Wavelengths

IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Volume 64 – Issue 2

Contents

Upcoming Events

We have several events coming up this month, all are listed below, FYI.
Note: All times are EST/EDT. If any events are missed do kindly bring them to the attention of wavelengths@ieee-sem.org. Enjoy!
You can also use this bookmark to view All of the links at a single glance
http://bit.ly/sem-upcoming

Event	Date	Time
Officer Training (part 4 of 7) Focus Vice Chair	03 Feb 2024	09:00 AM
Ch8: AdCom Teleconference	08 Feb 2024	11:00 AM
SEM Section ExCom Monthly meeting	08 Feb 2024	06:30 PM
Officer Training (part 5 of 7) Focus Secretary	10 Feb 2024	09:00 AM
SEM Life Members Affinity Group - Admin Meetings - 2024	12 Feb 2024	12:00 PM
Nano VNA Workshop	15 Feb 2024	05:30 PM
Officer Training (part 6 of 7) Focus Treasurer	17 Feb 2024	09:00 AM
TEMS ExCom Meeting	21 Feb 2024	6:30 PM
Officer Training (part 7of 7) Focus Ethics	24 Feb 2024	09:00 AM
New Chips on the Block	26 Feb 2024	06:00 PM
Documentary Night: Transistorized!	27 Feb 2024	06:00 PM
Documentary Night: Ludwig Boltzmann	28 Feb 2024	06:00 PM
Documentary Night: The Sun Queen	29 Feb 2024	06:00 PM

IEEE Advancing Technology for Humanity

140 YEARS

Chair's Column

Happy Winter 2024 and may February be equally busy!

2024 is now 1 month old and we have gotten off to a good start. We have done a few technical events, a few educational events, a few student events, a few documentary style events (future ones: you can see the list here), a few professional skills events (Agile Methods, Critical Thinking and Root Cause Analysis) and a few training events (Vtools, Collabratec and Chair responsibilities). In other words – always something for everyone! Planning is in full swing for several distinguished speakers share their perspectives, via online sessions.

A budget process will start soon at our next meeting. Officers and volunteers are expected to run their portions of our organization according to this approved budget.

Volunteering:
We, IEEE Southeastern Michigan Section, function based on the work of our volunteers. If someone has important obligations that reduce their ability to volunteer, other volunteers need to step in and carry the load. The more volunteers we have, the easier the workload on everyone. Please volunteer, you will find the experience interesting and rewarding.

Policies and Procedures:
Most Policies and Procedures that we follow, are spelled out in the IEEE MGA (Membership & Geographic Activities) manual. A few are unique to our Section. These unique to our section polices will be placed in a folder in the Website as well as Collabratec for referral by officers and members of our section. Additional information will be added as needed. A document with links to the MGA Manual will also be located in that folder.

You can find all the other upcoming events using the short URL link: **https://bit.ly/sem-upcoming**

Remember – every little bit helps, and the Section is here to help! If you have not taken the opportunity, do reach out to any of the Section officers (lifelong email contacts listed below). Who knows what unknown but immense value you may discover, by simply connecting with us. A possible membership annual rate discount, OR an upcoming soft skills event OR need of a professional member for a technical person resource OR opportunity to participate in a standards making process OR a chance to mentor a young graduate student in a domain badly needed in our section of the world OR network with a book publisher OR….the possibilities are limited only by your enthusiasm.

Finally, I ask you to help share news about our IEEE Section to fellow engineers. This will help us fulfill the mission and goals, which is to use technology to help society. Do help us gain more visibility – word of mouth, invitations to our tech events, skills, join as members, post our events to your social media feeds, etc.

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

Sharan Kalwani
Via email: chair@ieee-sem.org
Section members are encouraged to engage using any of these online platforms:

To reach any of our SECTION officers, for any help/assistance you seek you may try these easy to remember email addresses. The objective is to ensure business continuity, so one need not try to remember or hunt for the contact information! They can help you find your chapter officers or point you in the right direction for any query. They are:

- Chair is chair@ieee-sem.org
- Vice Chair is vicechair@ieee-sem.org
- Treasurer is treasurer@ieee-sem.org
- Secretary is secretary@ieee-sem.org
- Advisor is advisor@ieee-sem.org

Tech Activities REPORT

2024 IEEE SE Michigan Section Geo-unit Status (Till Jan 30th)

Ch'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
CnsIt	0	0	0	0	0	0	Consultants Network	0	0
LIFE	0	0	0	1	0	0	Life Members	0	1
WIE	0	0	0	1	0	0	Women In Engineering	0	1
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	0	0	0	0	0	0	Vehicular Technology	0	0
3	0	0	0	0	0	0	Aerospace & Elec. Sys., Communications	0	0
4	24	0	1	0	0	0	Trident (Ant, Elect Dev., uWave, Photo)	0	1
5	26	14	1	0	4	2	Computers	0	7
6	17	0	2	0	0	0	Geoscience & Remote Sensing	0	2
7	22	3	1	0	0	0	Power Engineering, Industrial App.	0	1
8	47	27	1	1	0	0	Electromagnetic Compatibility (EMC)	0	2
9	0	0	0	0	0	0	Power Electronics, Industrial Electronics	0	0
10	0	0	0	1	0	0	Engineering Management	0	1
11	0	0	0	1	0	0	Eng. in Medicine & Biology	0	1
12	0	0	0	0	0	0	Control Systems	0	0
13	0	0	0	0	0	0	Education	0	0
14	0	0	0	0	0	0	Robotics & Automation	0	0
15	24	0	1	0	0	0	Nuclear Plasma Science Society	0	1
16	0	0	0	0	0	0	Computational Intelligence / Sys.Man.Cyber.	0	0
17	0	0	0	0	0	0	Nano Technology Council	0	0
18	0	0	0	0	0	0	Magnetics Society	0	0
SEM	0	0	0	5	1	0	SEM (Section)	0	6
	160	44	7	10	5	2	NOTE: Highlight Green = Active	0	24
		28%					NOTE: Highlight clear = Concern		

SEM Section Chapter and Affinity group leaders who are not showing any technical or administrative meetings are encouraged to reach out to the TAcom for assistance. We are in a new year within the Section where we plan to exceed our projections for technical meetings hosted for our membership. Thanks to all GAs working to engage their membership.

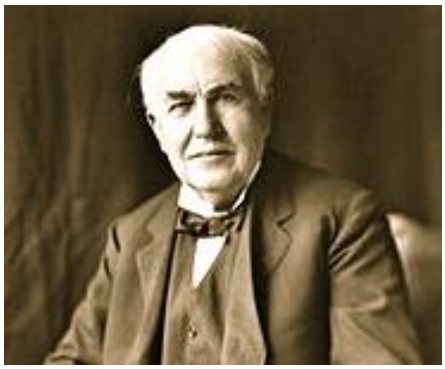
V/r Jeffery V. Mosley

Chair, Technical Activties Committee (TAcom)
jvmosley@ieee.org
Southeastern Michigan Section, IEEE Region 4

This Month in February

Or: Notable Events in Engineering & Science History, which I Did Not Know! ☺

February 5th, 1840 – John Boyd Dunlop is born. Dunlop was a Scottish inventor and veterinary surgeon who spent most of his career in Ireland. Familiar with making rubber devices, he re-invented pneumatic tires for his child's tricycle and developed them for use in cycle racing. He sold his rights to the pneumatic tires to a company he formed with the president of the Irish Cyclists' Association, Harvey Du Cross, for a small cash sum and a small shareholding in their pneumatic tire business. Dunlop withdrew in 1896. The company that bore his name, Dunlop Pneumatic Tyre Company, was not incorporated until later using the name well known to the public, but it was Du Cros's creation.



February 11th, 1847 – Thomas Edison is born. He was an American inventor and businessman, who has been described as America's greatest inventor. He developed many devices that greatly influenced life around the world, including the phonograph, the motion picture camera, and the long-lasting, practical electric light bulb. Dubbed "The Wizard of Menlo Park", Edison was a prolific inventor, holding 1,093 US patents in his name, as well as many patents in the United Kingdom, France, and Germany. More significant than the number of Edison's patents was the widespread impact of his inventions: electric light and power utilities, sound recording, and motion pictures all established major new industries worldwide. These included a stock ticker, a mechanical vote recorder, a battery for an electric car, electrical power, recorded music and motion pictures. Edison developed a system of electric-power generation and distribution to homes, businesses, and factories – a crucial development in the modern industrialized world. His first power station was on Pearl Street in Manhattan, New York

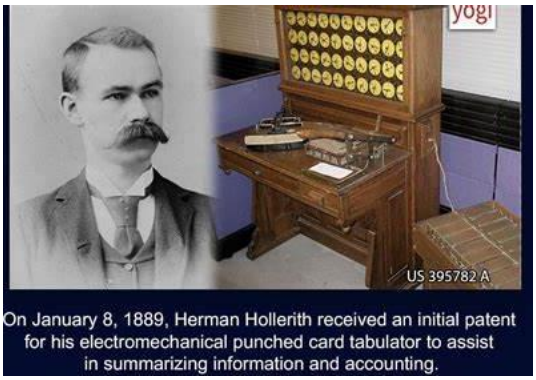
February 13th, 1910 – Birthday of William Shockley, an American physicist and inventor. Shockley was the manager of a research group at Bell Labs that included John Bardeen and Walter Brattain. The three scientists were jointly awarded the 1956 Nobel Prize in Physics for "their research on semiconductors and their discovery of the transistor effect." Shockley's attempts to commercialize a new transistor design in the 1950s and 1960s led to California's "Silicon Valley" becoming a hotbed of electronics innovation. In his later life, Shockley was a professor of electrical engineering at Stanford University and became a proponent of eugenics. {{ Members: check out https://events.vtools.ieee.org/m/401007 ! }}

February 15th, 1564 – Galileo is born. An Italian polymath, Galileo is a central figure in the transition from natural philosophy to modern science and in the transformation of the scientific Renaissance into a scientific revolution. Known for his work as astronomer, physicist, engineer, philosopher, and mathematician, Galileo has been called the "father of observational astronomy", the "father of modern physics", the "father of the scientific method", and even the "father of science!

February 18th, 1836 – Ernst Mach is born. Mach was an Austrian physicist and philosopher, noted for his contributions to physics such as study of shock waves. The ratio of one's speed to that of sound is named the Mach number in his honor.

February 20th, 1844 – The day celebrated as the birthday of Ludwig Boltzmann. Ludwig Eduard Boltzmann was an Austrian physicist and philosopher whose greatest achievement was in the development of statistical mechanics, which explains and predicts how the properties of atoms (such as mass, charge, and structure) determine the physical properties of matter (such as viscosity, thermal conductivity, and diffusion). {{ Members: check out https://events.vtools.ieee.org/m/401013 !}}

February 22nd, 1857 – A Day all engineers must be able to remember, for it is the birthday of Heinrich Hertz, a German physicist who first conclusively proved the existence of the electromagnetic waves theorized by James Clerk Maxwell's electromagnetic theory of light. The unit of frequency — cycle per second — was named the "hertz" or “Hz” in his honor.



