



# Almanack



IEEE Philadelphia Section Website

Membership in the Following Counties

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

**New Jersey:** Burlington, Camden and Gloucester

## Summer 2019 - (June, July, August)

(Entries are Hyperlinked: [point+ctrl+click](#))

June						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
	<i>*Last Day</i>	<i>*ADCOM</i>				
9	10	11	12	13	14	15
16	17	18	19	20	21	22
		<i>*GE Relay Sem.</i>		<i>*PCS Chapter</i>		
23/30	24	25	26	27	28	29
July						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
			<i>ACC 2019</i>	<i>ACC 2019</i>	<i>ACC 2019</i>	
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			
August						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



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### ALMANACK

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**Publisher:** Emilio M. Salgueiro

**Editor:** Michael A. Mayor, PE

**Section Office:** [sec.philadelphia@ieee.org](mailto:sec.philadelphia@ieee.org)

### IEEE SECTION NIGHT

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

### ADMINISTRATIVE COMMITTEE

Meetings are conducted on the 2<sup>nd</sup> 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

There are no Section Night meetings in June, July and August. There are, however, other meetings as listed in the calendar.

## Message from the Editor

*Michael A. Mayor, MSE, P.E.*

It has been a great pleasure and professional satisfaction to serve in a variety of positions in the IEEE Philadelphia section. However, after many, many years of working in Industry and as a Consultant, I finally decided to retire. Although, like a colleague of mine told me years ago, I probably will never be fully retired.

To this extent, this is the last Almanack I publish, since I am moving to the Tampa Florida area, where I expect to continue being active in the IEEE Florida West Coast Section and the University of South Florida.

My last day in the IEEE Philadelphia Section is June 30, 2019

I wish you all the best for years to come.

*Note: After June 30, Peter Silverberg, former Chair and past Editor, will be the new editor until a permanent editor is appointed.*

[psilverberg3@comcast.net](mailto:psilverberg3@comcast.net)



## MESSAGE FROM THE CHAIR

*Emilio M. Salgueiro, Chair, IEEE Philadelphia Section*

Dear fellow IEEE Philadelphia Section members, It is my pleasure to communicate with you using this monthly letter. During our last EXCOM I have asked Dr. Li Bai to lead the deployment of the new Awards Committee.



The goals of this newly formed committee will include, but it is not limited to deploy an inclusive Awards program, that will make the submission of nominations online. This will allow every member in the Section to submit nominations for awards. Kudos to Dr. Bai for volunteering for this effort.

A few weeks ago, the Drexel Student Chapter celebrated their first Centennial, members of the EXCOM were invited. I was very well impressed for the organization and the enthusiasm of these students ranging from Freshman to Senior grades. To the soon to be graduated Engineers, my congratulations for a first very important milestone, and I want to welcome them to the next phase in their careers, that is to become members of IEEE Young Professionals.

I want to personally thank Michael Mayor, who has decided to retire and move to warmer lands, for all his outstanding contributions to the Philadelphia Section. Our best wishes to Michael and his family in this new phase of life. Michael, you will be missed!

I hope you all have a safe and enjoyable Summer.

I am very interested in hearing from our members. I am available through email:

[emsalgueiro@ieee.org](mailto:emsalgueiro@ieee.org)

or you can email the IEEE Section office:

[sec.philadelphia@ieee.org](mailto:sec.philadelphia@ieee.org)



# **IEEE Philadelphia Section Merrill W. Buckley, Jr., IEEE Student- Branch Leadership Scholarships**

IEEE Philadelphia Section Office  
111 Presidential Blvd, Suite 231  
Bala Cynwyd, PA 19004  
Tel: 484-270-5136  
E-Mail: [sec.philadelphia@ieee.org](mailto:sec.philadelphia@ieee.org)

## **Description**

The Merrill W. Buckley, Jr, IEEE Student-Branch Leadership Scholarship Program of the Philadelphia Section recognizes IEEE Student Members who have made, and are planning to continue to make, significant contributions to the development, operation, outreach, and/or continuing vitality of their respective Student Branches.

