symposium papers; and a special issue will be published in the Springer Journal of Analog Integrated Circuits and Signal processing also based on extended versions of selected symposium papers.



## IEEE Movie Month Ahead!

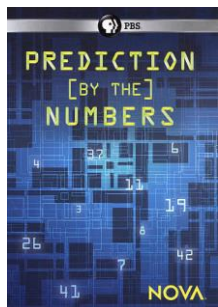
Following the successful and warm reception of the movie week during Spring Break (February 2021), Chapter 5 (aka Computer Society Chapter C16) is now planning a series of online viewing of movies for our section during the month of June 2021. The following titles are being considered:



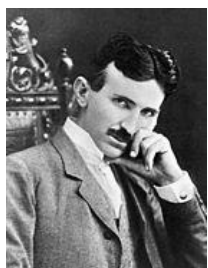
**"Divine Discontent: The Life of Charles Proteus Steinmetz":** This documentary/movie will look at the life and contributions of one of the most celebrated Engineers and inventors, Charles Proteus Steinmetz. Dr. Steinmetz was a legendary figure in his time inside and outside of GE. He was a Chief Consulting Engineer, a Professor at Union College, a Community Activist, and a family man. We will relive his path from a small town in Prussia to a small town in New York and his great accomplishments in Science, Engineering, Education, and contributions to Society. Running time approximately 55 minutes. The trailer can be viewed at: <https://vimeo.com/57064748>



One of Michigan's famous sons, but not many Michiganders know about him: **"The Bit Player"** - a documentary about Claude Shannon the creator of the "Information Theory". You will learn more about or get a refresher on the impact Claude Elmwood Shannon made on the world today. This documentary was made in 2018 and brought to you by the IEEE Foundation who partially funded this along with the IEEE Information Theory Society. The trailer for this 90 minute video is <https://www.youtube.com/watch?v=E3OldEtfBrE&authuser=0>



**Prediction by the Numbers** (PBS NOVA Special), first aired February 2018 running time 53 minutes. Predictions underlie nearly every aspect of our lives, from sports, politics, and medical decisions to the morning commute. With the explosion of digital technology, the internet, and "big data," the science of forecasting is flourishing. But why do some predictions succeed spectacularly while others fail abysmally? And how can we find meaningful patterns amidst chaos and uncertainty? From the glitz of casinos and TV game shows to the life-and-death stakes of storm forecasts and the flaws of opinion polls that can swing an election, "Prediction by the Numbers" explores stories of statistics in action. Yet advances in machine learning and big data models that increasingly rule our lives are also posing big, disturbing questions. How much should we trust predictions made by algorithms when we don't understand how they arrive at them? And how far ahead can we really forecast?



**Tesla: Visionary or madman?** (PBS documentary, running time is , first aired in 2018) Meet Nikola Tesla, the genius engineer and tireless inventor whose technology revolutionized the electrical age of the 20th century. Regarded by many historians as an eccentric genius, Tesla gained international fame for his invention of a system of alternating current that made possible the distribution of electricity over vast distances and is the basis for the electrical grid that powers 21st century life. But the visionary Tesla imagined much more — robots, radio, radar, remote control, the wireless transmission of messages and pictures, and harnessing the wind and sun to provide free energy to all. A showman, he dazzled his scientific peers who flocked to see him demonstrate his inventions and send thousands of volts of electricity pulsing through his body. His fertile but undisciplined imagination was the source of his genius but also his downfall, as the image of Tesla as a "mad scientist" came to overshadow his reputation as a brilliant innovator. Even before his death in 1943, he was largely forgotten, his name obscured by Thomas Edison — his hero, one-time employer, and rival. But it is his exhilarating sense of the future that has inspired renewed interest in the man, as his once scoffed-at vision of a world connected by wireless technology has become a reality. The trailer may be previewed here: <https://www.pbs.org/wqbh/americanexperience/films/tesla/#part01>

**Sharan Kalwani,**  
**Chair, IEEE SE Michigan Education Society Chapter**  
**Editor, Wavelengths,**  
**2018~2019~2020~2021**

**RoboFest 2021****IEEE SEM Sponsored Robofest Online Qualifier Registration Open**

Robofest involves so much more than just "building robots". To be a robotics engineer, you have to have a whole range of different skills and areas of expertise such as STEM, Computer Science, Problem Solving, Communication, and Teamwork. For the 22nd Robofest 2021 season, all teams must qualify to advance to the Robofest Online World Championship, Aug 20 ~ Oct 2, 2021. USA online qualifying competitions are:

- Thu, Apr 29, 5 PM ~ Jr & Sr Exhibition
- Sat, May 8, 9 AM ~ Jr & Sr BottleSumo Time Trial (Hosted by Cranbrook)
- Sat, May 8, 1 PM ~ Jr & Sr Game StackRolls (Hosted by Cranbrook)
- Thu, May 13, 5 PM ~ Jr & Sr Game StackRolls
- Sat, May 15, 5 PM ~ Jr & Sr Exhibition, Jr & Sr RoboArts, Sr & College RoboMed
- Sun, May 16, 11:59 PM ~ Video Qualifier Submissions Due (register by May 6).
- Sat, Jun 12, 9 AM ~ Jr & Sr Game StackRolls
- Sat, Jun 12, 2 PM ~ Jr & Sr BottleSumo Time Trial

If you are interested in starting Robofest robotics teams for grades 5 ~ 12, please visit [www.robofestnet](http://www.robofestnet) or contact Robotics & Automation Chair, CJ Chung at [cchung@LTU.edu](mailto:cchung@LTU.edu). Each student will receive IEEE SEM sponsored medal. IEEE SE Michigan members may lease robots for free, too.