February 29th, 1860 – Herman Hollerith is born. An American inventor who developed an electromechanical punched card tabulator to assist in summarizing information and, later, accounting. He was the founder of the Tabulating Machine Company that was amalgamated (via stock acquisition) in 1911 later renamed IBM.

This continues the yearlong feature of interesting ***engineering*** events or milestones that occurred in a specific month. Readers are invited to share their views and opinions (or suggestions) at the accompanying link. Submissions can also be made using direct email to the editors at: wavelengths@ieee-sem.org.

Past readers have asked to feature one or more of these events in more detail. So, starting in 2024, we will have documentaries that will help shed more light on these luminaries and also explore the hidden side of their life stories. We will also endeavor to republish an article from various publications in the same month of Wavelengths.

Here is a link which lists all of the documentaries featuring several of the folks mentioned in the past 12 months of “This month….” Series. Enjoy!

Sharan Kalwani
2022-2023 Chair, Southeastern Michigan Section,
Passionate Engineering History Buff/Aficionado

Magnetics Society Chapter

Proudly introducing the new Magnetics Society Technical Chapter Officer profiles (aka Chapter 18):

Chair: Cody Trevillian

Cody Trevillian is an Applied and Computational Physics Ph.D. candidate and Graduate Research Assistant at the Oakland University (OU) Department of Physics, in Rochester Hills, MI, USA. He currently holds a M.Sc. in Physics from OU awarded in 2019. In 2016, he graduated with a B.A. in Physics from Michigan Technological University.

Cody has studied under Professors Andrei Slavin and Vasyl Tyberkevych since 2018, investigating spintronic and magnonic applications of magnetism and spin dynamics in nanomagnetic elements. His current research interests (and the focus of his dissertation research) center on the field of quantum magnonics. Namely, he seeks to investigate the limits of quantum operations using dynamic magnon-mediated interactions.

Outside of academia, Cody enjoys time with his family, who support his scientific ventures with their fascination, patience & understanding. Through his volunteer effort and service in IEEE, he hopes to spread the love of science and engineering to the broader public while simultaneously furthering the fields themselves.

Secretary: Hannah Bradley

Hannah Bradley is a graduate student pursuing a PhD at Oakland University in Applied and Computational Physics. She started doing research in the field of spintronics while still in her undergraduate studies at Oakland University. In 2020, she graduated from Oakland with a BS in Engineering physics. She has continued her research on antiferromagnetic oscillators in neuromorphic computing in her graduate studies.

Treasurer: Steven Louis

Training 2 Steven Louis is a faculty member in the Department of Electrical and Computer Engineering at Oakland University. He earned his PhD in Electrical Engineering from Oakland University in 2020, an MS in Physics in 2015 from the same institution, and a BS in Electrical Engineering from Arizona State University in 1998. Before pursuing advanced degrees, Steven accumulated nearly 15 years of professional experience in telecommunications, biomedical research, and corporate finance.

His current focus lies in translating recent scientific breakthroughs in magnetism and spintronics into practical applications. Some of his recent projects include the development of a nanoscale ultrafast spectrum analyzer, based on a spin torque nano oscillator with a nanosecond time resolution. Additionally, he has been working on self-powered computing through a magnetic tunnel junction capable of harvesting stray radio frequency energy to drive a black phosphorus transistor. In the realm of neuromorphic AI hardware, Steven is dedicated to creating energy-efficient, terahertz-frequency computer hardware based on non-von Neumann architectures.

Vice-Chair: Vasyl Tyberkevych

At the time of going to press, we did not receive Vasyl's bio or picture. Hopefully we can catch up in a future edition of Wavelengths.

Volunteer+Officer Training

Icon shared by the Region 4 twitter account!

For the year 2024, now that elections are settled, we have notified individual officers elected of their status. **Virtual officer training sessions** were already scheduled and 3 of them have taken place. - see the vTools system in January and February to bring anyone who wants to learn what this is all about. Interestingly – news of our training sessions has made its way far beyond our neck of the woods and we had attendees from England (UK), Illinois and Iowa! Maybe that was because Region 4 advertised our events all over through their Social media account. If those folks see a benefit – then it must be worth something…..

Title	Date	Host	Location	Reported On	Options
Officer Training 2024 (part 4 of 7)	03 Feb 2024 09:00 AM	R40035			View | Manage
Officer Training 2024 (part 5 of 7)	10 Feb 2024 09:00 AM	R40035			View | Manage
Officer Training 2024 (part 6 of 7)	17 Feb 2024 09:00 AM	R40035			View | Manage
Officer Training 2024 (part 7 of 7)	24 Feb 2024 09:00 AM	R40035			View | Manage

If you missed any sessions – contact us and we can share the slides and video recording links.

NOTE: All the training, and all the governance meetings are open to all IEEE Members at all grades. All you need to do to participate is **register for each session** and show up.
https://events.vtools.ieee.org/m/382568
https://events.vtools.ieee.org/m/382569
https://events.vtools.ieee.org/m/382572
https://events.vtools.ieee.org/m/382581

EIT 2024 CFP

ANNOUNCEMENT and CALL FOR PAPERS (version June, 2023)

2024 IEEE INTERNATIONAL CONFERENCE
on ELECTRO/INFORMATION TECHNOLOGY

May 30, 31, June 1, 2024

University of Wisconsin-Eau Claire, Eau Claire, Wisconsin 54702-4004

http://www.eit-conference.org/eit2024

ORGANIZING COMMITTEE

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eit 2024 Webmaster
Bob Evanich, b.evanich@ieee.org, Duke Energy

Awards Committee
Sat Basu, satbasu@ieee.org, Hossein Mousavinezhad, Subra Ganesan

The IEEE 2024 International Electro/Information Technology Conference, sponsored by the IEEE Region 4 (R4), in collaboration with University of Wisconsin-Eau Claire, is focused on basic/applied research results in the fields of electrical and computer engineering as they relate to Electrical and Computer Engineering, Information Technology, and related applications. The purpose of the conference is to provide a forum for **researchers and industrial investigators** to exchange ideas and discuss developments in these growing fields. There will also be exhibits where the latest electro/information technology tools and products will be showcased. This is also an opportunity for professional activities development, workshops and tutorials.

Topics of interest include but are not limited to:

- **Robotics and Mechatronics**
- **Intelligent Systems and Multi-agent Systems**
- **Control Systems and System Identification**
- **Reconfigurable and Embedded Systems**
- **Power Systems and Power Electronics**
- **Solid State, Consumer and Automotive Electronics**
- **Electronic Design Automation**
- **Biomedical Applications, Telemedicine**
- **Biometrics and Bioinformatics**
- **Nanotechnology**
- **Micro Electromechanical Systems**
- **Electric Vehicles**
- **Wireless communications and Networking**
- **Ad Hoc and Sensor Networks**
- **Internet of Things**
- **Artificial Intelligence and Machine Learning**
- **Cybersecurity**
- **Computer Vision**
- **Signal/Image and Video Processing**
- **Distributed Data Fusion and Mining**
- **Cloud, Mobile, and Distributed Computing**
- **Software Engineering and Middleware Architecture**
- **Engineering Education**

Important dates:

- Submission of full papers: February 16, 2024
- Notification of acceptance: March 15, 2024
- Final manuscript (PDF) due: April 26, 2024
- Early registration: May 10, 2024

For more information, ideas for organizing/chairing sessions, industry participation, tutorials, professional activities sessions, please contact: **Drs. Gomes or Mousavinezhad.**

IEEE eit2024 International Conference Announcement and CFP

New Chips on the Block

IEEE SE Michigan
Presents
"New Chips on the Block"

In the 2nd half of 2023, we have had a few new chips - such as the POWER10, RISC-V, AMD Zen4 (aka Genoa), NVIDIA Grace Hopper and Apple M3 - appear on the immediate horizon, all of which have excited the world of personal computing, embedded systems, high-performance computing, and AI. We will take an architectural look at the hardware of these new processors and share a little insight on what all this means for us computing enthusiasts.

Speaker Bio: Sharan Kalwani is an industry technology specialist with 25+ years of experience. Sharan has degrees in both Engineering and Computer Science. He is a senior member of IEEE, ACM and ASEI.

At Glance

- **When:**
  Date: February 26th, 2024
  Time: 6:00 – 7:00 PM
- **Where:**
  Online via Webex (to be shared only after you have a confirmed registration)
- **Audience:** All eligible members and potential members (only if slots available)

*

Sponsored by IEEE SE Michigan Computer Society Chapter

Pre-Registration Required!

https://events.vtools.ieee.org/m/400967

ICCM 2024

ICMM 2024

International Conference on Microwave Magnetics

8th International Conference on Microwave Magnetics

We would like to invite you to attend the 8th International Conference on Microwave Magnetics, which will be held from Sunday, June 16 until Wednesday, June 19, 2024, at Oakland University in Rochester, Michigan, in the United States.

Abstract submission:

Please submit your abstracts electronically using the following template: https://tinyurl.com/ICMM2024-template
The link to the submission form can be found here: www.icmm2024.org/registrationsubmissions
Further information can be found at the conference website: www.icmm2024.org
The abstract submission period begins **January 1, 2024**, and the deadline is **February 8, 2024**.

Scope of the conference:

This is the eighth ICMM conference after the success of Fort Collins (USA, 2008), Boston (USA, 2010), Kaiserslautern (Germany, 2012), Sendai (Japan, 2014), Tuscaloosa (USA, 2016), Exeter (UK, 2018), and Beijing (China, 2022). The conference will focus on new developments in all branches of fundamental and applied microwave magnetics. The technical areas covered are as follows:

- Magnetization and relaxation dynamics
- Applications in communication, sensing, and energy harvesting
- Cavity and hybrid magnonics
- Spin waves, spintronics, and nonlinear magnetic phenomena
- Microwave and millimeter wave magnetic materials and devices
- High-frequency magnetic materials and characterization
- Integrated RF and microwave magnetic devices

Features:

- Four days
- Single Session: Keynote, Invited, and Contributed talks
- Poster Session
- Social Outing at Henry Ford Museum
- Banquet Dinner at Meadowbrook Mansion

Special Notice!

If you plan to submit an abstract and/or attend the 8th ICMM 2024, please make an appointment NOW to apply for your visa to visit the U.S. This application process can take some time, so we urge you to submit your application as soon as you read this.

Send your request for a letter of invitation to: icmm2024@gmail.com

Important Dates:

Abstract submission opens:
January 1, 2024

Abstract submission deadline:
February 8, 2024

Registration opens:
March 1, 2024

Notification of acceptance:
March 15, 2024

End of early bird registration:
May 1, 2024

Conference begins:
June 16, 2024

Conference ends:
June 19, 2024

For more information about the conference, please visit:

icmm2024.org

Member News

A hearty congratulations to some of our newest Senior members! Dr George Pappas was also recently elected to be the Secretary of the Computer Society Technical Chapter (aka Southeastern Michigan Section Chapter 5). Naveen Bonagiri recently volunteered to be part of the Information Management Committee (IMC), who will help keep us up to date on who is who in the Section. Karthik (as he is popularly known) also got recently elected to the Controls Society Technical Chapter and also serves double duty volunteering for the IMC just mentioned!

