



Almanack



[IEEE Philadelphia Section Website](#)

Membership in the Following Counties

Pennsylvania: Bucks, Chester, Delaware, Montgomery and Philadelphia.

New Jersey: Burlington, Camden and Gloucester

(Entries are Hyperlinked – point+ctrl+click)

DECEMBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
					* 2017 IEEE WIE Forum East Baltimore, MD	* 2017 IEEE WIE Forum East Baltimore, MD *SPMB17
3	4	5	6	7	8	9
10	11	12	13	14	15	16
		*ADCOM				
17	18	19	20	21	22	23
24/31	25	26	27	28	29	30
End of 2017	Christmas Day					



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ALMANACK

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IEEE Section Night

Meetings are conducted on the 3rd Tuesday of the Month, eight times per year, January through May and September through November.

ADMINISTRATIVE COMMITTEE (ADCOM)

Meetings are conducted on the 2nd Tuesday of the Month: January through June and September through December. Members are welcome to attend the meeting only. Reserve a seat by calling the office the Friday before the meeting. **Phone: 484-270-5136.**

MESSAGE FROM THE CHAIR

Peter Silverberg, IEEE-LSM, P.E.

I looked at the word December. If you know even a little Latin, this is the tenth month. Of course, you know the reason. The Romans gave Julius Caesar and Augustus Caesar the best summer months and pushed the rest down the calendar. That got me thinking about the words behind IEEE. We know that the full name of our association is Institute of Electrical and Electronic Engineers, but where did that come from? I did some digging.



Institute. Definition: A society or organization for carrying on a particular work, as of a literary, scientific, or educational character. Source: 1275-1325; Middle English modifying Latin *institūtus* past participle of *instituere* to set, put up, establish, equivalent to *in* + *-stitū-* (combining form of *statū-*, stem of *statuere* to make stand) + *tus* past participle suffix [1].

Electrical. Definition: Concerned with electricity. Source: It's ultimately from Greek: *elektron* (meaning amber). First used in English by physician Sir Thomas Browne (1605-1682), apparently coined as Modern Latin *electricus* (literally “resembling amber”) by English physicist William Gilbert (1540-1603) in treatise “De Magnete” (1600), from Latin *electrum* “amber,” from Greek *elektron* “amber” (Homer, Hesiod, Herodotus),



Originally the word described substances, which, like amber, attract other substances when rubbed. The meaning “charged with electricity” is from 1670s; the physical force so called because it first was generated by rubbing amber. In many modern instances, the word is short for electrical. [2]

Electronic. Definition: Relating to electrical devices that amplify and process electrical signals. The scientific study of the behavior and design of electronic devices and circuits is called electronics. Source: In 1902, “pertaining to electrons,” 1930 as “pertaining to electronics.” [1]. Electron is a term first suggested in 1891 by Irish physicist G. J. Stoney (1826-1911); electr(ic) + *on* (from the names of charged particles, as ion, cation, anion) with perhaps accidental allusion to Greek *ἤλεκτρον* amber. [1]

Engineer. Definition: a person trained and skilled in the design, construction and use of engines or machines or in any of various branches of engineering. [1]. Source: mid-14 century, *enginour*, “constructor of military engines,” from Old French *engigneor* “engineer, architect, maker of war-engines; schemer” (12 cent.), from Late Latin *ingeniare*; general sense of “inventor, designer” is recorded from early 15 century. A “maker of engines” in ancient Greece was a *mekhanopoios*. [3]

Of. Definition: Expressing the relationship between a part and a whole. [4] Source: Old English *of*, unstressed form of *æf* (prep., adv.) “away, away from,” from Proto-Germanic *af* (source also of Old Norse *af*, Old Frisian *af*, *of* “of,” Dutch *af* “off, down,” German *ab* “off, from, down”). Primary sense in Old English still was “away,” but shifted in Middle English with use of the word to translate Latin *de*, *ex*, and especially Old French *de*, which had come to be the substitute for the genitive case.

And. Definition: Conjunction used to connect words of the same parts of speech, clauses, or sentences that are to be taken jointly. [4] Source: Old English *and*, *ond*, originally meaning “thereupon, next,” from Proto-Germanic **unda* (source also of Old Saxon *endi*, Old Frisian *anda*, Middle Dutch *ende*, Old High German *enti*, German *und*, Old Norse *enn*). Introductory use (implying connection to something previous) was in Old English. Phrase *and how* as an exclamation of emphatic agreement dates from early 1900s. [3]

All these words are important. As far as I am concerned, AND embodies a prime attribute of IEEE — we are connected, no matter what technical specialty defines us this year. And so with that thought, I wish you a good December celebration and a Happy New Year.