Are you interested in forming all-girl robotics teams? The Michigan Council of Women in Technology Foundation, 17-year sponsor of Robofest, is once again providing \$500 grants for up to Six Michigan all-girl Robofest teams for the 2021 Robofest Game and Exhibition competition. More information and the application have been posted to their webpage:

<https://www.mcwt.org/programs/list/K-12-Initiatives/ROBOTICS-GRANTS>

Robofest eAcademy (<https://www.robofest.net/index.php/eacademy>) provides free online courses designed to help teams. Stack Roll Game workshop material is now available for text-based programming languages such as RobotC using EV3, RobotC using VEX IQ, and VEXcode V5 Pro. In addition, all of the online 2021 workshops that were held this season have been recorded and posted.

To learn how online competitions are organized, please watch Robofest Online World Championship 2020 highlight video at <https://youtu.be/9ly-X1ZsAuM>

CJ Chung [cchung@LTU.edu](mailto:cchung@LTU.edu)

IEEE SE Michigan

Chapter 14, Robotics & Automation Chair

Professor of Computer Science, Lawrence Technological University





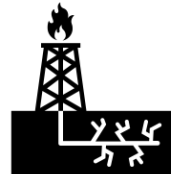
## PES Day 2021 Quiz

Recently on PES Day 2021, The SE Michigan held an event, but instead of the usual talk or career style event, we held an online quiz contest. The platform used was kahoot.com and the theme was of course "Clean Energy". Contestants were tested on their knowledge of various energy concepts. We thank all those who participated. Unfortunately there were no cash prizes, since the umbrella global PES Day 2021 committee forgot to budget some money for this, but a fun time was had by all. We invite you to test your mettle against this quiz. Good Luck!

In questions 1 thru 7, select the option letter that is **FALSE**.

## 1. Topic: FRACKING

- A. Each fracking well lasts only 4-5 years
- B. Fracking cannot last for "hundreds of years"
- C. Fracked oil shipped by rail can explode
- D. Fracking wells cost only \$100,000



## 2. Topic: HYDRO-ELECTRIC DAMS

- A. Hydroelectricity dams use potential energy converted to kinetic energy
- B. Majority of dams are for irrigation and flood control
- C. Dams can collapse
- D. Dams can meet all of our "base load" needs



## 3. Topic: WIND ENERGY

- A. Wind velocity must be > 7 mph for turbines to work
- B. If wind is too high, turbines must shutdown
- C. Turbines can rotate to face the wind
- D. Wind turbines have no fatalities



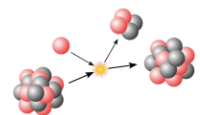
## 4. Topic: SOLAR ENERGY

- A. Cosmic radiation can provide tiny electric power at night
- B. Clouds reduce solar output to below 50%
- C. Solar efficiency is affected by clouds, trees and rain
- D. Solar can handle high surges in demand



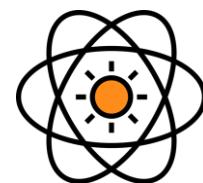
## 5. Topic: NUCLEAR ENERGY

- A. Persons killed by nuclear power plants is very very low
- B. Nuclear power plants have been with us for over 65 years
- C. Nuclear power plants can withstand a plane crash
- D. Fukushima nuclear accident directly killed 20,000 people



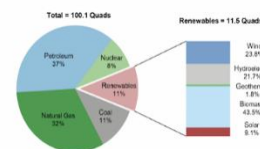
## 6. Topic: NUCLEAR DESIGN

- A. Uranium and Thorium can be used for energy production
- B. Thorium is a better long term nuclear fuel
- C. The Nautilus submarine design is mostly used for nuclear power plants today
- D. The USA has the most advanced reactor designs today



## 7. Topic: POWER/ENERGY PLANNING

- A. Nameplate number is frequently mis-used
- B. Nameplate is the full rated power under ideal conditions
- C. Power density is ratio of power to plant area (higher is better)
- D. We always get nameplate power all the time

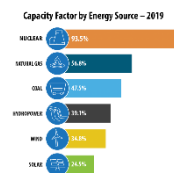


Change of pace here....

