



Almanack



[IEEE Philadelphia Section Website](#)

Membership in the Following Counties

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

New Jersey: Burlington, Camden and Gloucester

September 2018

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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

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 Friday before the meeting. Phone: 484-270-5136.

IEEE SECTION NIGHT

Philadelphia Section Meeting Sponsored by:

Magnetics (MC) and Reliability (R) Societies
Chapters

When:

Tuesday, September 18, 2018

Dinner at 6:00 PM,

1st Speaker at 7:00 PM.

Where:

Sheraton University City,

3549 Chestnut St,

Philadelphia, PA 19104

(215) 387-8000

Note: In the event of bad weather please call the Sheraton after 1:00 PM the day of the meeting and ask the front desk if the meeting has been canceled.

- Meal Cost: \$25 (students \$15). The meal cost is \$40 but it is subsidized by the IEEE Philadelphia Section.
- You can attend the talks only for free (with no dinner), however, we ask that you register.
- Parking is paid by the IEEE Philadelphia Section, make sure you have your parking ticket stamped at the meeting.

[Registration Link](#)

Or call (484) 270-5136 or email the section office: sec.philadelphia@ieee.org

PROFESSIONAL DEVELOPMENT HOURS (PDH)

PDH Certificates are free for IEEE members. For non-members, the cost is \$9 per certificate. You can pay during registration or by check at the meeting.



First Talk

(Almost) Everything you know about Electromagnetic Theory is Wrong.

Jack Nachamkin

Abstract: Electromagnetic theory is taught at most levels based on Maxwell's equations. Derivations of the occurrences of currents and charges at surfaces generally do not take into account the mechanical and kinematic electromagnetic interactions with matter. The case will be made that Classical electromagnetic theory is incomplete and can lead to wrong results and even wrong intuition. The axioms to be discussed link electromagnetism to materials and the Newtonian mechanics of matter. Interesting examples of non-intuitive results that are undisputedly physical and describe real scenarios will be demonstrated.

Biography: Jack Nachamkin is a retired physicist, now an organic farmer, living in Glen Mills Pennsylvania. He began his career as post-doctoral fellows at Atomic Energy of Canada and Kansas University. As a nuclear physicist in Los Alamos he was in charge of a small group that incorporated physics and mathematics into codes he wrote to describe fusion devices. In addition, he worked on superconducting magnets, vacuum electronics, and electric vehicles. Leaving Los Alamos, he worked for Exxon Enterprises in Palo Alto California as a colloid chemist and designer of miniature electronic structures.

At Lockheed Missiles and Space, he was the Principal Investigator on a large theoretical radar project. At McDonnell Douglas in San Diego he continued his radar work and was group leader for the radar theory section. Working for the Air Force on a



Fellowship at Edwards Air Force Base he investigated "anomalous phenomena" and evaluated new claims for the Air Force Office of Innovative Technology on the West Coast. He developed a new theory of ball lightning. At Martin Marietta in San Diego he worked on radar, sonar, and aspects of signal processing applied to radar signatures. At Boeing in Philadelphia, he worked on protection of aircraft from the effects of lightning, writing the first computer code to describe entire airframes struck by lightning. Jack Nachamkin has a number of patents in areas of electronics, physics, solar energy, and radar. He has written peer-reviewed papers in mathematics, nuclear physics, and the aspects of electro-mechanical plasma physics allowing a type of ball lightning to evolve. He has awards for his work from Lockheed, Boeing, and was voted an Exxon Enterprises Fellow. He won a Benjamin Franklin Key award from The IEEE for his lightning work. At present he runs J&J Farm in Glen Mills, and any Farmers Market he can get into.



Second Talk

Building Automation and Integration Design, Good, Better, Best Practices

Robert Lutz, P.E., CxA, LEED AP

Abstract: Building Automation & Controls Integration detailed designs should not be left to the contractors. A process for design will be discussed, along with the requisite skills to produce an integrated controls design that is robust and reliable with repeatable performance. Ultimately this represents a lower monetary risk for the contractors, and better performance of building systems that ultimately result in a more satisfied Owner and client.

Biography: Robert Lutz is the Vice President of Lutz Engineering, Inc. - a mechanical design firm with a focus on facility automation / integration, mechanical renovations, building system commissioning, and



energy projects. Before starting Lutz Engineering in 1997, he developed sales and engineering software for a commercial building automation manufacturer, and managed engineers and programmers for a building automation contractor. Prior to his work in commercial contracting and construction, Mr. Lutz was a project engineer for Thiokol Corporation designing solid propellant rocket motors and gas generators for commercial and military applications.

He holds a BS in Mechanical Engineering from the University of Maryland, and an MS in Mechanical Engineering from Drexel University.



MESSAGE FROM THE CHAIR

Peter Silverberg, IEEE, LSM, P.E.