This scholarship is awarded for excellence in Student-Branch (or Student-Branch Chapter or Affiliation Group) leadership in the promotion of technical, professional, educational, and personal development of its student members in IEEE-related fields of interest.

## **Information & Registration**



# **GE Relay Protection Seminar**

## **Tuesday, June 18, 2019, 8 am to 5 pm**

*Penn State at the Navy Yard,  
Building 661 NW Corner of 12th St. and Kitty Hawk  
Ave  
Philadelphia, PA 191212.*

*Presented by*

## **GE Multilin and Advanced Power**

GE Grid Solutions and Advanced Power would like to invite IEEE to our annual Philadelphia seminar.

These seminars cover a variety of topics and are an excellent opportunity to engage with the industries experts on power system design, protection and standards.

The seminars will have Professional Development Hours (PDH's) available with

certificates be issued following the event for those in attendance.

We look forward to seeing you at these events, and please register early as seating is limited.

The event is free of cost, a continental breakfast and lunch will be provided. The seminar qualifies for Professional Development Hours (PDH).

Registration is limited, so sign up today.

**To secure your spot, please register here:**

### **Information and Registration**

**Questions, email to:**

**Mustafa Attia:** [mattia@advpower.net](mailto:mattia@advpower.net)

**Ben Brown:** [bbrown@advpower.net](mailto:bbrown@advpower.net)



# **IEEE Professional Communications Society (PCS) IEEE Philadelphia Section PCS Chapter**

***Tuesday, June 20, 2019 at 5 pm***

**Room 320 Engineering Hall,  
Rowan University**

**201 Mullica Hill Rd, Glassboro, NJ 08028**

***Speaker***

**Dr. Ying (Gina) Tang**

**Professor & Associate Chair**

**Department of Electrical & Computer Engineering**

***Smart Personalized e-Education Development (SPEED)***

**Abstract:** Considerable interest has been devoted to the pursuit of learning and training through, and with, digital games so-called Serious Games (SG), “computer-based games with a primary purpose other than entertainment”. There are many benefits of using SG in education, particularly engagement, motivation and reach. SG makes difficult abstract concepts and large data sets accessible in ways that are more visual, interactive, and concrete, providing an opportunity to gain the attention of students who are not otherwise engaged with the content. The game format provides students with a learning structure and an incentive to develop their skills at their own pace in a

non-judgmental but competitive and often fun environment. Rigorous assessment and personalized scaffolding that are possible in SG allow games to reach students at different learning levels. This talk presents the intellectual merit of the recent development of virtual reality based serious games in various learning and training settings. The talk showcases various design strategies in order to maximize the aforementioned benefits and student achievement. The integration of serious games, artificial intelligence, and cognitive psychology is also explored to present new research challenges and future directions



**Biography: Ying Tang** received the B.S. and M.S. degrees from the Northeastern University, P. R. China, in 1996 and 1998, respectively, and Ph. D degree from New Jersey Institute of Technology in 2001. She is a professor of Electrical and Computer Engineering at Rowan University, Glassboro, New Jersey, USA, and a visiting professor of School of Information Science and Technology at Maritime University, Dalian, China. Her research contributions lie in two broad categories. The first is in the area of discrete event systems, particularly modeling, control and optimization for sustainability. She is the funding chair of IEEE Robotic and Automation Society (RAS) Technical Committee on Sustainable Production Automation and has led the TC to win the RAS CERMA project. The second is in the area of virtual reality and augmented reality. She holds a US patent (U.S. **9,626,568**) for markerless AR in mobile applications. She has successfully integrated serious games with sensor