In questions 8 thru 13, select the option letter that is **TRUE**

8. Question: *How much energy is supplied today by renewables in the USA?*

- A. 4 to 10%
- B. 20 to 30%
- C. 30 to 40%
- D. 11 to 18%



9. Question: *In the year 2040, which energy source is expected to supply most of the global needs?*

- A. Nuclear Energy
- B. Wind Energy
- C. Solar Energy
- D. Fossil Fuels

10. Question: *Today, the biggest user of energy in a USA home is in.....?*

- A. Lights
- B. Cooking
- C. iPad/iPhone/TV/Laptops/Home Electronics
- D. Space heating and cooling



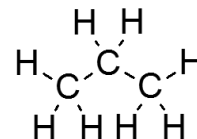
11. Question: *What uses more energy.....?*

- A. Six hours of laptop usage
- B. Making Coffee
- C. I don't drink coffee (prefer tea)
- D. Both are approximately the same



12. Question: *Why is propane used more often than natural gas in rural areas.....?*

- A. It is safer
- B. It is cheaper
- C. It is cleaner
- D. It is portable



13. Question: *Today which renewable provides the most electrical energy supply in the USA.....?*

- A. Wind
- B. Solar
- C. Political hot air/double talk
- D. Hydroelectric



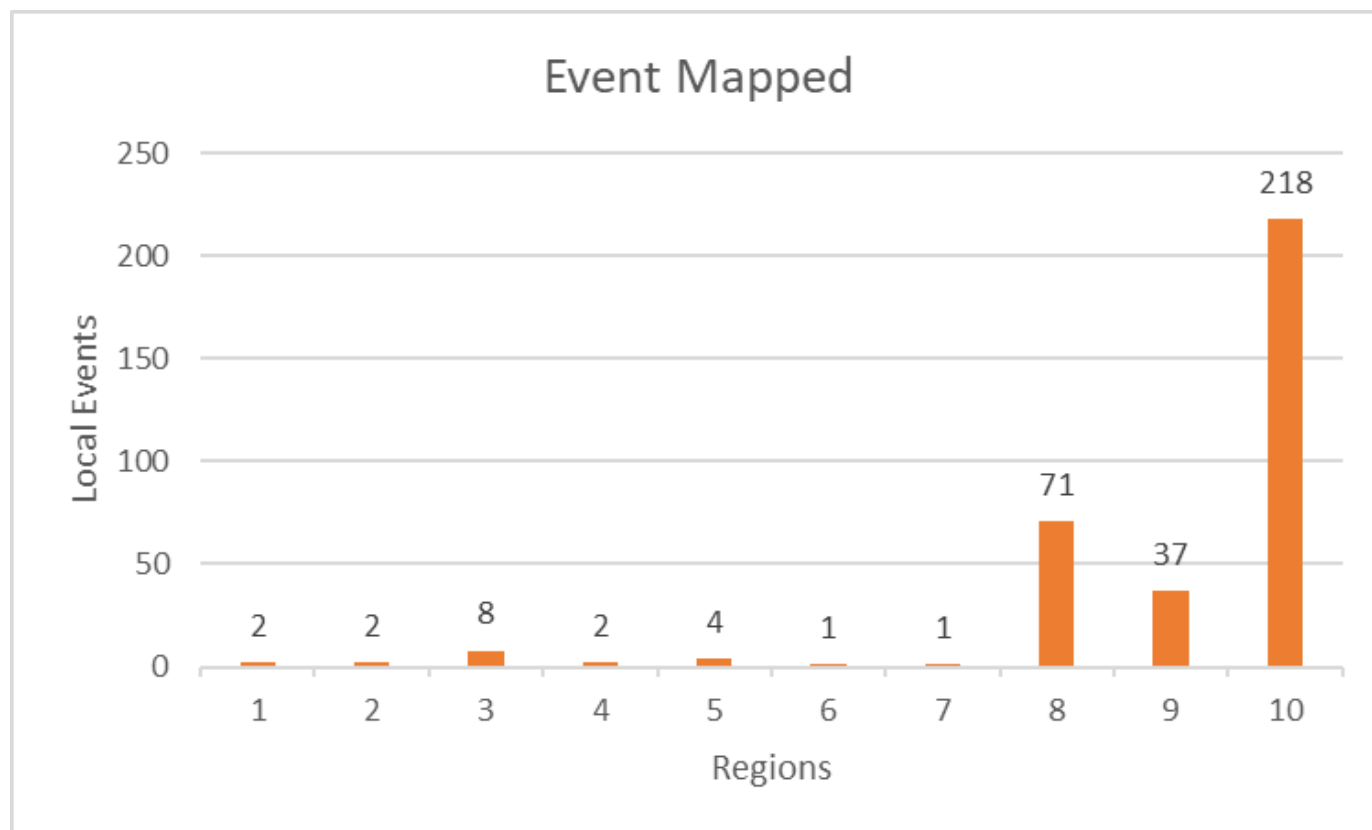
For answers look elsewhere in this issue OR send an email to [sharan.kalwani@ieee.org](mailto:sharan.kalwani@ieee.org), Subject line: PES Quiz answers...or something close enough. By the way if you notice a pattern, let us know via [letters@ieee-sem.org](mailto:letters@ieee-sem.org)!

**PES Day 2021 Celebrations****About the IEEE PES DAY**

On April 22, 2008, the 'Power Engineering Society' changed its name to the 'Power & Energy Society' to help the environment and society in terms of the Electric Power Industry. This day has been officially commemorated as "PES Day" since 2018 and a group of Volunteers from the energy industry come together to host various events based on the theme during the entire month of April. The theme for 2021 PES DAY was "Clean Energy Revolution".