Summer is a long gap in local IEEE activity. A few things go on even without formal meetings. Bob Johnston and I and Marvin Weilerstein had a pile of correspondence with the auditors in Piscataway. We passed the audit but with advice on where to improve next year. No one realizes how hard it is to be Treasurer in a large section, but Bob gets it done. We should all thank him.

First event of the new month is a tour of the Mussel Hatchery on Sept. 6. Our Life Members are part of the tour group along with ECP and PSPE. I have not seen many notices, which makes me suspect capacity is reached.

Late in August, we held a workshop to help members advance to Senior Member. Both the applicants and the references have to complete forms. We should expect new senior members over the next three months when processing is complete. You don't have to wait for a workshop to advance. The section has a cadre of references always ready to work with you.

Headquarters changed its computer program of member information from SAMIEE to

OU Analytics. IEEE is complying with an EU privacy directive worldwide rather than keeping it in Region 8. This may affect some information searches. Such is progress.

The Section earned a banner for meeting membership goals. The story is on the website and inside this issue. I have to thank everybody because this was a real group effort.

Our office relocated within Bala Cynwyd. If you have not changed your address book, do it today. The phone and email stayed the same.

Now, I am going to expend words on chapter finances and activity. Chapters and affinity groups are expected to hold at least two meetings a year. When this happens and the Vtools filing is correctly done, IEEE will in the next year rebate \$200 to the section for chapter use. The section also adds \$200 to the budget item. If the chapter holds only one meeting, the rebate is zero, but the section is willing to finance \$200 to get the unit more active. If no meetings, we get a threat to disband the unit.

All chapters (chairs pay attention) should strive to get two meetings. For auditing purposes, should be done by November 30. If you are not fulfilling this now, **get moving**, as



there are only three months left. There is flexibility as to time and place, and attendance does not have to be large. If you need help, reach

out to me, the office, Marvin Weilerstein, Fulvio Olivetto or Bryan Weaver.

Finally, the IEEE Philadelphia Section Received an Award for Outstanding Membership Recruitment and Retention Performance, due to the Section meeting the membership recruitment and retention goals.





PSPE Reporter

The Pennsylvania Society of Professional Engineers (PSPE) is proud to announce that **Joseph F. Maida, PE**, has been named **PSPE 2018 Engineer of the Year.**

Joe Maida has been a strong PSPE advocate since joining NSPE and PSPE in 1976. Mr. Maida knows firsthand the training and leadership regimen found in PSPE. He served as a Board Member and Chapter President in two of PSPE's chapters, Valley Forge and Philadelphia. Mr. Maida has encouraged his employees to not only join NSPE and PSPE but also to be active in these organizations. Maida Engineering has had four PSPE chapter presidents, PSPE board members, a PSPE state president, an NSPE board member and an NSPE president...all with his support and encouragement.

Mr. Maida has made presentations at PSPE annual conferences and continuing education events. In addition, he is active in NYSSPE's Practicing Institute of Engineering (PIE) and regularly reviews presentations to assess if they qualify for PDH credit for engineers licensed in New York. He has been instrumental in the success of the PSPE Education Committee. Mr. Maida is a member of the Philadelphia Section of the IEEE and has presented many programs at local meetings on a variety of professional and technical topics. Mr. Maida is a member of the Engineers Club of Philadelphia, for which he served on its board for several years.

PSPE is looking forward to recognizing and celebrating Mr. Maida's outstanding service to both PSPE and the engineering industry. We will hold an awards banquet on Friday, September 14 at the Holiday Inn Johnstown Downtown, in conjunction with the PSPE 2018 Conference. See you there too!

[See Complete Conference Details](#)

Johnstown is located just 70 miles east of Pittsburgh (an easy drive on U.S. Route 22), less than a half-hour north of the Somerset Exit of the Pennsylvania Turnpike, and less than an hour from the Bedford Exit.

Upcoming Events

September 12-15 PSPE 2018 Conference @ Holiday Inn Johnstown

September 15 PSPE Board of Directors Meeting @ Holiday Inn Johnstown

November 8-10 NSPE Northeast Region Conference @ Crowne Plaza King of Prussia



Women in Engineering (WIE)

What's Ahead and What We Did:

IEEE WIE Chair: Kate McDevitt

Coming up: September 10th is almost here! We will be at the Double Deck (upstairs) for our first meeting after the summer break on Monday, September 10th, 415 E. Baltimore Pike, Media, PA.

I do hope you all had a fun, healthy, active summer and plan to attend to catch up with us. Free pizza will be served.

The additional meetings this fall are as follows: Monday, October 8, Monday, November 12 and no meeting in December.