Do extend your welcome to all 3 of them.
--Sharan Kalwani

Dr George Pappas, LTU

Dr. George Pappas is an Assistant Professor in the Department of Electrical and Computer Engineering (ECE) at Lawrence Technological University and currently working with several graduate and undergraduate students in research in a multitude of developing areas ranging from automotive to medical applications. Dr. Pappas is currently the Director of Master of Science (MS) in Artificial Intelligence (AI) program. He has over 15 years of teaching, research and work experience in embedded systems and high-performance computing. Artificial Intelligence (AI) in Autonomous vehicles, employ machine-learning techniques to collect, analyze and transfer data for safer driving experience. Also, he investigates encryption and optimization algorithms and security of the transfer of electronic medical data using wireless cellular communication systems for evaluation, diagnosis, and treatment of patients in remote locations. Some of the research interests are: Artificial Intelligence (AI) within radiology, specifically computerized tomography (CT) image reconstruction. Precise data analytics for pathology images. Virtual Reality (VR) in medical applications, Artificial Intelligence (AI) to aid diagnostics, Telemedicine, Medical and Health Informatics, Wireless implantable sensors and biomedical Transducers.

Naveen Bonagiri, Dana Inc.

Naveen Bonagiri is currently working as Engineering Project Manager in Light Vehicles group at Dana Incorporated in the Electrification programs. He has a Masters in software systems and MBA in information management systems. Naveen has around 20 years of experience in Automotive software engineering for a wide range of products. Started his career working developing software for instrument panel clusters and later worked on software development for passive safety, telematics, active safety and ADAS/Automated driving. He also worked in the product development area which helped him get experience overseeing product development in all engineering disciplines. In recent years he took his profile to the next level by coming up with an idea which would detect changes in trailer for semi-trucks that would enhance truck drivers driving experience and add significant value to the trucking industry, He has a provisional patent application pending on this.

Dr. Karthikeyan Rajagopal, General Motors (GM)

Dr. Karthikeyan Rajagopal is a Senior Controls Engineer with GM Fuel Cell Algorithm development team, where he leads the development of humidification/thermal control, diagnostic & prognostic strategies for futuristic Fuel Cell systems and durability focused hybridization strategy for Fuel Cell applications. His research interests are Optimal control/Adaptive control of complex engineering systems, Machine learning, Electric vehicle technologies and Autonomous systems. He earned his B.E. in Mechanical engineering from National Institute of Technology, Trichy, India in 2003 and his Ph.D. in Aerospace engineering with emphasis on advanced control algorithms from Missouri University of Science and Technology, Rolla, Missouri in 2014. Prior to pursuing his PhD, he had a research appointment at Gas Turbine Research Establishment, DRDO, Bangalore, India. Dr. Karthik has authored/coauthored more than 20 research publications in refereed journals/conferences and two book chapters. He is the secretary of IEEE control systems society, and the Information management coordinator for the southeastern Michigan section.

2024 SEM Officers:

The IEEE SEM Organizational Roster is Located in the IEEE Southeastern Michigan website at:
http://sites.ieee.org/sem/

Under the TAB titled "About SEM" use the button:
"Organization Roster" to download the PDF version of the current Roster.

(Note: It is also a good idea to download the Organization Org Chart as well in order to get the complete 'big picture' of the Section.)

(Note: To protect the members from getting spam email, the roster is password protected. Request access by sending email to our web master – Scott Lytle.)

Years ago we used to publish the complete Chart and Roster in the Newsletter. But, that was when we had only 5 committees and 9 chapters.

Today we have 16 committees and sub-committees, 18 technical Chapters, 4 Affinity Groups and 8 Student Branches. The total roster divides into 12 pages with 247 identified officer positions.

That seems like a large organization, and it is, but it also presents our members with many volunteer opportunities to grow their capabilities through the experience of working with leaders who can guide and nurture engineering talent and widen the scope of volunteering through 'hands on' training in those 'soft skills' that can only be mastered by 'doing.'

We often refer to learning the non-technical side of an engineering career as similar to learning to play a musical instrument, or a sport, or how to dance. You can read all the books you want but, you only really learn by doing.

Reading the Roster:

Once downloaded notice that the roster is divided into five major segments:

- Executive Committee
- Standing Committees
- Affinity Groups
- Technical Chapters
- Student Branches

Within each segment you should find, at a minimum, the e-mail account for each officer, and in many cases, a work phone and a cell phone for quicker contact.

You may note a number of identified officer roles that have a blank cell (highlighted in yellow) where we would expect an officer name. These are vacant officer positions.

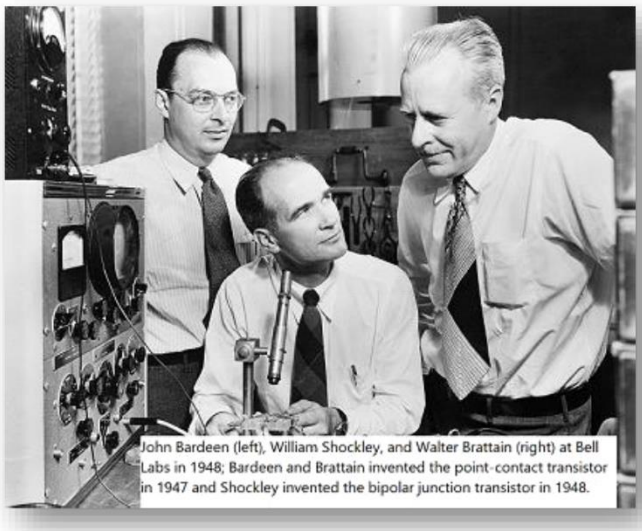
If you notice a vacancy where you might be interested in contributing to fill that role, please contact the relevant 'Chair' in that organization and discuss the duties of the office and consider helping out in that element.

As with all others, the road to this learning begins with the first step. That step is inquiring and finding out what skills go with each position. That information is maintained in the IEEE Center for Leadership Excellence at: **https://ieee-elearning.org/CLE/**

Good luck!

Transistorized!

IEEE SE Michigan
Presents
"Transistorized!"



John Bardeen (left), William Shockley, and Walter Brattain (right) at Bell Labs in 1948; Bardeen and Brattain invented the point-contact transistor in 1947 and Shockley invented the bipolar junction transistor in 1948.

IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Transistorized! Traces the discovery, invention, and impact of the transistor, perhaps the most important invention of the 20th century. Hosted by Ira Flatow, the documentary recounts how American life was utterly transformed by the transistor, and how its basic principles have flowered into technologies that will dominate the next century. We will leave plenty of room for attendee discussions and Q&A.

At Glance

- **When:**
  Date: Feb 27th, 2024
  Time: 6:00– 7:00 PM
- **Where:**
  Online via Webex (to be shared only after you have a confirmed registration)
- **Audience:** All eligible members and potential members (only if slots available)

*

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IEEE Southeastern Michigan Section

IEEE
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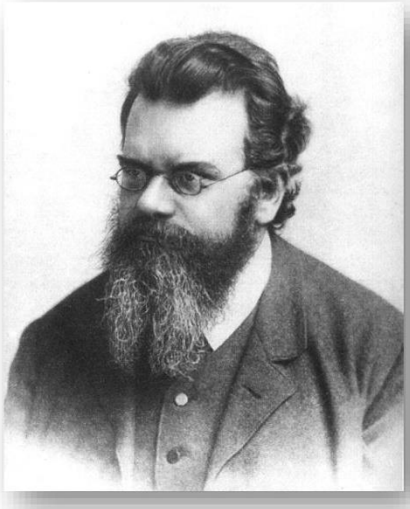
IEEE SE Michigan
Presents
"Ludwig Boltzmann – A Genius of Disorder!!"



IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Ludwig Eduard Boltzmann (20 February 1844 – 5 September 1906) was an Austrian physicist and philosopher. His greatest achievements were the development of statistical mechanics, and the statistical explanation of the second law of thermodynamics.

Statistical mechanics is one of the pillars of modern physics. It describes how macroscopic observations (such as temperature and pressure) are related to microscopic parameters that fluctuate around an average. It connects thermodynamic quantities (such as heat capacity) to microscopic behavior, whereas, in classical thermodynamics, the only available option would be to measure and tabulate such quantities for various materials. Ludwig Boltzmann's contributions to physics and philosophy have left a lasting impact on modern science.. We will leave plenty of room for attendee discussions and Q&A.

At Glance

- **When:**
  Date: Feb 28th, 2024
  Time: 6:00– 7:00 PM
- **Where:**
  Online via ZOOM (to be shared only after you have a confirmed registration)
- **Audience:** All eligible members and potential members (only if slots available)

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IEEE Southeastern Michigan Section

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RoboFest REPORT

(1) 2024 Robofest Game Rules Finalized and Registration Open
(2) LTU Open House February 24th
(3) Pre-season Technical Workshop Schedule
(4) Warmup Competition/Judge Training February 10th
(5) Updates to the LTU Robofest Scholarship Opportunity
(6) In Search of 5-, 10-, 15- and 20- Year Coach Award Recipients
(7) MCWT $750 Grants for All-Girl Robofest Teams in Michigan

Note: All times are listed in Eastern Time unless noted

(1) 2024 Robofest Game Rules Finalized and Registration Open

The 2024 General and Category rules have been modified slightly to add clarifications and FAQs. The updated category rules have been posted to the category pages on the Robofest.net website. Game Judge training presentation slides and video recordings will be uploaded in early February. General Rules can be found on the 2024 Main Page. US and International Sites now open for team registration.

(2) LTU Open House February 24th

Visit campus Saturday, February 24th, 10am - 1:30pm and join the deans and faculty from the Colleges of Architecture and Design, Arts and Sciences, Business and Information Technology, Health Sciences, and Engineering. This is the perfect way to get additional information about the programs that Lawrence Tech offers and get an in-depth knowledge of the technologically advanced opportunities that are in your future at LTU. This is a unique opportunity to tour campus and to actually speak with each of the deans from our colleges, as well as program directors and other faculty from the programs that you are most interested in. Admitted students will enjoy a special admitted student session. See the detailed schedule and register here

(3) Pre-season Technical Workshop Schedule

Workshops are available at no cost to registered 2024 Teams. Workshops are held in the Computer Science Robotics Lab, J234 on LTU's Campus. Robots and laptops are provided. Workshop materials will be made available on the eAcademy/Workshops page. Registration is open under Available Workshops.