**Our Success**

Every year we have seen tremendous response from students, YP, senior members all around the world for PES Day. This year was no different. For the benefit of our members and non-members, this year we had arranged global events open to all and local events led by ambassadors from sections, chapters from different regions. Our excitement peaked when we had more than 1000 ambassador entries. Until now, we have seen +450 local events celebrated and mapped by finalized ambassadors. This year we were able to reach members from USA & Canada and receive their support to use the platform of PES Day to educate their network. This platform not only provided the participants a chance to network and build relations but also hone their technical and leadership skills.



**Figure 1: Data on Local events by Ambassadors**



Our global events took a good take off with almost 3145 participants registering for 23 events (1 hour each) with almost 50 distinguished speakers. To connect industry experts, we had 4 green track panel sessions, to learn from SME we organized 5 educational webinars, to empower women and entrepreneurship we had 8 events, 3 webinars for young professionals and to connect with community we had 3 humanitarian sessions. All our sessions were live on Facebook, that allowed others to connect instantly.

Through social media platforms we reached +50,000 people across the globe. We will be publishing all the information and recordings of these sessions on our [website](#) and Resource Center. They are also accessible on our IEEE PES Day Facebook page.

The success of PES Day 2021 was not possible without the support of the team and their leadership skills. I would like to encourage for those who miss the opportunity to be part of the team this year, look out for it next year. Congratulations and thanks to all the members for their constant support to make this a huge success.



## Meet the Team

IEEE PES Day 2021 Global Leadership Team



**Julio Romero Agüero**  
*PES VP, Membership & Image*



**Chaitali Naik**  
*Chair, PES Day 2021*



**Mercy Chelangat**  
*Vice Chair, PES Day 2021*



**Machani Ajay Kumar**  
*PES Day Past Chair*



**Karen Galuchie**  
*IEEE Foundation Liaison*



**Thiago Alencar**  
*PES CSAC Liaison*



**Simay Akar**  
*PES YP Liaison*



**Ruomei-Li**  
*PES WIP Liaison*



**Anandhu S Kumar**  
*PES Day Regional Coordinator*



**Nirupama Prakash Kumar**  
*Humanitarian Activities Lead*



**John Benedict Boggala**  
*PES Day YP Activities Lead*



**Staji Wilson**  
*Educational Activities Lead*



**Bisma Noushad**  
*PES Day WIP Lead*



**Felipe Gaitan**  
*PES Day Marketing Lead*



**Konrad Schmitt**  
*PES Day Webinar Lead*



**Mayesha Tafannum**  
*PES Day Communications Lead*



**Akshay Krishnan**  
*PES Day Web lead*



**Aslam Ubaid**  
*PES Day Design Lead*



**Bala Kotharu**  
*PES Day Green Team Lead*

## Meet the Team

IEEE PES Day 2021 Regional Leads



**Ami Vyas**  
PES Day R1 Lead



**Austin Gaunce**  
PES Day R2 Lead



**Akansha Wankhade**  
PES Day R3 Lead



**Amrit Kaur**  
PES Day R4 Lead



**Konrad Schmitt**  
PES Day R5 Lead



**Keith Moore**  
PES Day R6 Lead



**Anand Shah**  
PES Day R7 Lead



**Oto Obong**  
PES Day R8 (Africa) Lead



**Anish M S**  
PES Day R8 (Europe) Lead



**Omayma Hammami**  
PES Day R8 (Middle East) Lead



**Lucia Pia Torres**  
PES Day R9 Lead  
(Andean council, CA, Mexico)



**Sarah Andarde**  
PES Day R9 (Brazil) Lead



**Haroon Rashid**  
PES Day R10 (Asia) Lead



**Athmi Jayawardena**  
PES Day R10 (Australia) Lead

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## Meet the Team

IEEE PES Day 2021 Country Reps



**Saran K S**  
*PES Day India Rep*



**Dev Sugandhika**  
*PES Day Sri Lanka Rep*



**Waleed Bin Nasir**  
*PES Day Pakistan Rep*



**Dhivya Sampath**  
*PES Day Singapore Rep*



**Mohammed Hussein Saleh**  
*PES Day Malaysia Rep*



**Stavriani Ntoga**  
*PES Day Greece Rep*



**Dr. Jia Li**  
*PES Day China Rep*



**Mostafa Adel Hassan**  
*PES Day Egypt Rep*



**Lakshita Lakshita**  
*PES Day New Zealand Rep*

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## Meet the Team

IEEE PES Day 2021 Design Team



**Aslam Ubaid**  
*PES Day Design Lead*



**Swathy Chandra R**  
*PES Day Designer*



**Devika Muraleedharan**  
*PES Day Designer*



**Navneeth Krishna E S**  
*PES Day Designer*



**Likhith Mahadevaswamy**  
*PES Day Designer*



**Antuanett Damian Gomez**  
*PES Day Designer*

IEEE PES Day 2021 Web Team



**Akshay Krishnan**  
*PES Day Web Team Lead*



**Amitha Nair**  
*PES Day Web Developer*



**Deepa Pillai**  
*PES Day Web Developer*

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## Government is You!