[1] Dictionary.com

[2] Quora

[3] etymonline.com

[4] New Oxford American Dictionary



Elevation to IEEE Fellow Grade



Dr. Fauzia Ahmad, currently an Associate Professor in Electrical and Computer Engineering at Temple University, has been elevated to the IEEE Fellow Grade. She is also the Chair of the IEEE Philadelphia Section Chapter of the Aerospace and Electronics Systems Society (AESS).

We congratulate Dr. Ahmad for her accomplishments.

Fauzia Ahmad, Ph.D.

IEEE Fellow is a distinction reserved for select IEEE members whose extraordinary accomplishments in any of the IEEE fields of interest are deemed fitting of this prestigious grade elevation.

IEEE Fellow Grade Description

IEEE Philadelphia Section Annual Awards Nominations

Each year the IEEE Philadelphia Section sponsors the following Awards:

- 1. Benjamin Franklin Key Award**
Information and Nomination
- 2. Philadelphia Section Corporate Technology Innovation Award**
Information and Nomination
- 3. Philadelphia Section Engineer of the Year Award**
Information and Nomination
- 4. Young Electrical Engineer of the Year Award**
Information and Nomination



ACE MENTOR PROGRAM

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EASTERN PA





THURSDAY FEBRUARY 15, 2018

6:00PM REGISTRATION + NETWORKING

421 NORTH 7TH STREET | 5TH FLOOR
PHILADELPHIA, PA 19123

Tower Above the Competition!





Test your steady hand and sense of balance by playing Giant Jenga with your friends in the design and construction industry! Just like the tabletop game only super-sized. The tallest tower winner gets bragging rights.

The winner of the tournament will also have the opportunity to name an ACE Scholarship - which will be presented at the 17th Annual ACE Scholarship Breakfast on May 23, 2018.

Proceeds from our Giant Jenga Tournament will go to scholarships for our current High School students - AND - ACE Alumni currently enrolled in school and focusing on an A-C-E related career path.

Help us **ENGAGE, EXCITE and ENLIGHTEN** students about the design + construction industry!



Teams fill quickly - Register Today!



The ACE MENTOR PROGRAM of EASTERN PA is an affiliate of a national non-profit organization. The mission of ACE (Architecture, Construction, Engineering) is to engage, excite, and enlighten high school students to pursue careers in the integrated construction industry through mentoring and to support their continued advancement in the industry through scholarships and grants. Students are recruited from both public and private high schools throughout Philadelphia and the suburbs, with special efforts made to reach the traditionally underrepresented populations of women and minorities.

FOR MORE INFORMATION, please contact our Affiliate Director Tiffany Millner at easternpa@acementor.org!

VISIT OUR BLOG!

Stay Connected



36 South 18th Street Philadelphia, PA 19103 · 215.820.8929



OBITUARY

Ernest B. Cohen, P.E., Ph.D.

Ernest Cohen passed away September 25, 2017. He was born in June 1932 in New York City. He attended the Bronx High School of Science, where he met his future wife, Elaine. They both attended Cornell University, where Dr. Cohen studied Math and Physics, and then obtained an MA degree in Industrial Psychology. In 1955, he became a computer programmer. After several years of computer work, he became an aerospace systems engineer. During this time, he obtained his Ph.D. in Electrical Engineering from the University of Pennsylvania. In his subsequent career he worked in a range of fields including stints as a management scientist in the petroleum industry, an electrical engineer for the construction of a coal-fired power plant, teaching Electrical Engineering at Wilkes College and as an environmental scientist for the NJ Department of Environmental Protection.

Dr. Cohen thought deeply on issues of energy, the environment, and the societal impact of

technology. He wrote a novel, RIF, *Reduction in Force*, to expound his philosophy. In 1985, he and Elaine founded the Community of Families (Kehillat Mishpakhot) to experiment in community dynamics towards sustainability. In 1990, they formed Sustainable Society Action Project (SSAP) which organized 15 annual conferences on sustainability at universities in the Philadelphia area.

Dr. Cohen wrote a monthly opinion column for the online *Almanack* for electrical engineers, and his letters to the editor were frequently published in the *Philadelphia Inquirer*. He was an active synagogue member throughout his life, and combined his support for the environment and the Jewish community by sponsoring energy efficiency improvements. In addition to his wife Elaine he is survived by children Beth Cohen (Tophier Cooper), Art Cohen, Robin Cohen (Nathan Birnbaum), and Naomi Cohen (Alexander Botwinik) and 7 grandchildren.