LEGO EV3 with Scratch for Game
Saturday, January 27th: 9:00am ~ 12:00noon
LEGO SPIKE Prime/Robot Inventor with Scratch for Game
Saturday, January 27th: 1:00pm ~ 4:00pm
LEGO SPIKE Prime/Robot Inventor with Python for Game
Saturday, February 3rd: 9:00am ~ 12:00noon
Intro to Exhibition using LEGO EV3 with Scratch
Saturday, February 3rd: 1:00pm ~ 4:00pm

(4) Warmup Competition/Judge Training on February 10th

We are hosting a Warmup competition and Game Judge Training on Saturday, Feb 10th,1:00pm ~ 4:30pm in the Computer Science Robotics Lab, Room J234 on the LTU Campus in Southfield, Michigan. Teams who would like to participate should send an email to spalonis@ltu.edu. There is no registration fee for this event, but teams must be registered AND PAID at a local competition (or Pre-Registration) in order to participate. Please limit to one team per coach. Check-in for registered teams begins at 12:45pm

We encourage Michigan Site Hosts and Volunteer Game Judges to register and attend. Judge training will start at 1:45pm. Judge Registration: https://www.robofest.net/rms/appPages/volunteerPages/index.jsp?siteID=1484

(5) Updates to the LTU Robofest Scholarship Opportunity

In order to truly recognize the effort and exceptional talent of the Robofest competitors, Lawrence Technological University has updated the Robofest Champion LTU Scholarship Award Offer for 2024. Each team member of the top 3

Senior Division Game, Exhibition, RoboArts, RoboMed, UMC and Vcc teams at the World Championship events will receive a scholarship certificate to attend LTU:

- 1st Place: $20,000 annual scholarship ($80,000 for 4 years)
- 2nd Place: $16,000 annual scholarship. ($64,000 for 4 years)
- 3rd Place: $14,000 annual scholarship. ($56,000 for 4 years)

Robofest participants who have competed at any time in any category may still apply for the annual $3,000 LTU Robofest scholarship. More details will can be found on the Scholarship page: https://www.robofest.net/index.php/about/scholarship

(6) In Search of 5-, 10-, 15- and 20-Year Coach Award Recipients

We would like to acknowledge our coaches who have coached Robofest teams for 5, 10, and 15 and 20 years! To submit your name, please send an email to robofest@ltu.edu with the subject -Coach Award-. Please include the coach name, coach ID (include all IDs used), and number of years coaching. We will recognize these dedicated coaches at the Robofest World Championship Awards Ceremony on May 11.

(7) MCWT $750 Grants for All-Girl Robofest Teams in Michigan

The Michigan Council of Women in Technology Foundation, a Gold Sponsor of Robofest, is once again providing $750 grants for up to ten Michigan all-girl Robofest teams for the 2024 Robofest Game and Exhibition competitions. More information and the 2024 season application are now available on the MCWT webpage: https://mcwt.org/programs/list/K-12-Initiatives/ROBOTICS-GRANTS

Lawrence Technological University / Robofest / J-233 / 21000 W. Ten Mile Rd, Southfield, MI 48075

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Dr. Chris Cartwright, Executive Council Member
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The Sun Queen

IEEE SE Michigan
Presents
"The Sun Queen"

IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

For nearly 50 years, chemical engineer and inventor Mária Telkes applied her prodigious intellect to harnessing the power of the sun. She designed and built the world's first successfully solar-heated modern residence and identified a promising new chemical that, for the first time, could store solar heat like a battery. And yet, along the way, she was undercut and thwarted by her boss and colleagues — all men — at MIT.

Despite these obstacles, Telkes persevered and, upon her death in 1995, held more than 20 patents. She is now recognized as a visionary pioneer in the field of sustainable energy. An unexpected and largely forgotten heroine, Telkes was remarkable in her vision and tenacity — a scientist and a woman in every way ahead of her time. Her research and innovations from the 1930s through the '70s continue to shape how we power our lives today. We will leave plenty of room for attendee discussions and Q&A.

At Glance

- **When:**
  Date: Feb 29th, 2024
  Time: 6:00– 7:00 PM EST
- **Where:**
  Online via ZOOM (to be shared only after you have a confirmed registration)
- **Audience:** All eligible members and potential members (only if slots available)

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IEEE Southeastern Michigan Section

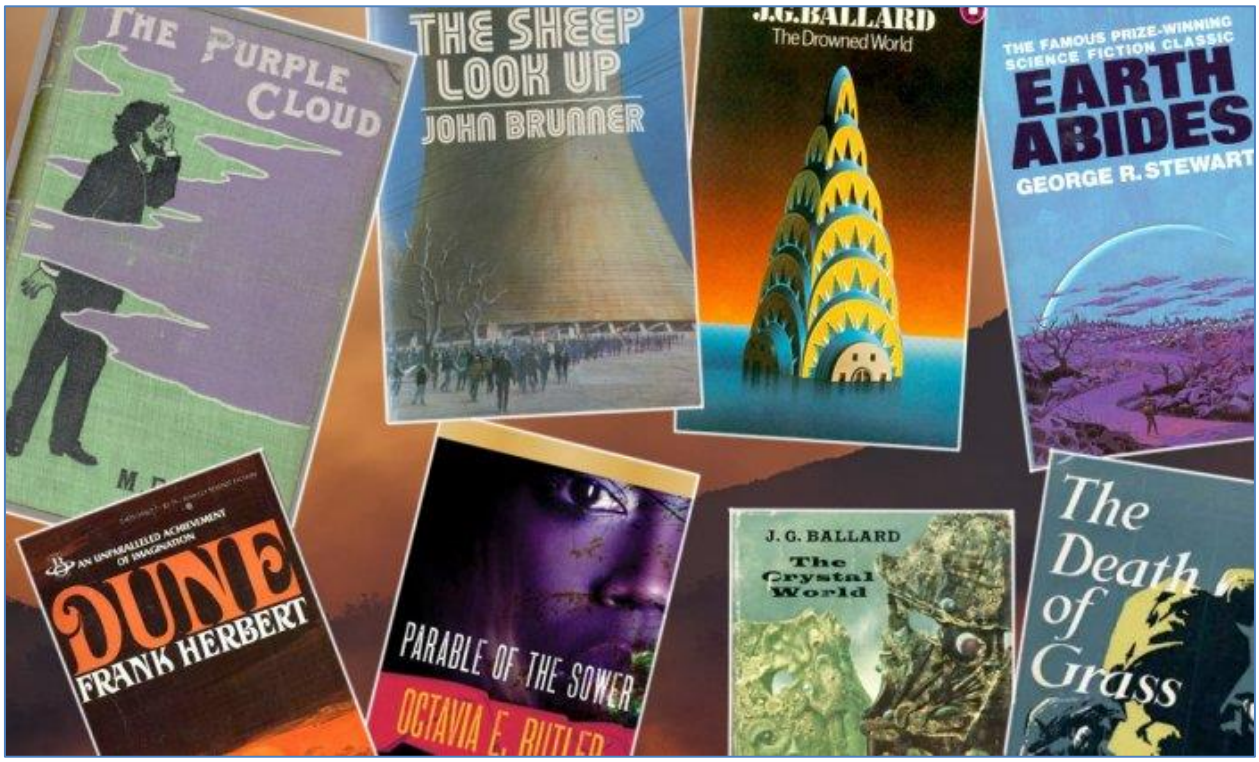
IEEE
Advancing Technology for Humanity

SciFi & Climate Change

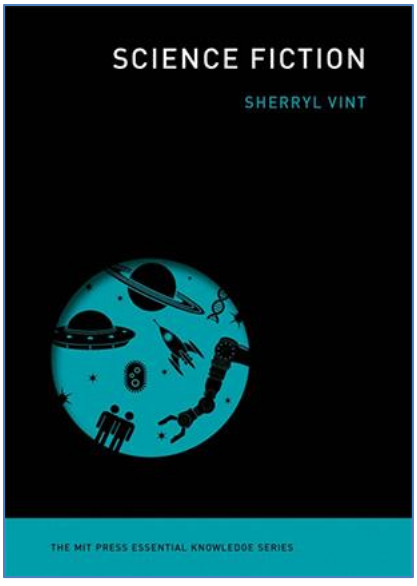
{ Reprinted from the MIT Press Reader} -- Editor

A Century of Science Fiction That Changed How We Think About the Environment

Even before the idea of climate change took hold, sci-fi began to think of the planet as something that preceded our species and could conceivably continue without us.



By: Sherryl Vint



This article is adapted from Sherryl Vint's Essential Knowledge series book "Science Fiction."

It has become axiomatic to say that the world is becoming like science fiction. From mobile phones that speak to us (reminding Star Trek fans of tricorders), to genetically modified foods, to the Internet of Things and the promise of self-driving cars, people in industrialized nations live immersed in technology. Daily life can thus at times seem like visions from the pulp science fiction of the 1920s and 1930s — either a world perfected by technology, manifested in events such as the 1939 World's Fair, with its theme "The World of Tomorrow"; or a dystopian nightmare, such as Aldous Huxley's "Brave New World" (1932).

If we think about science fiction (sf) in terms of the genre's connections to pressing issues in 21st-century culture, no topic is more urgent than climate change and the ways it promises to transform all aspects of human life, from where we live to how we cultivate our food to what energy sources will fuel our industries.

The issue is so pressing that some have started to use the term "cli-fi" for climate fiction — but this faddish coinage obscures a longer history of sf's engagement with the environment and leaves unexamined the question of why sf has proven such a valuable genre for thinking about environmental futures. Even before the idea of climate change took hold, the genre embraced the geological and evolutionary timescales of 19th-century science and began to think of the planet as something that preceded our species and could conceivably continue without us. Such conceptualizations of the planet as a changeable environment turned the tradition of apocalyptic fiction toward mundane visions of environmental catastrophe instead of divine judgment.

A key early way such ideas circulated was through the changing imaginary about Mars: In the late 19th century, telescopic observations seemed to suggest the planet was covered in canals, which American astronomer Percival Lowell hypothesized were an irrigation technology, an idea taken up in Edgar Rice Burroughs's "A Princess of Mars" (1912), among other fictions. When this idea was disproven by better telescopes, sf often depicted Mars as a once-inhabited planet whose civilizations had died out due to drought, presaging a fate that might also befall Earth.

In Kim Stanley Robinson's "Mars" trilogy (1993–1996), about terraforming Mars to create an atmosphere and enable human colonization, technology is used to make these canals a material reality. The trilogy represents the viewpoints of several different factions over the decades-long process of changing the surface of Mars, including characters who argue in defense of leaving its environment unchanged. This is the best-known science fiction series about engineering planetary environments, most of which express themes about environmental protection and sustainability, but some of which celebrate a fantasy of total human control over the environment and planetary weather.

Early sf offered spectacles of disastrous destruction of cities and their populations but — unlike more recent works — did not posit anthropogenic causes. Disease rather than climate was more frequently imagined as humanity's end in these works, including Mary Shelley's "The Last Man" (1826) and M. P. Shiel's "The Purple Cloud" (1901). At times such tales of massive destruction serve as opportunities to remake society without much environmentalism, such as Sydney Fowler Wright's "Deluge" (1928), in which existing cultures are wiped out by earthquake-induced floods, distilling remaining populations into a hardier strain. This motif begins to take on a more environmentalist orientation in later works such as John Christopher's "The Death of Grass" (1956), about a mutation that kills all cereal crops, a device that draws attention to humanity's dependence on other species, a theme also present in George R. Stewart's "Earth Abides" (1949), in which current humanity cannot survive, but the planet can.