As Americans we proudly live in a country that a government “Of the People, By the People and For the People.” When this statement is made in a group, I often see some look around as if asking ‘what does that mean?’

It means that in a Republic (Representative Democracy) every individual within that country accepts responsibility for their actions, and the actions of their government. If something needs to be done, we don’t look around to find the public official who we can get to take care of it. We make sure it gets done by letting the ‘powers that be’ know of our concerns, and where possible, and legal, take personal action to make a change.

If the ‘powers that be’ ignore us, or take no effective action, we vote them out of office, and replace them with someone who we know will take action. Or, we do it ourselves.

So, what? So, sometimes we recognize that our ‘government’ (local, regional or national) will be unable to take care of our concern. Some time ago Amateur Radio through the American Radio Relay League recognized that in the case of a natural disaster, when all communication lines could be put out of service (Tornado / Hurricane / Flood / Wild Fire / etc.) within the local area the only way to reach out for immediate help would be through independent Amateur Radio stations.

### Field Day is ham radio's open house.

Every June, more than 40,000 hams throughout North America set up temporary transmitting stations in public places to demonstrate ham radio's science, skill and service to our communities and our nation. It combines public service, emergency preparedness, community outreach, and technical skills all in a single event. Field Day has been an annual event since 1933, and remains the most popular event in ham radio.



From June 26-27 in 2021 Amateur Radio operators will gather in open air facilities and exercise their equipment and hone their skills at emergency communications. Just as they have since 1933.

Why? Because we know that “when all else fails” Ham radio gets through: And not only in the USA. Amateur Radio operators all over the world volunteer their time and equipment to bring help to devastated areas. (See the insert below:)

The pandemic this year may prevent the public from observing the individual sites that will be set up this year. But you may be sure that they will be ‘on the air’ as always.

### Ham radio operators provided emergency communications during these recent events:

Tornadoes in Mississippi and Alabama— 2011 Japan Earthquake and Tsunami— 2011 Texas Wildfires— 2011 Earthquake in Haiti— 2010 California Wildfires— 2010 Earthquake in Hawaii— 2006 Flooding in Northeastern States— 2006 Hurricanes Katrina, Wilma and Rita— 2005 Wildfires in Texas, Oklahoma and New Mexico— 2005 Hurricanes Charley, Frances, Ivan and Jeanne— 2004 Tsunami in Asia—2004 Earthquake in Central California— 2003 Hurricane Isabel—2003 Northeast Blackout—2003 Shuttle Columbia Recovery Effort—2003 Wildfires in Colorado—2002 Flooding in Kentucky—2002 World Trade Center, Pentagon and Western Pennsylvania Terrorist Attacks—2001 Tropical Storm Allison—2001

PHM Conference 2021



Photo Courtesy of [Visit Detroit](#)  
Sponsored by the IEEE Reliability Society

## 2021 IEEE International Conference on Prognostics and Health Management (ICPHM 2021)

Enhancing Safety, Efficiency, Availability, and Effectiveness of Systems  
through PHM Technology and Application

**ICPHM 2021 will be fully remote!**

June 7-9, 2021

<http://phmconf.org/index.html>

The 2021 IEEE International PHM Conference will take place virtually on June 7-9, 2021. PHM is a wide-ranging interdisciplinary field that requires an energized exchange of ideas. This conference will match up world class expertise in the academic, engineering, and management disciplines to create synergistic exchanges of ideas and practices among academics and industry practitioners. Special attention has been paid to assure a sociable, professional environment to encourage networking, forge new relationships, and deepen existing ones.

**Important Dates:**

**Final Manuscript Due:** May 21, 2021

**Conference Dates:** June 7-9, 2021

**2021 Technical Sponsors and Co-sponsors**



## 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: (LM40035)

Young Professionals: (YP40035)

Women in Engineering: (WE40035)

Chapter: 01 (CH04049) (SP01) Signal Processing Society,  
 (CAS04) Circuits and Systems Society and  
 (IT12) Information Theory Society

Chapter: 02 (CH04051) (VT06) Vehicular Technology Society

Chapter: 03 (CH04053) (AES10) Aerospace and Electronic Systems Society and  
 (COM19) Communications Society

Chapter: 04 "Trident" (AP03) Antennas and Propagation Society,  
 (CH04050) (ED15) Electron Devices Society,  
 (MTT17) Microwave Theory and Techniques Society,

Chapter: 05 (CH04055) (C16) Computer Society

Chapter: 06 (CH04056) (GRS29) Geosciences and Remote Sensing Society

Chapter: 07 (CH04057) (PE31) Power Engineering Society,  
 (IA34) Industrial Applications Society

Chapter: 08 (CH04088) (EMC27) Electromagnetic Compatibility Society

Chapter: 09 (CH04087) (IE13) Industrial Electronics Society,  
 (PEL35) Power Electronics Society