Our IEEE Philadelphia Section just was recognized for increasing our memberships over at three-year period! Congratulation to all the societies, chapters and affinity groups that made this possible! You will see a new icon attached to all correspondence:



2018 Outstanding Section Membership
Recruitment and Retention Performance

Philadelphia Section



Brandywine Museum Tour, Sunday, September 16, 2018 12 noon. We will tour this lovely Art Museum featuring the Andrew Wyeth family and others. Tea & snacks will follow at the Terrain Café in Concordville, Town Centre, 914 Baltimore Pike, Glen Mills, PA 19342

Natural Wonders: The Sublime in Contemporary Art

Artists since antiquity have depicted, and often mimicked, the splendors of nature. Throughout the centuries, such representations have embodied the shifting relationship between humans and their natural surroundings.

RISE will again take place on Saturday, October 6, 2018 at the Pyramid Club of Philadelphia. This is for and sponsored by the Young Professionals and Women in Engineering. This event is designed to aid individuals early in their career. Visit to review and register here:

<http://sites.ieee.org/r2rise-2018/>

History. We are working on a plaque location for Grace Hopper and we will be having a

Nature has thus proved to be a fertile terrain for projecting a culture's desires, fears, whimsy, or will.

This exhibit will showcase the work of thirteen American artists who engage nature in all its fierce magnificence. Beyond just highlighting nature's beauty, the featured artists—Suzanne Anker, Lauren Fensterstock, Patrick Jacobs, Maya Lin, Roxy Paine, Miljohn Rupert & Ulrik Heltoft, Diana Thater, Jennifer Trask, Mark Tribe, Kathleen Vance, T.J. Wilcox, and Dustin Yellin—also hint at the more disquieting aspects of the natural world.

Terror Behind the Walls – Tickets need to be ordered prior to the event on Thursday, October 11th, 2018

<https://www.easternstate.org/halloween/schedule>

More information to follow.

Celebration event with the IEEE History Commission when plans are finalized.



Looking back:

We were very busy the first half of the year with meetings, social events and volunteering. The Eagles Tour was a big success for Young Professional and Women in Engineering thanks to the work of Vice Chair of WIE and Young Professional member, Maria Tabbut. We had over thirty members and friends turned out.

We had many volunteers for the First Annual Philadelphia Mini Maker Faire. We processed guests and manned the front table. Nannette D'Imperio and Kate McDevitt sold Tee Shirts at the souvenir tent. Later, Peter Silverberg and wife Susan helped at the IEEE table. John Iannuzzi and Ken Paist demonstrated soldering to young and old. Everyone who stopped by had a keen interest in the soldering process. Holly Cyrus and Lee of IEEE South New Jersey joined us in volunteering, too.

Women in Engineering awarded certificates to the new members at Penn State

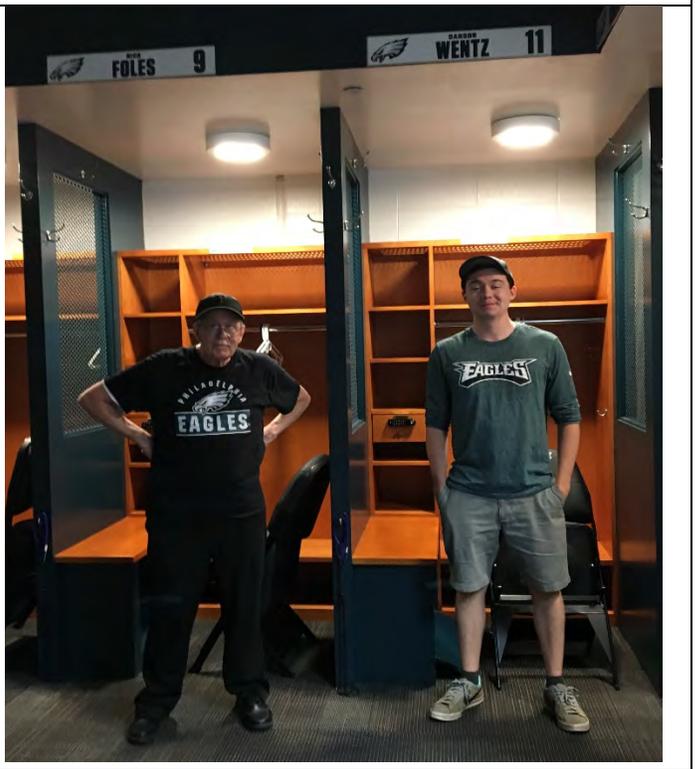
Brandywine for a very successful WIE Speaker Series this past Spring and having an active IEEE and IEEE WIE Branch the past year and a half. They include: Nannette D'Imperio, Helia Aghababazadeh, Betsy McCole and new comer, Jaemi B. Hammond.

A special achievement award was also presented to Ms. Torrie Griffiths, who did an amazing job creating and inspiring students at Rowan to grow IEEE WIE Branch to one of the most active groups in our Region. They have had many events to benefit young middle school students in STEM projects. We supported Rowan for the Wearable Mechanic Fashion Show. We wish the new Rowan WIE Branch Chair, Alexandra Haden, well.