informatics and machine learning to offer series of educational and training systems to support personalized learning. Such development has been featured many times in newspapers and magazines, including a recent story in 2018 IEEE Women in Engineering Magazine Vol 12, Issue 2. Tang's work has been continuously supported by NSF, local foundations, industry and Natural Science Foundation of China. Her work has resulted in over 150 scientific publications, including 43 journal articles, 7 book editorials and chapters, and many conference articles. Dr. Tang is currently serving as the Secretary of the IEEE SMCS, and a members-at-large of the SMCS Board of Governors (2019–2021). She served as Associate Editor of IEEE Transaction on Automation Science and Engineering from 2009 to 2014 and is currently serving as Associate Editor of IEEE Transactions on Computational Social Systems, International Journal of Intelligent Control and Systems, and Editorial Board Member of International Journal of Remanufacturing. She has chaired several technical sessions and served on program committees for many conferences.

**Questions email to:**

**[psilverberg3@comcast.net](mailto:psilverberg3@comcast.net)**

**5:00 pm Snacks; 5:30 Talk**

**[Register Here](#)**



# iPraxis

## ***THE POWER OF VOLUNTEERING!***

***Through in-class mentoring, project-based learning, science fairs, and after-school programs, our iPraxis volunteers (Scienceteers) help to increase knowledge and understanding of STEM subjects and the opportunities they provide.***

**iPraxis** works to inspire middle school aged students in underserved Philadelphia communities to explore science, technology, engineering, and mathematics (STEM) by connecting them with professional scientists and providing hands-on learning experiences.

Our commitment to STEM education is the foundation of our programs and initiatives. We believe all students, regardless of their backgrounds, should be given the opportunity

to learn how to investigate, problem solve, and create by putting their ideas into action. iPraxis brings together experts and students to explore how STEM is fundamental to everyday living and our future well-being -- from protecting the environment to curing illnesses.

iPraxis relies on volunteer STEM professionals and students, on donors and supporters, and on teachers, parents, and students to fulfill its mission.

## **iPraxis Website**





## Electrical Engineer

### Overview:

TLC Engineering Solutions is a dynamic and growing National Engineering firm seeking an experienced and motivated Electrical Engineer for our Philadelphia, Healthcare Operations.

### Responsibilities:

- Electrical design experience (lighting, power and low voltage systems) for **Healthcare facilities**
- Prepare load calculations, select equipment, layout electrical systems using Revit
- Coordinate with architect, owner-client and other disciplines
- Familiarity with recent NEC

### Qualifications:

- 5+ years of experience in Electrical Design (Lighting, power distribution, low voltage, lightning protection, etc.)
- Background from similar Engineering design firm, Consulting or Architectural engineering firm
- BSEE or BSAE
- EIT or PE preferred
- **Projects consist of healthcare buildings design**
- Revit Experience

If you or someone you know is interested in this opening please send all resumes to  
Angie Camacho at [Angie.Camacho@tlc-eng.com](mailto:Angie.Camacho@tlc-eng.com)

**\*\*Check out TLC Engineering Solutions website for more information\*\***

<https://tlc-engineers.com/>

*TLC is an Equal Opportunity, Affirmative Action employer, dedicated to Workforce Diversity EOE-M/F/Vets/Disabled. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, veteran status, disability, age and other classifications covered under federal, state or local laws. TLC participates in E-Verify.*



# PHILADELPHIA SECTION PLANNING CALENDAR

**Current Month: June 2019**

Date	Activity
<b>June</b>	
June 3	Last day to register for the Student Branch Leadership
June 11	ADCOM
June 18	GE Relay Protection Seminar
<b>July</b>	
July 10-12	American Control Conference
<b>August</b>	
	<i>No Activity</i>
<b>September</b>	
	<i>To be provided</i>
<b>October</b>	
	Electric Expo 2019



## **PHILADELPHIA SECTION NOTES**

### **IEEE PHILADELPHIA SECTION OFFICERS**

Chair: Emilio M. Salgueiro: [emiliosalgueiro@ieee.org](mailto:emiliosalgueiro@ieee.org)

Vice Chair: Mark Soffa: [msoffa@kns.com](mailto:msoffa@kns.com)