Chapter: 10 (CH04142) (TEM14) Technology and Engineering Management Society

Chapter: 11 (CH04099) (EMB18) Engineering in Medicine &amp; Biology

Chapter: 12 (CH04103) (CS23) Control Systems Society

Chapter: 13 (CH04113) (E25) Education Society

Chapter: 14 (CH04115) (RA24) Robotics And Automation Society

Chapter: 15 (CH04144) (NPS05) Nuclear Plasma Sciences Society

Chapter: 16 (CH04125) (CIS11) Computational Intelligence Society,  
 (SMC28) Systems, Man and Cybernetics Society

Chapter: 17 (CH04128) (NANO42) Nanotechnology Council

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

University Of Detroit-Mercy: (STB00531)

Michigan State University: (STB01111)

University Of Michigan-Ann Arbor: (STB01121)

Wayne State University: (STB02251)

Lawrence Technological University: (STB03921)

Oakland University: (STB06741)

Eastern Michigan University: (STB11091)

University of Michigan-Dearborn: (STB94911)

**Curated & Maintained By**

**Sharan Kalwani,**  
**Wavelengths,**  
**2017 ~ 2021**

## Activities & 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 has changed to its new home, kindly make a note of it! The new home is located at <http://r4.ieee.org/sem/>** . The old links will continue to work for some time, but will be changing permanently in the near future.

### SEM Wavelengths:

<https://r4.ieee.org/sem/about-sem/sem-history/wavelengths-magazine-archive/>

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 Happenings

Here are some of the non-IEEE functions 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. **NOTE: You may need to copy the URL and paste it into your browser address bar.**

Send details to: [wavelengths@ieee-sem.org](mailto:wavelengths@ieee-sem.org)

.....

**Michigan Institute for Plasma Science and Engineering:** Seminars for the 2018-2021 academic year:

<http://mipse.umich.edu/seminars.php>

### Model RC Aircraft

<http://www.skymasters.org>

### Model Rocketry

<https://www.nar.org/find-a-local-club/nar-club-locator/>

### Astronomy

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

### Experimental Aircraft Association

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

### Robots

<https://www.robofest.net/index.php/about/contact-us>

### Science Fiction Conventions

<https://2021.penguicon.org/>

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

### Mad Science

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

### ESD PE Review Class

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

### Maker Faire:

<https://swm.makerfaire.com/>



## Executive Committee

The **SEM Executive Committee** is the primary coordination unit for Southeastern Michigan (SEM) IEEE operations. The basic organization chart below shows the 2019/2020/2021 arrangement of communications links designed to provide inter-unit coordination and collaboration.

The SEM Executive Committee meets in a teleconference each month on either the first Wednesday or first Thursday at noon. The specific meeting days, times, phone or WebEx numbers and log in codes are published on the IEEE SEM Website calendar: <http://r4.ieee.org/sem/> Click on the “Calendar” button in the top banner on the first page of the web site.

If you wish to attend, or just monitor the discussions, please contact **Bhupinder Mavi**, the section secretary at: [bmavi@outlook.com](mailto:bmavi@outlook.com), and request to be placed on the distribution list for a monthly copy of the agenda and minutes. More meeting details are available on the next page of this newsletter.

### Other Meetings:

About half of our members maintain memberships in one or more of the IEEE technical societies, which automatically makes them members of the local chapter which is affiliated with that society. As a result, they should receive notices of the local chapter meetings each month.

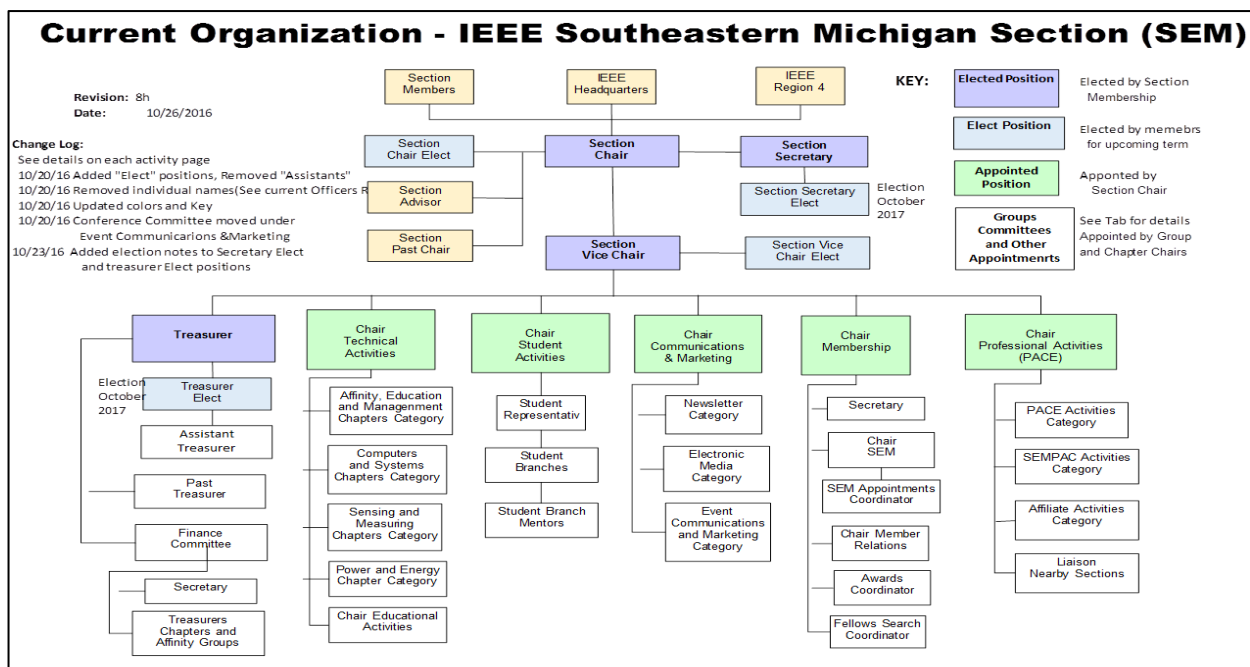
However, members of the section may have multiple technical interests and would like to have meeting information of other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to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