TechGirlz sponsored a code camp at Villanova University and WIE was there to support and volunteer for the STEM project for middle school students. Four IEEE WIE members participated for the camp that ran for a week.



WIE Visit to the Philadelphia Eagles





IEEE Philadelphia Section – WIE Grace Hopper Project



Grace Hopper: Computer Museum



Grace Hopper and UNIVAC



Grace Hopper

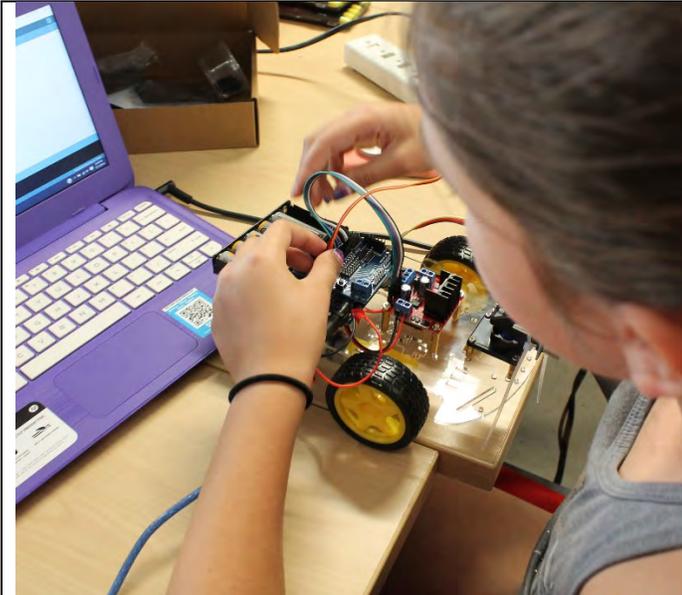


WIE Previous Meetings





WIE Previous Meetings





Attention Electrical and Lighting Professionals!

Update on the Latest Editions of Two Sections of the Mandated Energy Code

Speaker(s): Carl Watson, P.E., MBA, LC,

Thursday, September 27 @ 5:00 pm - 8:00 pm

Recent Legislation in Harrisburg, and in Philadelphia, is a major Game Changer for the Regional Design Professional Community.

Abstract: Energy codes are playing an increasingly significant and far-reaching role in influencing the lighting and electrical design process, particularly concerning environmentally sustainable buildings. This presentation examines the growing impact of these energy efficiency regulations on most new construction projects, as well as on additions, alterations and renovations of existing non-residential buildings. It includes an insightful review of the major mandatory energy code requirements, plus an overview at the two alternative prescriptive path approaches to achieve full compliance for interior lighting and for exterior lighting. Several straightforward examples are provided to illustrate the applicability of the energy code as an integral part of the design process.

This course will address an in-depth survey of the extensive electrical and lighting provisions of the ASHRAE / IES / ANSI Standard 90.1 and their crucial role in the electrical and lighting design process, especially for “sustainable” or “green” buildings. A concise discussion concerning the relationship between Standard 90.1 - 2007

and IECC - 2009 (The International Energy Conservation Code) will be presented; along with the multiple contrasts between these relatively similar, yet slightly different, legislated energy efficiency mandates. This intensive course will provide a detailed incremental examination of the specifics of the electrical and the lighting requirements of the 2007, the 2010, the 2013, and the 2016 editions of Standard 90.1.

Biography: Carl M. Watson, P.E., MBA, LC is a broadly experienced, knowledgeable and seasoned consulting engineer who specializes in developing and implementing highly effective lighting design and energy cost reduction projects that optimize aesthetics, energy efficiency, and maintainability. He is a Registered Professional Engineer, Licensed in Pennsylvania and he was one of the first engineers in PA to attain the demanding Lighting Certified [LC] credential, a professional designation of the National Council on Qualifications for the Lighting Professions [NCQLP]. Previously, he also achieved the rather unique Certified Lighting Efficiency Professional [CLEP] designation



granted by the Association of Energy Engineers [AEE].

Mr. Watson has been an active member of the Illuminating Engineering Society [IES] for over 40 years. He has served in multiple leadership roles on the IES Philadelphia Section's Executive Board for more than 30 years. In addition, he has been a member of the Institute of Electrical and Electronics Engineers [IEEE] for over 35 years. Mr. Watson currently serves as a member of the Board of Governors of the Electrical Association of Philadelphia [EAP].

Mr. Watson is a recipient of both Section and Regional Awards from the International Illumination Design Awards [IIDA] program created by the IES, which is an annual lighting design project competition. Additionally, he has served on jury panels for either the local IES Section's or the IES Region's IIDA judging process.