Treasurer: Robert Johnston: [rlj1620@gmail.com](mailto:rlj1620@gmail.com)

Secretary: J.J. Gingerich, Jr: [jjgingerich@gmail.com](mailto:jjgingerich@gmail.com)

Past Chair: Peter Silverberg: [psilverberg3@comcast.net](mailto:psilverberg3@comcast.net)

### **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: Emilio M. Salgueiro: [emiliosalgueiro@ieee.org](mailto:emiliosalgueiro@ieee.org)

Editor: Michael Mayor, P.E.: [michael.mayor.pe@ieee.org](mailto:michael.mayor.pe@ieee.org)

News and notices contact: [michael.mayor.pe@ieee.org](mailto:michael.mayor.pe@ieee.org)

### **IEEE Philadelphia Section Main Office:**

Bala Pointe Centre, c/o Greater Philadelphia Association Management Group  
111 Presidential Blvd., Suite 231, Bala Cynwyd, PA 1004, Phone: 484.270.5136

**[sec.philadelphia@ieee.org](mailto:sec.philadelphia@ieee.org)**

### **ADVERTISEMENTS – Contact: [michael.mayor.pe@ieee.org](mailto: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](mailto:sec.philadelphia@ieee.org)

	<b>Platinum</b>	<b>Gold</b>	<b>Silver</b>	<b>Bronze</b>
<b>Cost per Year</b>	<b>\$3,500</b>	<b>\$2,500</b>	<b>\$2,000</b>	<b>\$1,000</b>
<b>Awards Banquet<sup>1</sup></b>	<ul style="list-style-type: none"> <li>• Full Table-10 tickets</li> <li>• Full page Awards Brochure</li> <li>• 6-ft Exhibit Table</li> </ul>	<ul style="list-style-type: none"> <li>• 6 tickets</li> <li>• Half page Awards Brochure</li> <li>• 6-ft Exhibit Table</li> </ul>	<ul style="list-style-type: none"> <li>• 4 tickets</li> <li>• Quarter page Awards Brochure</li> <li>• 6-ft Exhibit Table</li> </ul>	<ul style="list-style-type: none"> <li>• 2 tickets</li> <li>• Quarter page Awards Brochure</li> </ul>
<b>IEEE Almanack<sup>2</sup></b>	12 Months Full Page	9 Months Full Page	6 Months Full Page	3 Months Full Page
<b>IEEE Website<sup>2</sup></b>	12 Months Full Page	9 Months Full Page	6 Months Full Page	3 Months Full Page
<b>IEEE Email Blast<sup>2</sup></b>	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

<sup>1</sup> **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.

<sup>2</sup> **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.

# Merrill W. Buckley, Jr., IEEE Student-Branch Leadership Scholarships IEEE Philadelphia Section

IEEE Philadelphia Section Office  
111 Presidential Blvd, Suite 231  
Bala Cynwyd, PA 19004  
Tel: 484-270-5136  
E-Mail: [sec.philadelphia@ieee.org](mailto:sec.philadelphia@ieee.org)

## Description

The Merrill W. Buckley, Jr, IEEE Student-Branch Leadership Scholarship Program of the Philadelphia Section recognizes IEEE Student Members who have made, and are planning to continue to make, significant contributions to the development, operation, outreach, and/or continuing vitality of their respective Student Branches. This scholarship is awarded for excellence in Student-Branch (or Student-Branch Chapter or Affiliation Group) leadership in the promotion of technical, professional, educational, and personal development of its student members in IEEE-related fields of interest.

## The Leadership Scholarship

Up to three \$6,000 scholarships are available for each academic year beginning in September, paid in two installments (as early as August and January). The scholarship is awarded to an exceptional applicant to assist in the pursuit of academic goals. If, in any year, there are no exceptional applicants, no scholarship will be awarded.