PHILADELPHIA SECTION

NOTES

IEEE PHILADELPHIA SECTION OFFICERS

Chair: Peter M. Silverberg, P.E.: psilverberg3@comcast.net

Vice Chair: Mark Soffa: msoffa@kns.com

Treasurer: Robert Johnston: rlj1620@gmail.com

Secretary: Chris Vaile: cvaile@burns-group.com

Past Chair: Philip Gonski, P.E.: philip.m.gonski@ieee.org

ADMINISTRATIVE COMMITTEE (ADCOM)

ADCOM meets the second Tuesday of the month at the Sheraton University City, 3549 Chestnut St, Philadelphia, PA 19104. Members are welcome to attend. If you want to attend, reserve a seat by calling the IEEE Section Office by the Friday before the meeting.

DIECTORIES

[Link to ADCOM Members](#)

[Link to SECTION Chapters](#)

ALMANACK STAFF

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The IEEE Philadelphia Section encourages placement of technical, professional, promotional and commercial advertisements. The Almanack is published ten times a year and is read by approximately 4,000 members in over 150 key industries.

The following rates are designed for the occasional advertisers. A more comprehensive set of benefits is offered in the Sponsorship Program (next page).

Almanack - One Month Full Page: \$200.-

Website – One Month Full Page: \$200.-

Email Blasts – One Time Full Page: \$200.-



PHILADELPHIA SECTION SPONSORSHIP PROGRAM

Contact: sec.philadelphia@ieee.org

	Platinum	Gold	Silver	Bronze
Cost per Year	\$3,500	\$2,500	\$2,000	\$1,000
Awards Banquet¹	<ul style="list-style-type: none"> • Full Table-10 tickets • Full page Awards Brochure • 6-ft Exhibit Table 	<ul style="list-style-type: none"> • 6 tickets • Half page Awards Brochure • 6-ft Exhibit Table 	<ul style="list-style-type: none"> • 4 tickets • Quarter page Awards Brochure • 6-ft Exhibit Table 	<ul style="list-style-type: none"> • 2 tickets • Quarter page Awards Brochure
IEEE Almanack²	12 Months Full Page	9 Months Full Page	6 Months Full Page	3 Months Full Page
IEEE Website²	12 Months Full Page	9 Months Full Page	6 Months Full Page	3 Months Full Page
IEEE Email Blast²	12 Months 4 Times / month Full Page	9 Months 4 Times / month Full Page	6 Months 2 Times / month Full Page	3 Months 1 Time / month Full Page

NOTES

¹ **The Awards Banquet is held annually at the prestigious Union League of Philadelphia.** The Awards Banquet is a major social occasion, recognizing those honored by the Institute & the Section for their contributions & those honored by organizations with mutual interests of IEEE.

² **Advertisement(s) are prepared by the Sponsor and can contain links to the Sponsor's website and/or specific events.** Advertisement(s) can be different one for each month of benefit or the same for one or more months.

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College of Engineering



Department of Computer and Information Sciences

SERC (035-10)
1925 N. 12th St.
Philadelphia, PA 19122
215-204-8450

Non-Tenure Track (Instructional) Faculty Positions Computer & Information Sciences

The Department of Computer and Information Sciences (CIS) invites applications for multiple non-tenure-track, open rank, full-time faculty positions in the Department of Computer and Information Sciences at Temple University. We are interested in talented and dedicated educators and scholars who can contribute to our undergraduate and graduate academic programs. CIS has a growing and vibrant student population, with the number of undergraduate majors close to 1,000 and the number of graduate students over 100. Our flagship undergraduate majors include B.S. in Computer Science, B.S. in Information Science and Technology, and a joint B.S. in Math and Computer Science. CIS has several new programs including a B.S. in Data Science, a B.S. in Computer Science and Physics, a certificate in Computer Security and Digital Forensics, a certificate in Data Science, and a certificate in programming.

Our needs range from general education and introductory programming courses to core computer and information science courses to specialized upper level and graduate courses. We are continually revising and improving our academic programs and are particularly interested in hiring faculty that will help us further extend the quality, depth, and breadth of our curriculum. This position can be attractive for several types of candidates. Among them: fresh Ph.D. degree holders in computer science and related disciplines that are particularly interested in education, or want to sharpen their teaching skills, while having an opportunity collaborate with the world-class researchers at CIS, Temple, and the regional institutions and industry. Non-doctoral degree holders with industrial experience and passion and talent for teaching will find a welcoming environment at Temple to grow and impact the lives of our diverse student population. We are particularly interested in candidates with extensive industrial experience in the full software development life cycle, development methodologies and quality assurance for our senior capstone courses.

Temple offers competitive salaries and excellent benefits. It is located in the heart of Philadelphia, a thriving metropolis known for its arts, culture and history, and being one of the most affordable large cities in the Northeast. Temple University is a Carnegie R1 (highest research activity) institution that serves more than 39,000 students and places among the top 60 public schools by both the U.S. News and Wall Street university rankings.