More detailed information on meetings may be found through the IEEE SEM Website: <http://r4.ieee.org/sem/> and clicking on the **SEM meetings list** button near the bottom of the left-hand banner.

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

**Bhupinder Mavi** - SEM Secretary 2021

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



**ExCom Meeting Schedule****NOTE: All SEM members are invited to attend ALL ExCom meetings:**

Below is the 2021 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 2021 meetings. Or, link your personal calendar to the SEM Web calendar.

**Section Administrative Committee (ExCom) Meeting Schedule for 2021:**

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

**2021 Meeting Schedule:**

<i><b>ExCom Meeting</b></i>	<i><b>Date &amp; Time</b></i>
<b>SEM Section ExCom Monthly Meeting (Teleconference) for May 2021</b>	<b>5/6/2021 18:30</b>
<a href="#">SEM Section ExCom Monthly Meeting (Teleconference) for June 2021</a>	6/2/2021 18:30
<a href="#">SEM Section ExCom Monthly Meeting (Face-Face) for July 2021</a>	7/14/2021 18:30
<a href="#">SEM Section ExCom Monthly Meeting (Teleconference) for August 2021</a>	8/5/2021 18:30
<a href="#">SEM Section ExCom Monthly Meeting (Teleconference) for September 2021</a>	9/1/2021 18:30
<a href="#">SEM Section ExCom Monthly Meeting (Face-Face) for October 2021</a>	10/7/2021 18:30
<a href="#">SEM Section ExCom Monthly Meeting (Teleconference) for November 2021</a>	11/4/2021 18:30
<a href="#">SEM Section ExCom Monthly Meeting (Teleconference) for December 2021</a>	12/1/2021 18:30

**Bhupinder Mavi**  
**SEM Secretary 2021**  
[bmavi@outlook.com](mailto:bmavi@outlook.com)

## Letters to the Editor

As promised, we have now started a “Letters to the Editor” column soon. Feel free to email away to help us get that started! Letters, bouquets, brickbats, suggestions, advice, feedback, opinions may be sent to: [letters@ieee-sem.org](mailto:letters@ieee-sem.org)

To the Editors of Wavelengths:

I saw this quote and was inspired to share it.

*"Live with intention. Walk to the edge. Listen hard. Practice wellness. Play with abandon. Laugh. Choose with no regret. Appreciate your friends. Continue to learn. Do what you love. Live as if this is all there is."*

~Mary Anne Radmacher

This quote embodies the intersection of curiosity and community. Wavelengths is a reflection of this. A call to action for the members: share what you are curious about. We learn from each other when we share. We discover connections. We expand horizons.

Thank you and I appreciate all the hard work put in place by all editors!

Christopher G. Johnson

I develop and deliver inspiring messages.

(248) 417-7472

--

Thank you Christopher for those lovely thoughts, very inspiring indeed!

Sharan Kalwani

Editor

Wavelengths

2017~2018~2019~202~2021

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

Comments and suggestions may be sent to the editorial team at [wavelengths@ieee-sem.org](mailto:wavelengths@ieee-sem.org)

OR

[sharan.kalwani@ieee.org](mailto:sharan.kalwani@ieee.org)

[d.romanchik@ieee.org](mailto:d.romanchik@ieee.org)

[nilesh.dudhaia@ieee.org](mailto:nilesh.dudhaia@ieee.org)

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[lunnmalcolm@me.com](mailto:lunnmalcolm@me.com)

[akio@emcsociety.org](mailto:akio@emcsociety.org)

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

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

The plan below relies on the contributions of our members and officers, so please do not be shy. If you have something that should be shared with the rest of the section, we want to give you that opportunity.

*We always encourage all chapters and student branches to share news of activities (both past and future) in their arenas. Please feel free to share any and all information so your peers, colleagues can hear about all the good work you do.*

Quote:

*“If a tree falls in a forest and no one heard it, how do you know it actually fell??”*

**So publicize your work, one never knows when it can pay off!**

Answers to the PES Day 2021 “Clean Energy” Quiz:

- 1) D
- 2) D
- 3) D
- 4) D
- 5) D
- 6) D
- 7) D
- 8) D
- 9) D
- 10) D
- 11) D
- 12) D
- 13) D

#### Editors:

We are always looking for members interested in helping to edit the newsletter. The process is always more fun with more people to share the duties. Having more participants and contributors also helps us keep the newsletter interesting.