## Eligibility

An applicant must: (1) have demonstrated exceptional leadership qualities in the development of some aspect of an exemplary Student Branch, Student-Branch Chapter, or Student-Branch Affiliation Group; (2) be an IEEE Student Member of at least six-months standing, with the intention to remain an active member for the duration of the scholarship; (3) have at least one academic year of full-time undergraduate study remaining before graduation in a discipline that qualifies for membership in the IEEE; (4) be attending a college or university with an IEEE Student Branch in the Philadelphia Section; and (5) have a cumulative undergraduate grade-point average of 2.70 or higher on a 4.0 scale.

Up to two highly qualified applicants from the same Student Branch may be selected to receive Leadership Scholarships in the same year. Only under special circumstances, as determined by the Scholarship Selection Panel, shall a past recipient of an IEEE Student-Branch Leadership Scholarship be selected to receive a second such scholarship in a subsequent year.

## Basis for Judging

Selection as a recipient of the Student-Branch Leadership Scholarship is based on a review of the following submissions: (1) A completed Leadership Scholarship Application Form; (2) Certified Copy of the applicant's latest Academic Transcript; and (3) Up to three one-page Letters of Reference from persons familiar with the applicant's activities in the Student Branch, the Philadelphia Section, or the Community at Large. The Scholarship Selection Panel will be composed of three senior engineering executives from government or industry. All will be free of any close affiliation with a college or university with an IEEE Student Branch in the IEEE Philadelphia Section.

## Deadline for Application Submission

All applications and supporting letters must be received by the Office of the IEEE Philadelphia Section by **June 3, 2019**.

(Updated May 15, 2019)

**IEEE Student-Branch Leadership Scholarship Application – 2019-20**  
**IEEE Philadelphia Section**

Your Name \_\_\_\_\_  
*Last (Family) First Middle*

Current Undergrad Year (Fresh, Soph, Junior) College/University Anticipated Degree / Year Cumulative GPA

Your Local Address \_\_\_\_\_  
*Number & Street City & State ZIP Code*

Your Home Address \_\_\_\_\_  
*Number & Street City & State ZIP Code*

Preferred Mailing Address: Local \_\_\_\_\_ or Home \_\_\_\_\_

Telephone No. \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Birth Date \_\_\_\_\_ IEEE Student Member No. \_\_\_\_\_ Member Since \_\_\_\_\_  
*(MM/YYYY)*

Education:  
High School or College                      Location                      Degree / Honors                      Year

Name of and Contact Information for your current IEEE Student Branch Counselor:

Name \_\_\_\_\_ E-Mail Address \_\_\_\_\_

Telephone No. \_\_\_\_\_

This Scholarship Application is made for the full academic year beginning: \_\_\_\_\_  
*(MM/YYYY)*

\*\*\*\*\*

**Part A** Please describe your basic view of the IEEE and your approach to making the most of what the IEEE has to offer.  
*(Max. 150 words)*

**Part B** On this single page, please briefly describe three to six of your activities or projects in your IEEE Student Branch that have had (or are having) a notable positive impact in terms of: (a) The relevance of technical or professional program to members and larger college community; (b) The effectiveness, growth, and vitality of the Student Branch; (c) The outreach of your Student Branch beyond your college to the Philadelphia Section, the broader IEEE membership, and/or the larger community; and/or (d) Some other valuable aspect of the IEEE affiliation.

Activity/Project \_\_\_\_\_ Date(s) \_\_\_\_\_

Description / Your Role / Outcome:

Activity/Project \_\_\_\_\_ Date(s) \_\_\_\_\_

Description / Your Role / Outcome:

Activity/Project \_\_\_\_\_ Date(s) \_\_\_\_\_

Description / Your Role / Outcome:

\*  
\*  
\*

Please provide an outline of your goals for the 2019-20 academic year relative to your IEEE Student Branch and to its larger community.

Please detail any awards or recognitions that you have received as a result of your efforts on behalf of the IEEE.

Please have this page reviewed and endorsed first by your IEEE Student Branch Counselor, and then by your Department Chair, affirming that your accomplishments are accurately and adequately represented.