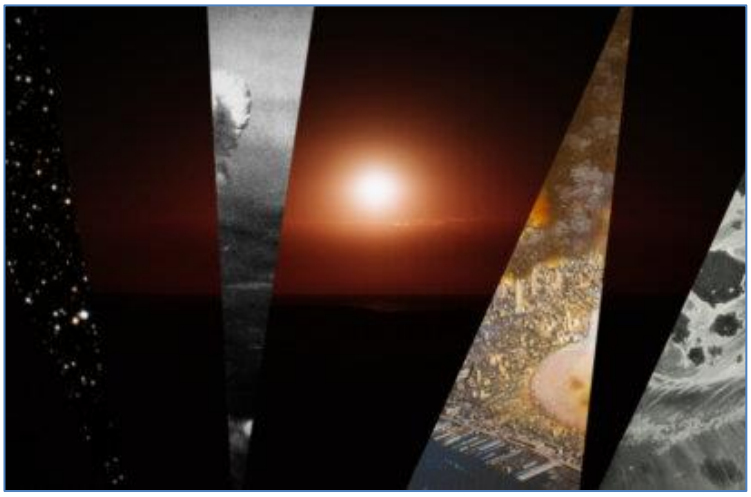
Such works are interested in how the remnants of humanity might restore civilization and what form it might take, and thus remain anthropocentric in their focus. They are notable, however, for their emphasis on connections between humans and the natural world, resisting a technophilic tone of much contemporary sf that envisioned extensively mechanized futures. Moreover, they stand out from other contemporary postapocalyptic fiction in positing a premise other than nuclear war for the end of life as we know it and in explicitly linking images of destruction to environmental themes.

Ballard's vivid depictions of the monstrosities inherent in industrialization, capitalism, and colonialism evoke topics that would usually be addressed in work by activist authors.

With the more experimental sf of the New Wave period and its relationships to contemporary countercultures, an overtly environmentalist sf appears, although here too fictions of apocalyptic collapses are sometimes more metaphorical than literal. This is especially true of J. G. Ballard's stylistically compelling disaster novels, "The Wind from Nowhere" (1961), "The Drowned World" (1962), "The Burning World" (1964), and "The Crystal World" (1966), each of which depicts the world destroyed by what we would now call climate change — high winds, flood, drought, and a mysterious force that crystallizes matter, respectively. Ballard uses his transformed setting to interrogate the sterility and violence of the world prior to these disasters rather than comment specifically on environmental themes; nonetheless, his vivid depictions of the monstrosities inherent in industrialization, capitalism, and colonialism evoke topics that would usually be addressed in work by activist authors.

At roughly the same time, Rachel Carson published "Silent Spring" (1962), a trenchant critique of the use of pesticides in agriculture, which opens with "A Fable for Tomorrow" in which Carson depicts a future where a blight destroys all life in Anytown, USA, an outcome that Carson traces back to disruptions in the ecosystem caused by pesticides.

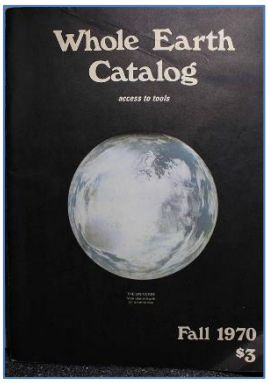
Related: How Humanity Came to Contemplate Its Possible Extinction: A Timeline



Carson thus demonstrates the rhetorical power of fictional, futuristic depictions to shape public understandings. In attempts to discredit her scientific credentials and disparage her personal character, Carson's opponents were as vociferous and vile as any Ballardian antagonist. Nonetheless, her work, alongside the Club of Rome report "The Limits to Growth" (1972) published a decade later, fostered new ways of thinking about ecological futures, premised on sustainability.

"Silent Spring" energized a contemporary environmental movement, which had significant overlaps with contemporary antiwar and antinuclear activism. The first Earth Day was proposed in 1970, aimed at making air and water pollution a mainstream public concern, and eventually resulting in the creation of the U.S. Environmental Protection Agency and the passage of legislation related to pollution and endangered species.

Earth Day drew on the sf imaginary both in terms of Carson's use of futuristic narrative and in the image of the planet as seen from space as a symbol on a flag designed by John McConnell, which was intended to convey the interconnectedness of all life on the planet. The turn toward imagination as a powerful rhetorical technique in the environmental movement is also apparent in the launch of the Whole Earth Catalog, a countercultural magazine started in 1968 and published until 1998, which also featured an image of Earth from space on its first cover — indeed, this is the "whole Earth" of its title. An early example of DIY activism, the magazine fostered an imaginative community oriented toward an ideal of living more sustainably, addressed, in this way, to inhabitants of that future.



The turn toward imagination as a powerful rhetorical technique in the environmental movement is apparent in the launch of the Whole Earth Catalog, a countercultural magazine started in 1968 and published until 1998

As with feminism in the 1960s and 1970s, environmental activists turned explicitly to sf and its relationship to the utopian tradition to promote countercultural values. The most famous example is Ernest Callenbach's "Ecotopia" (1975), written as if it were the notebook of William Weston, a journalist who in 1999 is visiting and reporting on a society in the Pacific Northwest that seceded from America to establish a new polis defined by sustainability, recycling, minimal use of fossil fuels, localized food production, and gender equality. Like the authors of 19th-century utopias, Callenbach demonstrates an imaginative possibility for how one might live otherwise. Moreover, the novel suggests that changed relationships to environmental ideals require transformation of other aspects of social life, such as patriarchy and capitalism, themes that persist in ecological sf today. Similar ideas about the need to address problems of poverty and discrimination alongside pollution and environmental destruction are found in fiction by Kim Stanley Robinson, unquestionably the most important living sf writer addressing environmental themes.

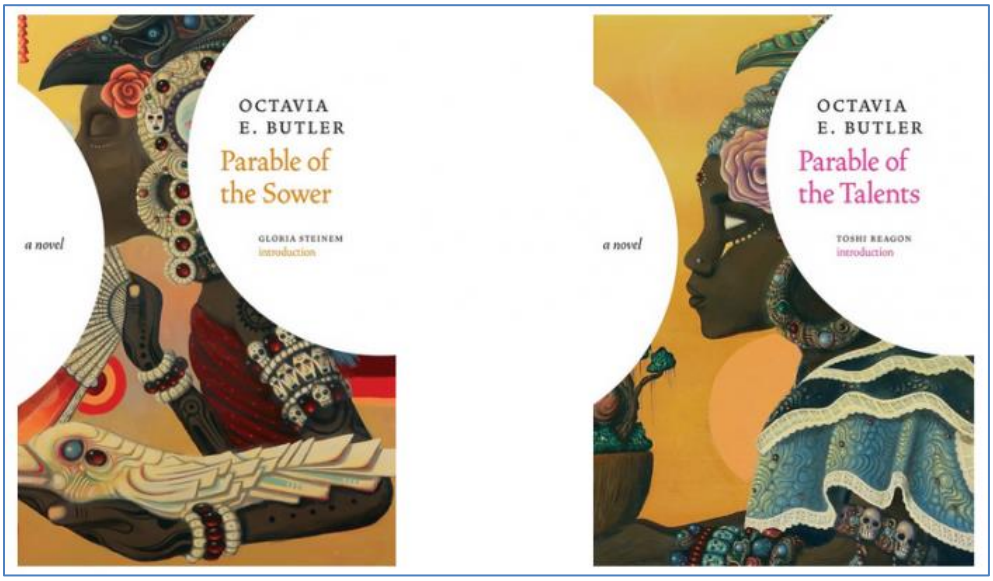
There are then dystopian works of environmental sf such as John Brunner's "The Sheep Look Up" (1972). Taking its title from a line in Milton's "Lycidas" about hungry sheep failing to be fed by a corrupt church, the novel scathingly critiques the entrenched capitalist system that simultaneously destroys the environment and markets products designed to ameliorate

the risks caused by contaminated air, water, and food. The plot concerns Nutripon, a manufactured food sent to developing countries as part of an American aid package. A shipment causes hallucinations that result in violent behavior, and some believe this is a deliberate attempt to eliminate people of color. Meanwhile, in the United States, money is less and less able to insulate the rich from contaminated food and water. Finally, we learn the Nutripon shipment was contaminated by toxic waste in the factory's water supply, an accident. In a world of irresponsible polluters who value profit above all else, a conspiracy is not required to produce genocide. Brunner's work stands out for its global scope and its recognition that the damage done by colonialism continues in and is exacerbated by pollution.

Frank Herbert's *Dune* (1965) is often understood as a prescient novel about climate change, given its desert setting and its invention of several technologies for survival with a minimum of water. It is the first novel is what would become a sprawling franchise. The original novel recounts the political machinations by which young Paul Atreides is displaced from his inheritance as a feudal colonizer of Arrakis, lives among nomadic Indigenous peoples while mastering psionic powers, and eventually reclaims his dynasty while also fulfilling a messianic prophecy. Alongside Robert Heinlein's "Stranger in a Strange Land" (1961), in which a libertarian, free love–promoting human comes to Earth from Mars, "Dune" was read widely outside sf circles when it was published. Heinlein's strange protagonist, Valentine Michael Smith, preached a hippie-like philosophy best expressed by the novel's invented term "grok," that is, comprehension so intense as to approximate union with the object of attention, a phrase soon widely used beyond sf. Both novels were embraced by a youthful college audience who saw in them a reflection of their own anti-establishment values.

But the shift from pollution to climate change as the main engine of dystopian futures doesn't firmly take hold until the 21st century. The explicit turn to sf as a tool for environmental activism characterizes this second generation of writers, who often write fiction about climate change and are involved in activism.

Wanuri Kahiu's important short film "Pumzi" (2009), depicting the regeneration of a future Africa after a period of intense environmental loss, shows the power of new voices taking up these themes. Another prominent example is Paolo Bacigalupi, who addresses the uneven global effects of climate change. His YA trilogy — "Ship Breaker" (2010), "The Drowned Cities" (2012), and "Tool of War" (2017) — is set in a world changed by sea-level rise and projects both growing economic precarity and the rise of authoritarian governments in such circumstances. Bacigalupi's most forceful novel to date is "The Water Knife" (2015), based on a short story originally published in the environmental magazine High Country News, about near-future water wars as California, Arizona, and Nevada all battle to control the dwindling resources of the Colorado Basin. It is mainly an indictment of legal manipulations that keep water rights in the hands of an elite, portraying with sympathy the fraught ethical choices left to the disenfranchised, and it concludes with a glimmer of hope in green technologies distributed by a Chinese government that is mostly in the background of the narrative.



Published more than 20 years ago, the books in Octavia Butler's "Parable" series, which imagine a future California beset by massive displacements, read as plausible futures, perhaps now more than ever.

Octavia Butler's "Parable" series (1993–1998) is a truly prescient work about climate change. One of the few writers of color to achieve prominence in the field during the 20th century, her reputation has only grown in the years since her

death in 2006. In this series, she imagines a future California beset by massive displacements fueled by climate change. Although published more than 20 years ago, these books read as plausible futures, perhaps now more than ever. Unlike Bacigalupi's despair, Butler's novel is rooted in hope, although she depicts an equally grim future. Like her "Xenogenesis" series, this work demands of its audience that we confront the difficult task of building communities in the face of loss, displacement, and tensions about diversity.