#### Heads Up

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

#### Join the Team:

If you feel you might like to join the team, or would like to train with us, please contact one of us at:

[wavelengths@ieee-sem.org](mailto:wavelengths@ieee-sem.org)

OR

any one of the following:

[sharan.kalwani@ieee.org](mailto:sharan.kalwani@ieee.org)

[d.romanchik@ieee.org](mailto:d.romanchik@ieee.org)

[nilesh.dudhaia@ieee.org](mailto:nilesh.dudhaia@ieee.org)

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

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[lunnmalcolm@me.com](mailto:lunnmalcolm@me.com)

[akio@emcsociety.org](mailto:akio@emcsociety.org)



*Wavelengths Annual Publication Plan for Articles*

Month	AG's	Ch's	Ch's	SB's	Special Notice	Reporting Events	Monthly Focus	Awards
Jan		1		OU	New Year Officers	Officer's Welcome	The Year Ahead	
Feb	Cons	2		MSU	Science Fair Judges	National Engrs Wk	Surviving Winter	
Mar		3	13	EMU	Elections - Prep			
Apr		4		U/M-D		ESD Gold Awards	Chapter Focus	
May	Life	5	14			Science Fair		
Jun		6					Leadership Skills	
Jul		7	15				Students Issues	
Aug	WIE	8			Nominations Call		Womens Issues	
Sep		9	16	LTU	Ballots	Engineers Day?	Professional Skills	
Oct		10		U/M-AA	Elections!	IEEE Day		
Nov	YP	11	17	WSU	Election Results	New Fellows		
Dec		12		U/D-M	IEEE-Com Apmts.		Happy Holidays	R4 Nom

*Wavelengths Annual Publication Plan for Personal Profiles*

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



**Web & Social Sites****SEM Website**

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

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

**Section Website Event Calendar**

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

**SEM Facebook Page**

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

**SEM LinkedIn Page**

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

**SEM Twitter Account (new)**

<https://www.twitter.com/ieeesemich>

**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.”

**Section Officers****Section Chair**

David Mindham

**Section Vice-Chair**

Sharan Kalwani

**Section Secretary**

Bhupinder Mavi

**Section Treasurer**

Colleen Chmielewski

**Standing Committees:****Section Adviser**

Don Bramlett

**Wavelengths Editor**

Sharan Kalwani

**Chair Educational Activities**

Christopher Guirlanda

**Chair Finance**

Sharan Kalwani

**Chair Membership Development**

Sharan Kalwani

**Chair Nominations & Appointments**

Kimball Williams

**Chair Professional Activities (PACE)**

Sharan Kalwani

**Chair Student Activities**

Mel Chi

**Student Communications Coordinator**

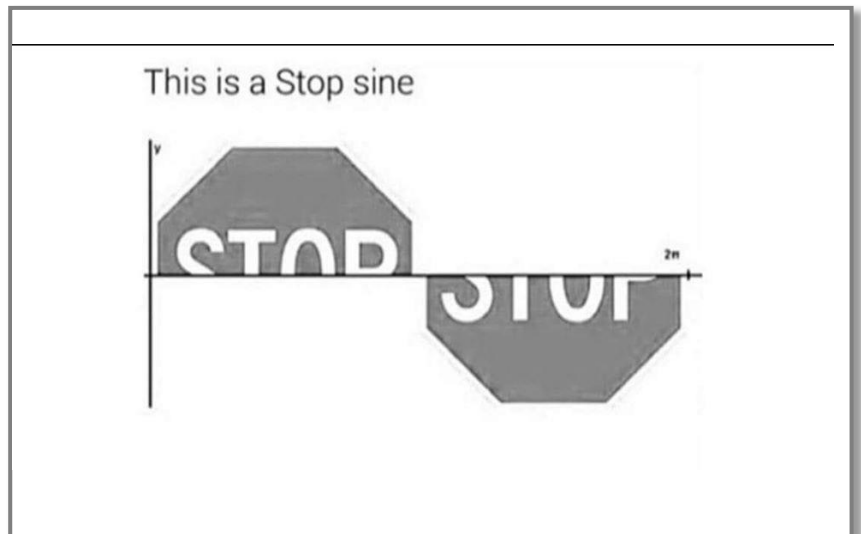
Michael Anthony

**Student Representative****Chair Technical Activities**

Jeffery Mosley



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#### Advertising Rates

SEM Website & Newsletter

#### 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:  
<http://bit.ly/sem-ieee>

##### SEM Standing Committee Meetings:

##### SEM Affinity Group Meetings:

##### SEM Technical Society/Chapter Meetings:

##### SEM University Student Branch Meetings:

- Meeting schedules are announced on SEM Calendar  
<http://r4.ieee.org/sem/>  
(Select the “SEM Calendar” button in the top row.)
- Registration for all at:  
<http://bit.ly/sem-upcoming>