Mr. Watson has published articles in Control Engineering and Computer Technology Review, and in national trade publications such as Energy User News (now known as Engineered Systems) and Lighting Design & Application (a monthly publication of the IES). Over several decades, he has conducted numerous training courses for technical and non-technical audiences, both individually, and as one part of a multiple person instructional team, held at local, regional and

national forums. In addition, Mr. Watson was the instructor for a capstone course on lighting and electrical systems design as an Associate Professor in the Architecture Department of the School of Media Arts and Design at Drexel University in Philadelphia, PA.

Mr. Watson's higher education path began with a Bachelor of Science in Electrical Engineering with concentrations in Electric Power and Control Systems.

Mr. Watson's post-graduate degree was attained several years later, during the evenings, while working full-time in as a technical marketing professional, and included a Master of Science in Business Administration with concentrations in Brand/Product Management and Marketing Research. Both degrees were earned at Drexel University.

Reasons to Attend: These extensively revised code provisions, which are much more comprehensive than in the past, affect virtually all new building projects, as well as most renovation projects for existing buildings, throughout PA, NJ, DE and beyond, within the Mid-Atlantic region. It is noteworthy that the State of New Jersey is already enforcing newer versions of Standard 90.1, exclusively.

***CEU's are available at \$5 for non-members and no cost for members.
If you would like a CEU, please select CEU when registering.***

[Register Here](#)

**Location: Burns Engineering
2001 Market Street #600
Philadelphia, Pennsylvania**



PHILADELPHIA SECTION PLANNING CALENDAR

Current Month: September

Date	Activity
September	
September 11	ADCOM
September 18	IEEE Night
September 22	Maker Faire (NYC)
September 24-25	Sarnoff Symposium
September 27	Electrical & Lighting Professionals – Update on the Mandated Code
October	
Oct 3?	IEEE Day
October 9	ADCOM
October 10	Volunteer sign-up mentors for Future City
October 15	Voting closes for section officers
October 15	New members get 15 months by joining in October
October 15	Nominations due for Engineer of the Year (DVEW)
October xx	RISE
October 16	IEEE Night
October 26-27	Electric Expo
Oct. 26 to Nov. 4	ITC Meeting (Phoenix)
October 30	Voting closes for Engineer of the year
November	
November 2	Chairman starts to assemble ADCOM for next year
November xx	WIE Forum in White Plains
November 13	ADCOM
November 20	IEEE Night
December	
December 1	Application due for Region 2 Awards nominations
December 1	Signal Processing in Medicine and Biology Conference at Temple. Dr. Joseph Picone, Chair. Co-Sponsored Philadelphia Section and SPS Chapter.
December 11	ADCOM
December 11	Send sponsorship donation to Del. Valley Eng. Week
December 31	Last Day to pay 2019 dues



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.

DIRECTORIES

[ADCOM Members](#) [SECTION Chapters](#) [Chapter Chairs Responsibilities](#)

ALMANACK STAFF

Publisher: Peter Silverberg, P.E.: psilverberg3@comcast.net

Editor: Michael Mayor, P.E.: michael.mayor.pe@ieee.org

News and notices contact: michael.mayor.pe@ieee.org

IEEE Philadelphia Section Main Office:

11 Bala Avenue, Bala Cynwyd PA 19004, Phone: 484.270.5136

sec.philadelphia@ieee.org

ADVERTISEMENTS – Contact: michael.mayor.pe@ieee.org.

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, Website, Email Blasts

One Month Full Page: \$200.-

Three Months Full Page: \$400.-



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
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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.

Honeywell Performance Materials
Authentication Technologies (HON / PMT / AM / FC / AT)
Ft Washington, PA 19034
Electrical Engineer

Honeywell Performance Materials is a global leader in developing and manufacturing advanced materials, process technologies and automation solutions. PMT's Advanced Materials businesses manufacture a wide variety of high performance products, including fluorocarbons, hydrofluoroolefins, caprolactam, resins, ammonium sulfate fertilizer, phenol, specialty films, waxes, additives, advanced fibers, customized research chemicals and intermediates, and electronic materials and chemicals.

The **Electrical Engineer** will be responsible for electronic design, layout, functional assembly, and testing of optoelectronic sensors for the Authentication Technologies business. The position will be located in **Ft Washington, PA**.

Authentication Technologies (AT) is part of the Fine Chemicals business unit and is a leader in the development of Authentication solutions for banknotes, coins, high-value documents, and materials packaging.

This is an opportunity for an engineer to lead the electronics development of optical sensor products (design through functional assembly). This includes high reliability designs that need to operate in difficult environments. The electronics hardware are mixtures of low-noise analog circuits coupled to digital interfaces and optical source drivers. Work includes low EMI and EMC designs and layouts. Significant hands on efforts are required with good data capture abilities. Many of the sensors are incorporated into customer machines, so the ability to resolve specification issues is important. The engineer must be technically creative and able to work in a collaborative environment with other hardware engineers (optical, mechanical, software).