Applications should include a curriculum vitae and a statement of recent achievements and teaching goals. Candidates should also have three reference letters sent directly. Please submit applications online at <https://academicjobsonline.org/ajo/jobs/9316>. Review of candidates will begin immediately and will continue until the positions are filled. For further information check <https://cis.temple.edu>. Temple University is an equal opportunity, equal access, affirmative action employer.

2017 IEEE WIE FORUM USA EAST

Call for Papers & Participation



November 30 – December 2, 2017 Baltimore, MD

Presentation & Paper Topics

- Mentoring the next generation of female leaders
- Strategies for increasing equity in power and decision making
- Women as leaders in education, industry, and government
- Development: communication skills in written and spoken word, effective dialog
- Cross-cultural aspects of leadership
- What it takes to be a great leader - qualities that all successful leaders share
- Shaping the future by female leaders
- Training vs inherent skills: can leadership be learned?
- Work-Life balance: family systems traditions and changes
- Leadership development for women: overcoming stereotypes
- The design, implementation, and evaluation of leadership from a structural perspective
- Helping girls and young women become leaders - motivating to empower, empowering to motivate
- Exploring the attrition gap - why do women leave the engineering field and what can be done to prevent it

Not a WIE member?
Our active community of female and male engineers is involved in career building, networking, and community outreach.

Join Now

Submission Deadline

Presentation only: Title and topic abstract suitable for program (up to 150 words), and an extended abstract for evaluation (up to 2 pages)

Presentations with paper submission: Title and topic abstract suitable for program (up to 150 words), and publication-ready paper (up to 8 pages)

Deadline for all submissions: 24 July 2017

Email: R1R2WIEForum@gmail.com with paper and presentation abstracts

For more information, visit:

<http://sites.ieee.org/wie-forum-usa-east/calls-for-participation/>



Seventh Annual

IEEE Signal Processing in Medicine and Biology Symposium (SPMB17)

Saturday, December 2, 2017

Temple University, Philadelphia, Pennsylvania

IEEE SPMB17 is a regional symposium intended to provide a highly interactive forum where bioengineering and signal processing researchers can collaborate on emerging trends in signal processing. We expect approximately 125 researchers to attend. We specifically encourage graduate students to attend and present their thesis or dissertation research. This is an excellent opportunity to network with leading professionals in your field and to form new collaborations.

Signal processing plays a vital role in applications ranging from medical electronics to data mining of electronic medical records. The enormous amounts of data that can be acquired from devices are enabling a new generation of technology based on big data. This symposium is intended to bring together a wide range of professionals interested in applications of signal processing medicine and biology. The symposium is sponsored by IEEE-USA, IEEE Region 2, IEEE Region 2 Philadelphia Section, Temple University, the Neural Engineering Data Consortium and NYU Polytechnic School of Engineering.

The symposium will consist of two plenary talks, two oral sessions and two poster sessions. Exhibits and demonstrations are encouraged as well. Interested parties should contact the conference organizers at help@ieeespmb.org for further details. Please consult our [conference archive](#) for additional information about the history of this conference.

Symposium Topics:

Traditional signal processing topics include:

- Signal analysis (e.g., EEG, ECG, EMG)
- Medical imaging (e.g., MRI, fMRI)
- Machine learning, data mining and classification
- Big data resources and applications
- Signal processing methods in bioinformatics
- Linear, nonlinear, and adaptive filtering and prediction
- Time-frequency and non-stationary signal analysis

Applications of particular interest this year include:

- Electronic medical records
- Wearable healthcare devices
- Data mining and analytics in healthcare
- Security and reliability in wireless medical technologies
- Biomedical nanosensors and wireless technologies
- Biomedical instrumentation and electrical stimulation

If you have questions about the relevance of a planned submission, feel free to contact the technical committee at help@ieeespmb.org for guidance.

Paper/Abstract Submission:

Presenters may choose to submit to one of two peer-reviewed tracks:

- (1) Paper: An original four to six-page paper for oral presentation.
- (2) Poster: A one-page abstract that will be presented as a poster.

All papers and abstracts are indexed in IEEE Xplore (search for "IEEE SPMB").

Papers/abstracts can be submitted via email to submit@ieeespmb.org. Papers must be prepared using the standard IEEE conference paper template (see [IEEE Templates](#) for more information.)

Important Dates:

Submission	Sept. 1, 2017
Notification	Oct. 1, 2017
Early Registration	Nov. 1, 2017
Final Program	Dec. 1, 2017

Organizing Committee:

General Chairs:

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Contact: help@ieeespmb.org