The Parable series imagines a future religion, Earthseed, as the core of this new kind of community. As Shelley Streeby outlines in "Imagining the Future of Climate Change" (2018), Butler's work has inspired activists, some of whom have formed the Octavia E. Butler Legacy Network to cultivate the values Butler espoused, treating her sf as a manual for alternative lifeways — what Streeby calls a place "to *practice* the future." Streeby connects this network to other instances of imaginative activism in 21st-century environmental politics, particularly by people of color and Indigenous communities, showing powerful ways that sf is becoming a rhetoric for activist practice. Butler's vision insists that environmentalism must proceed in tandem with other social justice movements that counter racism and colonialism, a perspective that also informs N. K. Jemisin's celebrated "Broken Earth trilogy," the most important recent work to address climate change and social injustice as mutually constitutive problems.

Kim Stanley Robinson has written about the environmental damage caused by capitalism throughout his career, generally offering the hope that technology can ameliorate our dire situation. Climate change is most centrally the focus in his near-future "Science in the Capital" trilogy (2004–2007), about the struggle to mobilize politics and science together to confront the inevitability of climate change. The first novel, "Forty Signs of Rain" (2004), focuses on structural barriers that bar research and legislation that could address climate change, and it ends with the spectacle of a flooded Washington, DC. The second novel, "Fifty Degrees Below" (2005), is set during a mini Ice Age caused by the halting of the Gulf Stream, and it explores possible technical options to ameliorate this changed climate: a lichen engineered to capture more carbon, re-salinating the ocean to restart the Gulf Stream, and various tools and clothing that enable a high-tech Paleolithic lifestyle with a smaller carbon footprint than the lifeways of urbanized modernity. The final novel, "Sixty Days and Counting" (2007), offers the utopian possibility of an elected U.S. president who will prioritize climate change and who institutes a set of policies that push the U.S. economy into sustainable energy, while acknowledge the global disparities that are the legacy of capitalism. A number of the technological amelioration projects succeed, and we are left on the cusp of a new chapter in history.

Kim Stanley Robinson's cast of characters enables readers to see how politicians, lobbyists, funding agencies, displaced migrants, and families in America are all part of the network that informs how climate change is perceived.

Appearing about the time that Hurricane Katrina devastated New Orleans in 2005, we can see in retrospect that the trilogy addresses issues of extreme weather, just as we can see now that Katrina was only the first of what has since become the new normal for the climate: heat waves, cold waves, and extreme storms. The vast scope of his work speaks to Robinson's careful attention to the complexity of climate change and the institutional barriers that prevent even acknowledging this reality in some circles. His wide cast of characters enables readers to see how politicians, lobbyists, funding agencies, displaced migrants, and families in America are all part of the network that informs how climate change is perceived. The utopianism of Robinson's conclusion seems a bit forced, perhaps, but he is careful to show the number of people and institutions that must come together to enact meaningful social change as he refuses to simply capitulate to the cynical despair that fuels Bacigalupi's work. Although perhaps not self-evidently a climate change novel, Robinson's "Shaman" (2013), set during the last ice age and recounting how early humans adapted to a changing climate, further reinforces his ideas about the value of elements of Paleolithic ways of living with, rather than in opposition to, one's environment.

Science fiction is a genre that has long used its projected other worlds to offer commentary on our material (and contemporary) one, especially to remind us that this world is open to change. There is myriad evidence that authors from outside the genre use sf techniques in precisely this rhetorical way. Consider Naomi Oreskes and Erik M. Conway's polemical "The Collapse of Western Civilization: A View from the Future" (2014), written as if by a Chinese historian in 2393 who is reflecting back to theorize why Western civilizations failed to act, despite clear signs of their looming collapse. Similarly, popular books such as Alan Weisman's "The World without Us" (2007) and the documentary television series "Life after People" (2009) encourage us to reflect on how humans have changed our environments as they offer speculative visions of ecosystems continuing without us, erasing the technological signs of human habitation. Or consider Werner Herzog's strange environmental film, "The Wild Blue Yonder" (2005), which is part documentary, part sf narrative, fused with NASA footage of outer space, deep sea photography, and a scripted narrative about an alien species who destroyed their ecosystem and seek to relocate to Earth.

Werner Herzog's "The Wild Blue Yonder," which is part documentary, part sci-fi narrative, fused with NASA footage of outer space, deep sea photography, and a scripted narrative about an alien species who destroyed their ecosystem and seek to relocate to Earth.

Herzog, The Wild Blue Yonder, 2005

Environmental rhetoric, like speculative design, an approach that encourages thinking about and designing possible futures in a meaningful way, is one of the main places we see sf become a discursive way to grasp the present. Lindsay Thomas, in a compelling article on preparedness discourse, argues that sf provides a counter discourse to the kinds of speculative projections found in disaster planning, including government projections about climate change. Whereas documents such as the Department of Defense 2014 *Climate Change Adaptation Roadmap*, cited by Thomas, cultivate feelings of neutral detachment and automated response to already anticipated scenarios, sf about climate change enables readers to experience multiple temporalities beyond the individual human life.

Preparedness discourse responds to change, understood as disaster, through strategies of containment. But science fiction offers something much more. It offers us a way of thinking and perceiving, a toolbox of methods for conceptualizing, intervening in, and living through rapid and widespread change — and the possibility to direct it toward an open future that we (re)make.

***Sherryl Vint** is Professor of Media and Cultural Studies and of English at the University of California, Riverside. She is the author of several books, most recently "Science Fiction," from which this article is adapted.*

Posted on Jul 20, 2021
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Original URL: https://thereader.mitpress.mit.edu/century-of-science-fiction-environment-anthropocene/

Celebration Days

International Science and Engineering Celebration Days

The more time I spend as an engineer in various roles and with various colleagues all over the globe – the more I discover things I did not know!

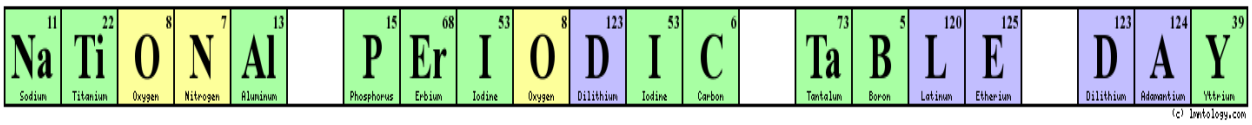
a) **International Day of Women and Girls in Science**, February 11, 2024. *The following is excerpted from Wikipedia.org* : The International Day of Women and Girls in Science is an annual observance adopted by the United Nations General Assembly to promote the full and equal access and participation of women in Science, Technology, Engineering and Mathematics (STEM) fields. The United Nations General Assembly passed resolution 70/212 on 22 December 2015, which proclaimed the 11th day of February as the annual commemoration of the observance. A theme is selected annually to highlight a particular focus and area of discussion around a focus point for gender equality in science. The International Day of Women and Girls in Science is implemented annually by UNESCO in collaboration with UN Women. Both organizations work with national governments, intergovernmental organizations, civil society partners, universities, and corporations in order to achieve the shared goal of promoting the role of women and girls in scientific fields and celebrate those already successful in the field.

From their official web site (link shared below): The Royal Academy of Science International Trust works closely with Women and Girls in Science to celebrate and commemorate the relevant International Days, weeks, years, and decades observed by the United Nations. A few Key Statistics:

- 178 Scholarships Granted for Girls
- 3279 girls in science Supported
- More than 105,000 events worldwide and
- 221 Initiatives

Some useful links: *(To learn more via Social Media, you can search on #February11)*
https://womeninscienceday.org/
https://www.unesco.org/en/articles/closing-gender-gap-science-accelerating-action
https://en.wikipedia.org/wiki/International_Day_of_Women_and_Girls_in_Science

b) **National Periodic Table Day**, February 7, 2024. National Periodic Table Day is a day to commemorate the publication of the first periodic table by English chemist John Newlands in 1863. It is also a day to celebrate the contributions of chemists to society. We wouldn't have passed our chemistry exams as easily as we did if it wasn't for the periodic table.
Some useful links:



https://nationaltoday.com/national-periodic-table-day/
https://www.periodictableday.org/

c) **E-Day**, February 7, 2024. e-Day is a day dedicated to the inexplicably recurring number in the world of mathematics which starts with 2.718281828 and goes on and on to infinity. It is celebrated on February 7 (2/7) for the obvious reason that the date holds the same digits as e rounded to the nearest tenth. The number itself can be found in many different equations but it's most commonly known as the base of the natural logarithm, whose symbol is "e." To celebrate the e-Day, you can Memorize the digits (as much as you can), read a mathematics book, or donate a calculator. My personal favorite is using this in the classic formula ($1 + e^{i\pi} = 0$).

A portrait of Leonhard Euler,
who named the mathematical constant **e**,
painted by Jakob Emanuel Handmann.

Useful links:
https://nationaltoday.com/e-day/
https://www.timeanddate.com/holidays/fun/e-day
https://eday.imaginary.org/
https://www.imaginary.org/news/e-day-a-mathematical-holiday-celebrated-on-february-7th
https://www.checkiday.com/83780a80f3f8e34147441ca8b8e15a60/e-day
https://www.intmath.com/blog/mathematics/today-is-e-day-4133
https://blogs.ams.org/blogonmathblogs/2018/02/06/how-to-have-an-excellent-e-day/

d) **Engineering Week**, February 18th thru 24th, 2024. Engineering Week was founded by the National Society of Professional Engineers (NSPE) and is celebrated in the United States during the month of February. It is a week-long event that is dedicated to the field of engineering. The objective of Engineering Week is 'to raise public awareness about engineers and engineering and to instill a sense of pride in engineering. Engineering Week celebrates the contribution of engineers and recognizes their critical role to the development of society.

Engineers Week 2024 will run from February 18 to 24. This year's theme "Welcome to the Future" is about celebrating today's achievements and paving the way for a brighter and more diverse future in engineering.

Engineering is at the forefront of innovation and is instrumental in designing and creating the solutions that are shaping the world of tomorrow. From the development of the internet and smartphones to space exploration and renewable energy solutions, engineers have been at the forefront of progress, making our lives more efficient, comfortable, and connected. Through their creativity, expertise, and dedication, engineering teams are addressing global challenges, driving technological advancements, and making a positive impact on society's future.

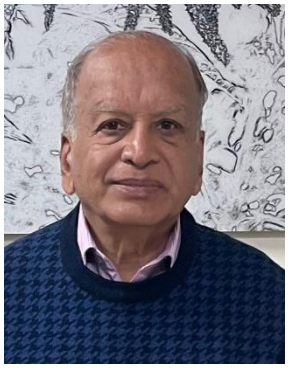
This Engineers Week we hope that you'll take a moment to recognize and celebrate the work of engineers and engage students in engineering. DiscoverE, the organization behind Engineers Week, has free resources you can use to inspire future innovators, such as hands-on engineering activities and lesson plans, information about engineering education, and pathways to a technical careers. Visit DiscoverE.org/EngineersWeek and get the help you need to focus on the "E" in STEM.