Responsibilities:

- Leads electrical design and hands-on development efforts in a highly-dynamic team environment
- Develop electrical systems (circuit modeling and layout) using the Mentor Graphics tool, and ability to work on analog to digital interfaces
- Work closely with optical, mechanical, and software engineers to develop robust, high-quality sensor solutions
- Responsible for delivery of one-off prototypes to support business efforts
- Leading electronics through maturation from concept development to engineering to production
- Develops a clear understanding of customer technical requirements, and is able to translate into project plans
- Significant hands on building, testing, and trouble-shooting required
- Modest travel anticipated, including international (< 5%)

“Must Have” Qualifications:

- B.S. degree in Electrical or Electronics Hardware Engineering
- 2 years of experience with the Mentor Graphics or Cadence software package
- 2 years of experience with microprocessors, including firmware programming
- 3 years hands-on experience in analog circuit design with coupling to digital interfaces
- 3 years' experience in EMC and EMI requirements, SMT layout, and building multi-layer PCBs intended for hardware
- Must be eligible for a US security clearance. Strong preference given to individuals who already have a DoD clearance

“Nice to Have” Qualifications:

- M.S. degree in Electronics Engineering
- Experience with LeCroy test gear or digital test equipment
- Six Sigma Training (Green or Black belt)
- Ability to work with minimal supervision

[Information & Application](#)



Salve Regina University

Assistant Professor of Mathematical Sciences

About Salve Regina University:

Salve Regina University, ranked among the best institutions of higher education in the United States by U.S. News & World Report, is a comprehensive Catholic University located in scenic Newport, Rhode Island. Salve Regina offers challenging academic programs in a highly supportive environment and an innovative core curriculum that provides students with a solid foundation and broader perspective. The historic, 75-acre campus enrolls approximately 2,500 men and women and offers Associate, Baccalaureate, and Master's Degrees, the Certificate of Advanced Graduate Study, and two doctoral programs.

Job Description:

The Department of Mathematical Sciences at Salve Regina University invites applications for a tenure track position at the Assistant Professor level starting in the fall 2019 semester. The department offers a major and a minor in mathematics, and an interdisciplinary minor in mathematical finance. Additionally, the department offers courses in the core curriculum and courses that constitute the mathematics, statistics, and computer science components of other programs at the university. The Mathematical Sciences Department is in the process of developing a minor in computer science and a program in data science and analytics.

Duties include teaching mathematics at all undergraduate levels, teaching undergraduate courses in computer science, advising students, mentoring student research, and serving on committees. The successful candidate is expected to engage in research and scholarship with publications in peer-reviewed journals, and/or grant activity, and to participate in university service and university outreach programs.

Requirements:

Candidates must have an earned doctorate in Mathematics or Applied Mathematics, evidence of strong teaching ability, and interdisciplinary interests in computer science, preferably demonstrated by additional credentials in computer science (e.g., baccalaureate or master's degree). While candidates with research interests in any area of mathematics are welcome to apply, the successful candidate will be able to demonstrate an interest and ability to help develop a minor in computer science.

Additional Information:

Salve Regina University offers generous benefits to eligible employees including:

- health and dental coverage
- life insurance
- long-term disability
- 403B plan
- tuition benefits and more

Salve Regina University strives to provide equal opportunity in employment and education to all employees, students and applicants. No employee, student or applicant shall be discriminated against or harassed on the basis of race, color, national and ethnic origin, sex, sexual orientation, gender identity or expression, religion, disability, age, marital or parental status, military or veteran status, genetic information or any other basis protected by applicable federal or state law, in the administration of Salve Regina's employment policies, education policies, admission policies, scholarship and loan programs, athletic and other University administered programs. In accordance with Title IX, it does not discriminate on the basis of sex in any of its educational programs or activities. Salve Regina is also committed to making its programs and campus accessible to its visitors and compliant with all applicable non-discrimination laws.

Application Instructions:

Interested applicants should submit a cover letter, CV, transcripts, teaching statement, research statement, and 3 letters of recommendation. Review of applications will begin on November 15, 2018 and will continue until the position is filled.

Applicants must apply online for any open staff and faculty positions by providing a cover-letter and resume. Pre-employment background checks and reference checks are required of successful candidates. Salve Regina University participates in E-verify.

www.salve.edu

[Benefits Questions](#)

[Application Link](#)

Jessica Gesner

Recruitment and Data Specialist

Office of Human Resources

Salve Regina University

p: (401) 341-2137 f: (401) 341-2921



ITC 2018 Registration Open

Program Preview now Available

International Test Conference, the cornerstone of TestWeek™ events, is the world's premier conference dedicated to the electronic test of devices, boards and systems-covering the complete cycle from design verification, test, diagnosis, failure analysis and back to process and design improvement. At ITC, test and design professionals can confront the challenges the industry faces and learn how these challenges are being addressed by the combined efforts of academia, design tool and equipment suppliers, designers, and test engineers.

ITC 2018 will be held October 30 - November 1, 2018, in Phoenix Arizona at the Phoenix Convention Center.

The preliminary 2018 ITC Program is available at:

<https://easychair.org/smart-program/ITC2018/>

See the accepted papers and abstracts. More content, including invited sessions, panels, and keynote speakers will be posted when available.

Once you look at the program, register for ITC at our [registration page](#)

Then, reserve your hotel room at the [hotel reservation page](#).

Looking forward to seeing you in Phoenix for the 49th **International Test Conference**.

Visit us on our Web Page, <http://www.itctestweek.org>



2018 IEEE WIE FORUM USA EAST

Call for Papers & Participation



November 29 – December 1, 2018 White Plains, NY

Presentation & Paper Topics

- Innovation: Emerging/Future/Disruptive Technical & Entrepreneurial
- Development: Communication skills in written and spoken word, effective dialog
- Empowerment: Women as leaders in education, industry, and government
- Work-Life balance: family systems traditions and changes
- Mentoring women leaders
- Leadership development
- Exploring the attrition gap

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

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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: 25 July 2018

Submit abstracts: <http://sites.ieee.org/wie-forum-usa-east-2018/cfp-abstract-submission/>

For questions, email: R1R2WIEForum@gmail.com



Eighth Annual

IEEE Signal Processing in Medicine and Biology Symposium (SPMB18)

Saturday, December 1, 2018

Temple University, Philadelphia, Pennsylvania

IEEE SPMB18 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. Contributions must follow the approved conference formats. See [IEEE SPMB Guidelines](#) for more information.

Important Dates:

Paper Submission	Aug. 1, 2018
Notification	Oct. 1, 2018
Early Registration	Nov. 1, 2018
Final Program	Dec. 1, 2018

Organizing Committee:

General Chairs:

Joseph Picone (Temple)
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Local Arrangements:

Shawn Fagan (Temple)
Eva von Weltin (Temple)

Web: <http://www.ieeespmb.org/2018>

Contact: help@ieeespmb.org



The 39th IEEE Sarnoff Symposium 2018
New Jersey Institute of Technology Conference Center, Newark, New Jersey, USA
September 24-25, 2018
Sponsored by IEEE Princeton/Central Jersey Section (IEEE Region 1)
<https://ewh.ieee.org/conf/sarnoff/2018/>

Call for Papers

ABOUT IEEE SARNOFF

Since 1978, the IEEE Sarnoff Symposium has been bringing together telecom and communications experts from industry, universities, and governments. The Sarnoff Symposium continues to grow as a premier forum in the northeastern United States for researchers, engineers, and business executives, drawing an attendance from all over the world. Besides technical sessions, the Symposium will include keynotes, invited talks, expert panels, tutorials, demo/exhibits and posters presentations.

SCOPE

The Symposium is soliciting state-of-the-art research papers, panels and tutorial proposals including, but not limited to, the following topics:

4G/5G Communications	Network Analytics and Forensics
Augmented Reality	Network Architecture, Design, and Performance
Blockchain Technology	Networking for Big-Data Analytics
Cloud and data center networks	Network Education for All
Cognitive radio and opportunistic networks	Optical Communications
Communications and Information Theory	Optical Networking
Connecting the next billion – rural networks	Public and Private Cloud Computing
Cyber-physical systems and networks	R/F Communications
Green networking and Sustainability	Self Configuring Networks
Internet-of-Things	Smart Infrastructures, Cities, Communities, Safety
M-Health, E-Health and Smart Health-care	Software-Defined Networks
Mobile Fog and Edge Computing	Standardization Efforts and Needs
Mobile Networks	Security, Trust, and Privacy
Near field communications	UAV, Underwater and Underground Communications
Network Function Virtualization	Virtual Reality
Network virtualization	Wireless Communications and Networks
Networked Applications and Services	Wireless Sensor Networks

SUBMISSION GUIDELINES: Authors must submit their papers using EDAS on or before **Tuesday, May 01, 2018** (<https://edas.info/newPaper.php?c=24545>). All papers will be reviewed for technical content and scope by the technical program committee. Accepted and presented papers will be published in the conference proceedings and will be included in IEEE Xplore. The page limits are SIX (6) pages. Papers should be in PDF format, two columns, font size 10 or greater and compliant with other IEEE Sarnoff Symposium manuscript guidelines, which can be found on the conference website. Submitted papers must be unpublished and not currently under review for any other publication. Authors of accepted papers must sign an IEEE copyright release form and also present their paper at the conference for their paper to be included in IEEE Xplore.