Useful Links:
https://spectrum.ieee.org/celebrate-u-s-engineers-week
https://ieeeusa.org/events/engineers-week-2024/
https://discovere.org/programs/engineers-week/
https://www.engineeringforkids.com/about/news/2021/february/what-is-engineers-week/

Sharan Kalwani *is the current Chair of the IEEE Southeastern Michigan Section as well as the Chair of the Computer Society Technical Chapter. Besides working in the field of High Performance Computing as his daytime job, he is also Adjunct Faculty and teaches a number of courses such as: Introductory Computer Science, Information Security or Cybersecurity/ Computer Science Research Seminar/ Principles of Programming Languages/etc. He is the author of one book and is working on his second.*

Life Members AG Profile

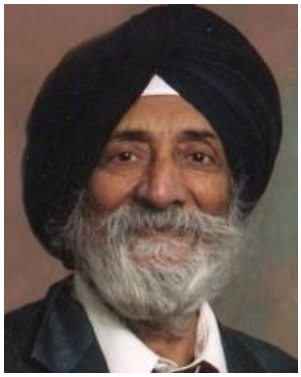
2024 Officers:



Chair: Arun Hundiwal

Vice Chair: Ray Sasinowski

Secretary: Kimball Williams



Treasurer: Harpreet Singh

Life Member (LM) website: https://life.ieee.org

Southeastern Michigan LM Affinity Group (LMAG) website: https://r4.ieee.org/sem/sem-life-member

"IEEE Life Members are technology influencers, pioneers, and valuable partners – sharing over one million years of experience with the next generation of innovators".

"Stronger together! The key to the IEEE Life Members community is our members. Dedicated to life-long learning and giving back to humanity, Life Members come together to learn new things, contribute ideas, mentor students, and participate in IEEE events." I took this mission statement off the Life Member website and I couldn't agree more with it.

IEEE "Life" status is an automatic process which is based on an individual's membership record to determine if an IEEE member qualifies for Life member status. The member must be at least 65 years of age and has been a member of IEEE or one of its predecessor societies for such a period that the sum of his/her age and his/her years of membership equals or exceeds 100 years. (IEEE Bylaw I-102.2). Members who qualify each year will be notified by mail in the fourth quarter of the qualifying year. "Life" status will be effective on 1 January of the following year.

The LM group had an active 2023 year holding 3 Technical and 8 Professional meetings which achieved Geo unit activity requirements. I want to thank and recognize the 2023 LM officers on a successful year.

For 2024 LMAG will challenge our memberships to increase support & activity for the year. According to the latest data analytics, LMAG has over 380 members within the Southeastern Michigan Section. We have a number of volunteer positions openings in support of our 2024 goals. We are seeking volunteers to mentor Student chapters, LM web master, STEM, LM Social Director, LM single point contact to National LM group, and many more opportunities. Speaking of 2024 we held our first LM admin meeting on Monday January 8th to start planning to meet our goals. LM will meet on the 2nd Monday of the month from 12pm to 1pm, so please join us if your schedule allows. Our LM secretary Kimball Williams has set up a LM Affinity Group page via IEEE Collabratec. Please see the information below to find the site page.

In order to enhance communication with our 383 members here is our Section, we have set up an IEEE Collabratec site for our Affinity Group. If you do not yet have access to Collabratec, you may use the link below to initiate access:
https://ieee-collabratec.ieee.org/app/home

Once in Collabratec, search in Workspaces for: 'Southeastern Michigan Section Affinity Group, LM'. You may then request access to the Workspace.

In the Collabratec 'Files' section we are storing the LM: Agendas, Minutes, Project Action Items, Meeting Recordings, and Meeting Chat records. For your convenience and information, I have included the link below to the meeting Minutes of the LM Admin most recent meeting.
https://ieee-collabratec.ieee.org/app/workspaces/9255/document/952479

Initial list of possible activities, site visits, classes, and events that the LM Admin is considering for 2024. Your comments or indications of interest about these would be helpful.
GM Auto Museum
GFVIL
Flint 'Factory One'
Hamvention
HFGV Rouge Tour
Intro to Amateur Radio
Technician Class 'Ham' license class
Menlo Innovations – AA
Introduce to EAA

Ray Saninowski

ORG UNITS cheat sheet

Section Unit Name or Affinity Group or Chapter Name (Organizational Unit code 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 (CH04050)	(AP03)	Antennas and Propagation Society,
	(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 & 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
Chapter: 18 (CH04162)	(MAG33)	Magnetics Society

Section Unit Name or Affinity Group or Chapter Name (Organizational Unit code 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)

Use the Geo-unit ‘Code’ for faster access in the vTools system applications.

HKN Code	HKN Name (Student IEEE Honor Society)
HKN029	University of Michigan-Ann Arbor, Beta Epsilon
HKN042	University of Detroit-Mercy, Beta Sigma
HKN054	Michigan State University, Gamma Zeta
HKN073	Wayne State University, Delta Alpha
HKN163	University of Michigan-Dearborn, Theta Tau
HKN164	Lawrence Institute of Technology, Theta Upsilon
HKN190	Oakland University, Iota Chi
HKN244	Southeastern Michigan Alumni

Organization Unit IEEE Code	Student Technical Chapter name
SBC00531	University of Detroit-Mercy, Computer Society Chapter
SBC02251	Wayne State University, Computer Society Chapter
SBC03921	Lawrence Tech University, Computer Society Chapter
SBC06741	Oakland University, Engineering in Medicine & Biology

Why do we publish this? Well, this is most useful when searching the vTools page for entering L31s or creating new events or searching for existing events!

Curated & Maintained By
Sharan Kalwani,
Chair, IEEE Southeastern Michigan Section (2022-2023)
Editor, Wavelengths (*Serving you as an active newsletter contributor since 2018)*
Enthusiastic IEEE volunteer since 2011

Use the Geo-unit ‘Code’ for faster access in the vTools system applications.

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 is located at http://r4.ieee.org/sem/**

SEM Wavelengths:
https://r4.ieee.org/sem/about-sem/sem-history/wavelengths-magazine-archive/

SEM Calendar of events:
https://r4.ieee.org/sem/sem-calendar/
Select "SEM Calendar" button in the top row of the website. 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 Collabratec Workspace:
https://ieee-collabratec.ieee.org/app/workspaces/5979/IEEE-Southeastern-Michigan-Section/activities
An IEEE supported space for online chat, discussions, connecting with other global IEEE entities, besides our local Michigan folks.

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: Copy the URL and paste it into your browser address bar.
These websites were checked in June 2022 and found viable.
Send details to: wavelengths@ieee-sem.org OR letters@ieee-sem.org

Michigan Institute for Plasma Science and Engineering: Seminars for the academic year:
https://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/eaa/eaa-chapters/find-an-eaa-chapter

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

Science Fiction Conventions
https://2022.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/

It appears that the SouthWest Michigan Maker Faire was a casualty of the Global Pandemic, as were many of our friends and several organizations.

However, we retain this link for anyone wishing to make contact and consider pumping life back into what was a wonderful experience.

Executive Committee

The Executive Committee is the primary coordination unit for Southeastern Michigan (SEM) IEEE operations. The basic organization chart below shows the 2023 arrangement of communications links designed to provide inter-unit coordination and collaboration.

The SEM Executive Committee meets in a teleconference each month on usually on a Thursday at 6:30 pm. 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 **Christopher Johnson**, the section secretary at secretary@ieee-sem.org and request to be placed on the distribution list for a monthly copy of the agenda and minutes. More meeting details are available on the next page of this newsletter.

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

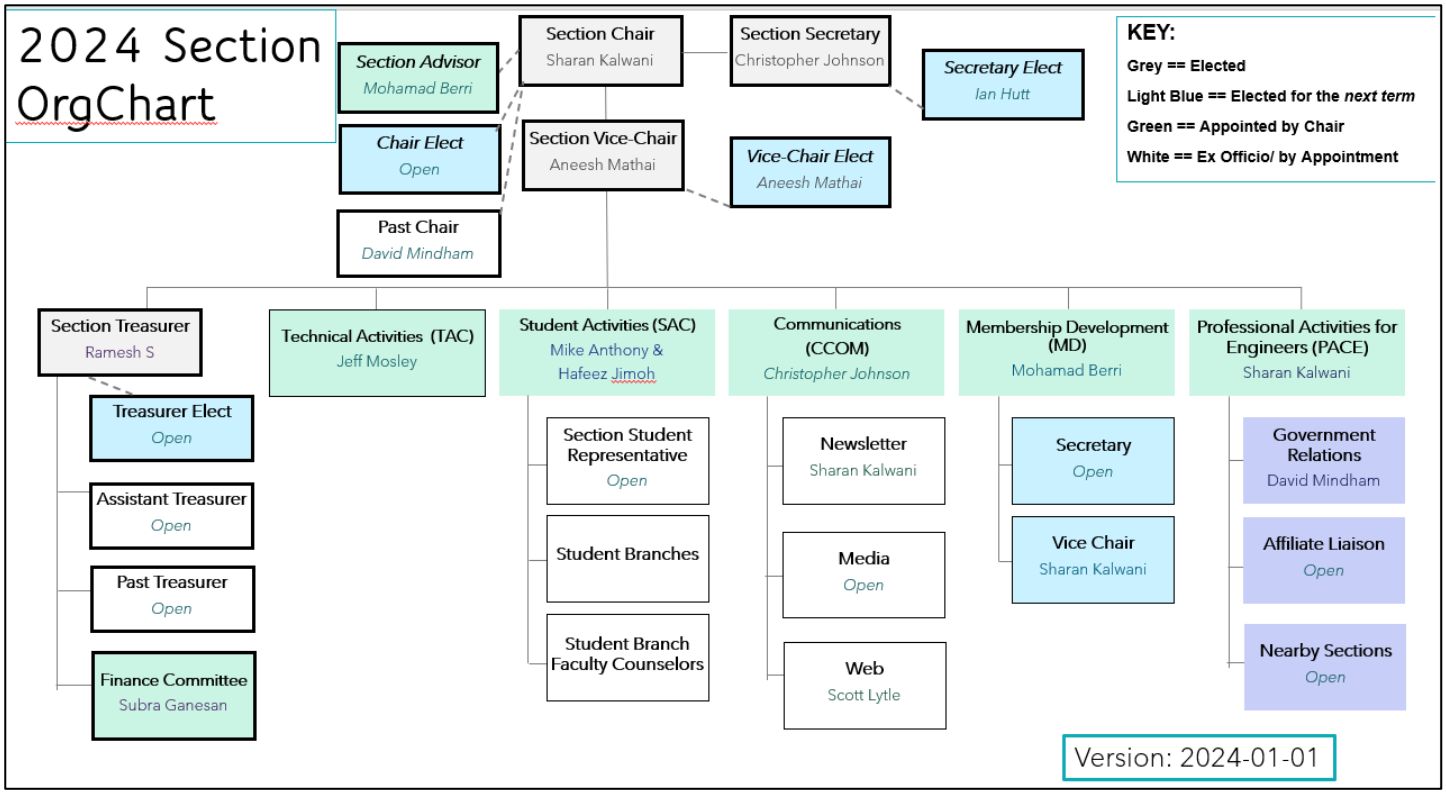
However, members of the section may have multiple technical interests and would like to have meeting information of other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to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