Important Dates:

- * Paper submissions: **May 01, 2018**
- * Notification of acceptance: June 30, 2018
- * Camera-Ready Paper Submission and Author Registration: August 1, 2018
- * Conference dates: September 24-25, 2018

ORGANIZING COMMITTEE

General Co-Chairs: Guiling (Grace) Wang, New Jersey Institute of Technology
Deepak Kataria, IPJunction Inc

TPC Co-Chairs: Miao Pan, University of Houston
Wade Trappe, Rutgers University & WINLAB



2019 American Control Conference: Call for Papers

July 10-12, 2019, Philadelphia Marriott Downtown, Philadelphia, PA (USA) (<http://acc2019.a2c2.org/>)

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Douglas A. Lawrence
Ohio University
dal@ohio.edu

Program Chair

Andrea Serrani
The Ohio State University
serrani.1@osu.edu

Finance Chair

Randal W. Beard
Brigham Young University
beard@byu.edu

Local Arrangements Chair

Garrett M. Clayton
Villanova University
garrett.clayton@villanova.edu

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Elisa Franco
University of California, Riverside
efranco@engr.ucr.edu

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Rensselaer Polytechnic Institute
gongcas@rpi.edu

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The Ohio State University
zhang.491@osu.edu

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LyondellBasell
dennis.williams@lyondellbasell.com

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rfierro@unm.edu

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North Carolina State University
achakra2@ncsu.edu

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Stefano Di Cairano
Mitsubishi Electric Research Laboratories
dicairano@ieee.org

Vice-Chair: Student Affairs

Anouck Girard
University of Michigan
anouck@umich.edu

The 2019 American Control Conference will be held Wednesday through Friday, July 10–12, at the Philadelphia Marriott Downtown, located in the heart of Center City, Philadelphia. Philadelphia is the birthplace of American democracy, and the home to the creation and signing of the Declaration of Independence and the Constitution. It is also the City of Brotherly Love and considered one of the most European-like cities in the USA, captured by the cross-the-street Reading Market and little Italy neighborhood. The city features a cultural diversity of food (and also the original cheesesteak), exhibitions, and museums for all tastes throughout the year, as well as outdoor concerts and festivals during summer.

The ACC is the annual conference of the American Automatic Control Council ([AACC](#)), the U.S. national member organization of the International Federation of Automatic Control ([IFAC](#)). Society co-sponsors of the ACC are the American Institute of Aeronautics and Astronautics ([AIAA](#)), American Institute of Chemical Engineers ([AIChE](#)), American Society of Civil Engineers ([ASCE](#)), American Society of Mechanical Engineers ([ASME](#)), IEEE Control Systems Society ([IEEE-CSS](#)), Institute for Operations Research and the Management Sciences Applied Probability Society ([INFORMS-APS](#)), International Society of Automation ([ISA](#)), Society for Modeling & Simulation International ([SCS](#)), and Society for Industrial & Applied Mathematics ([SIAM](#)).

The 2019 ACC technical program will comprise presentations in regular and invited sessions, tutorial sessions, and special sessions along with workshops and exhibits. Submissions are encouraged in all areas of the theory and practice of automatic control.

KEY DATES

Manuscript Submission: September 17, 2018
Acceptance/Rejection Notice: January 31, 2019
Final Manuscript Submission: March 15, 2019

Call for Contributed Papers: Papers are invited in the form of regular manuscripts. There is no separate short paper format. Papers must conform to the submission policy, detailed on the conference web page. All manuscripts should be written in English, be in a 2-column format, and be 6–8 pages in length, with additional page charges applicable for pages 7 and 8.

Call for Invited Sessions: Invited sessions consist of 6 papers presenting a unifying theme from a diversity of viewpoints. Proposals must clearly describe the motivation and relevance of the session. Proposals must be accompanied by full versions of each paper, which will be individually reviewed together with the proposal itself.

Call for Tutorial Sessions: Tutorial sessions are a special category of invited sessions organized to provide an introduction to a topic of interest. The format is structured around the main tutorial paper (up to 12 pages) and talk (60 minutes) to bring the participants up to speed, followed by three 20-minute presentations (with or without papers of up to 6 pages each) to give a picture of the state of the art. Tutorial sessions involving strong industry and academic collaboration are highly encouraged.

Call for Special Sessions: Special sessions are focused events to spotlight emerging research areas, funding opportunities, and other topics of broad interest to the conference attendees. Examples include industry-led, research sponsor-led, education-themed, and history sessions.

Call for Workshops: Workshops to be held prior to the conference are solicited on all related topics. Proposals for workshops addressing novel control methodologies and nonstandard control applications, as well as workshops with strong tutorial value are encouraged.

Exhibits: Exhibitors are invited to showcase, demonstrate and market control-related publications, software tools, prototypes, educational products, services, and jobs. Exhibits are open throughout the conference to all attendees of the ACC.

Papers and session and workshop proposals must be submitted through the submission website. Submissions must conform to policies given on the conference website: <http://acc2019.a2c2.org/>