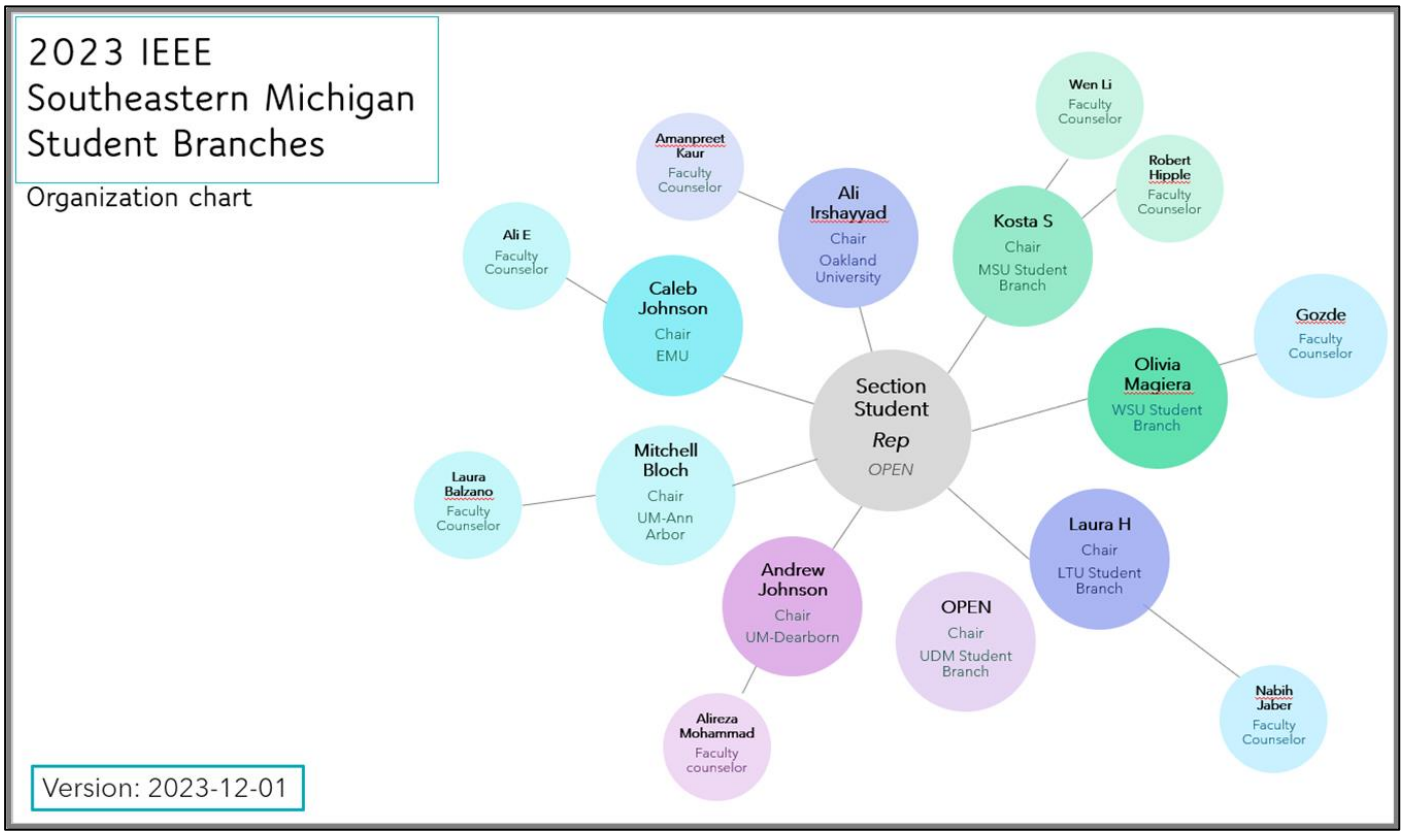
More detailed information on meetings may be found through the IEEE SEM Website: **http://r4.ieee.org/sem/** and clicking on the **SEM meetings list** button near the bottom of the left-hand banner.

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.

Christopher Johnson (Secretary)
Email: secretary@ieee-sem.org

If you wish to download the complete SEM Organization Chart, in PDF format, it will be made available soon at http://r4.ieee.org/sem/ . In the meantime, you may use the diagram below (recently refreshed!)





ExCom Meeting Schedule

NOTE: All SEM members are invited to attend ALL ExCom (Executive Committee) meetings:

Below is the 2023 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. Please mark your calendars for the 2023 meetings. Or link your personal calendar to the SEM Web calendar.

Section Administrative Committee (ExCom) Meeting Schedule for 2024: (clickable links)

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**.

ExCom Meeting (all clickable links)	*Date & Start Time, Duration*
Section ExCom Monthly Meeting (virtual) For FEBRUARY	08 Feb 6:30 PM, 1 hour
Section ExCom Monthly Meeting (Hybrid) For MARCH	14 Mar 6;30 PM, 2 hours
Section ExCom Monthly Meeting (virtual) For APRIL	11 Apr 6:30 PM, 1 hour
Section ExCom Monthly Meeting (virtual) For MAY	09 May 6:30 PM, 1 hour
Section ExCom Monthly Meeting (Hybrid) For JUNE	13 Jun 6:30 PM, 2 hours
Section ExCom Monthly Meeting (virtual) For JULY	11 Jul 6:30 PM, 1 hour
Section ExCom Monthly Meeting (virtual) For AUGUST	08 Aug 6:30 PM, 1 hour
Section ExCom Monthly Meeting (Hybrid) For SEPTEMBER	12 Sep 6:30 PM, 2 hours
Section ExCom Monthly Meeting (virtual) For OCTOBER	10 Oct 6:30 PM, 1 hour
Section ExCom Monthly Meeting (virtual) For NOVEMBER	14 Nov 6:30 PM, 1 hour
Section ExCom Monthly Meeting (In Person) For DECEMBER	12 Dec 6:30 PM, 2 hours

Christopher Johnson (Secretary)
Email: secretary@ieee-sem.org

Section Administrative Committee (ExCom) Meeting Schedule for 2024: (screen snapshot)

IEEE vTools EVENTS

VTOOLS SEARCH MY EVENTS MANAGE EVENTS API ABOUT CONTACT

IEEE

SEARCH EVENTS

Learn how to integrate Event notices with your website
Hey! I want the old Search page.

Search Options | Advanced Search | Clear Search

Search Term: section excom

Organizational Unit: R40035 - Southeastern Michigan Sect

Date Range: Upcoming

Search

Showing 12 of 12 upcoming events, based on search criteria.

Title	Date	Host	Location	Options
SEM Section ExCom Monthly Meeting (virtual) For JANUARY 2024	11 Jan 2024 06:30 PM	R40035		View
SEM Section ExCom Monthly Meeting (virtual) For FEBRUARY 2024	08 Feb 2024 06:30 PM	R40035		View
SEM Section ExCom Monthly Meeting (Hybrid) For MARCH 2024	14 Mar 2024 06:30 PM	R40035	Southfield, Michigan	View
SEM Section ExCom Monthly Meeting (virtual) For APRIL 2024	11 Apr 2024 06:30 PM	R40035		View
SEM Section ExCom Monthly Meeting (virtual) For MAY 2024	09 May 2024 06:30 PM	R40035		View
SEM Section ExCom Monthly Meeting (Hybrid) For JUNE 2024	13 Jun 2024 06:30 PM	R40035	Southfield, Michigan	View
SEM Section ExCom Monthly Meeting (virtual) For JULY 2024	11 Jul 2024 06:30 PM	R40035		View
SEM Section ExCom Monthly Meeting (virtual) For AUGUST 2024	08 Aug 2024 06:30 PM	R40035		View
SEM Section ExCom Monthly Meeting (In Person) For SEPTEMBER 2024	12 Sep 2024 06:30 PM	R40035	Southfield, Michigan	View
SEM Section ExCom Monthly Meeting (virtual) For OCTOBER 2024	10 Oct 2024 06:30 PM	R40035		View
SEM Section ExCom Monthly Meeting (virtual) For NOVEMBER 2024	14 Nov 2024 06:30 PM	R40035		View
SEM Section ExCom Monthly Meeting (In Person) For DECEMBER 2024	12 Dec 2024 06:30 PM	R40035	Southfield, Michigan	View

Editorial Corner

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

Comments and suggestions may be sent to the editorial team at wavelengths@ieee-sem.org
OR
sharan.kalwani@ieee.org
d.romanchik@ieee.org
nilesh.dudhaia@ieee.org
k.williams@ieee.org
cgjohnson@ieee.org
lunnmalcolm@me.com
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 hears it, how do you know it actually fell??"

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

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.

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

Sharan Kalwani,
Chair, IEEE SE Michigan Education Society Chapter
Vice-Chair, IEEE SE Michigan Computer Society Chapter
Co-Editor, Wavelengths,
2018~2019~2020~2021~2022-2023

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

Southeastern Michigan Section Website
http://r4.ieee.org/sem/

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

Section Website Event Calendar
(Select the "SEM Calendar" button - top row)

SEM Facebook Page
(Select the "f" button under the top row)
https://www.facebook.com/groups/ieeesemich

SEM LinkedIn Page
(Select the "in" button under the top row)
https://www.linkedin.com/groups/1766687/

SEM Twitter Account (new)
(Select the "" button under the top row)
https://www.twitter.com/ieeesemich

SEM Collabratec *Community* Page
https://ieee-collabratec.ieee.org/app/section/R40035/IEEE-Southeastern-Michigan-Section

SEM Collabratec *Workspace* Page
https://ieee-collabratec.ieee.org/app/workspaces/5979/IEEE-Southeastern-Michigan-Section/activities

SEM Instagram (new)
https://www.instagram.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 web page (top banner)

Section Officers

Section Chair
Sharan Kalwani

Section Vice-Chair
Aneesh Mathai

Section Secretary
Christopher Johnson

Section Treasurer
Ramesh Sethu

Standing Committees:

Section Adviser
Mohamad Berri

Wavelengths Editor
Sharan Kalwani

Educational Committee
Anthony Will (Chair)

Finance Committee
Subra Ganesan (Chair)

Membership Development
Mohamad Berri (Chair)

Awards & Nominations
Jerry Song (Chair)

PACE
Sharan Kalwani (Chair)

Student Activities
Michael Anthony & Hafeez Jimoh (Co-Chairs)

Student Mentors
OPEN

SECTION Student Rep
OPEN

Technical Activities
Jeffery Mosley (Chair)

Information Management
Karthick Rajagopal, Naveen Bonagiri, Kimball Williams (Co-Chairs)

IEEE Southeastern Michigan

Electrical and Electronic Engineers Creating Our Future

IEEE Southeastern Michigan

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

Leadership Meetings

SEM Executive Committee Monthly Teleconferences:

- 2nd Thursday of Each Month @ 6:30 PM
- Check the Section Web Calendar at:
  http://r4.ieee.org/sem/sem-calendar/
  (Select the "SEM Calendar" button in the top row.)

OR

SEM Executive Committee Meetings:

- 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