\_\_\_\_\_  
(IEEE Student Branch Counselor)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Department Chair)

\_\_\_\_\_  
(Date)

**Part C** Please summarize any non-IEEE activities that have helped you to be a more effective member of your IEEE Student Branch. (Max 150 words)

**Part D Letters of Reference**

List the name and affiliation of two or three individuals each of whom has agreed to write a **one-page** letter in support of your application for an IEEE Student Branch Leadership Scholarship of the Philadelphia Section. At least one of these referees must be a current IEEE Member. These letters should be delivered to the “Leadership Scholarship Application Committee” at the address below (with this application or separately) in an envelope sealed and signed by the referee. Alternatively, the signed letter may be scanned and e-mailed by the referee to [sec.philadelphia@ieee.org](mailto:sec.philadelphia@ieee.org). These letters should be received by the Leadership Scholarship Application Committee by **June 3, 2019**.

- 1.
- 2.
- 3.

**Part E Endorsement of Your Scholarship Application (Optional)**

This application may be endorsed by an individual representing a technical entity of the IEEE (e.g., a Technical Society) with whom you have interacted. This endorsement may not exceed **one page** and should also be delivered directly to the Leadership Scholarship Application Committee at the address below.

Name of the individual and associated technical organization providing endorsement: \_\_\_\_\_

**Part F Official Copy of Current Academic Transcript**

An official copy of the applicant’s current academic transcript must either be submitted with this signed scholarship application, or mailed separately to the Leadership Scholarship Application Committee at the address below, by the application deadline of **June 3, 2019**.

**Part G Signature of Applicant and Date**

\_\_\_\_\_

\_\_\_\_\_

(Date)

All materials are to be delivered, by the application deadline, to:

Leadership Scholarship Application Committee  
IEEE Philadelphia Section Office  
111 Presidential Blvd., Suite 231  
Bala Cynwyd, PA 19004

Telephone: 484-270-5136  
E-mail: [sec.philadelphia@ieee.org](mailto:sec.philadelphia@ieee.org)

(Updated 3/20/2019)



# Relay Protection Seminar



**PennState**  
at the Navy Yard

GE Multilin and Advanced Power are pleased to invite you to our **Relay Protection Seminar**.

The event is free of cost, a continental breakfast and lunch will be provided. The seminar qualifies for Professional Development Hours (PDH). Registration is limited, so sign up today. To secure your spot, please [click here](#) to register to attend.

## Agenda:

7:30am to 8:00am

Registration

8:00am to 11:00am

Bus Protection

- Sizing CT's
- Zone Selective Interlock via IEC 61850
- High Impedance
- Low Impedance

11:00am to 12:00pm

Mitigation of Arc Flash Hazard with Relaying

- Arc-Flash Mitigation Techniques
- Typical Installations
- Challenges & Solutions

12:00pm to 1:00pm

Lunch

1:00pm to 3:00pm

Principles of Microgrid Systems and Designs

**Date: June 18th, 2019**

**Location: Penn State at the Navy Yard**

Bldg 661 (NW Corner of 12<sup>th</sup> and Kitty Hawk Ave)

4960 S. 12<sup>th</sup> Street

Philadelphia, PA 19112

Questions regarding the seminars may be forwarded to Advanced Power at

Mustafa Attia: [mattia@advpower.net](mailto:mattia@advpower.net)

Or Ben Brown: [bbrown@advpower.net](mailto:bbrown@advpower.net)





# 2019 American Control Conference: Call for Papers

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

## Operating Committee

### General Chair

Douglas A. Lawrence  
Ohio University  
[dal@ohio.edu](mailto:dal@ohio.edu)

### Program Chair

Andrea Serrani  
The Ohio State University  
[serrani.1@osu.edu](mailto:serrani.1@osu.edu)

### Finance Chair

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### Local Arrangements Chair

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### Registration Chair

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[SeYoung.Yoon@unh.edu](mailto:SeYoung.Yoon@unh.edu)

### Workshops Chair

Wei Zhang  
The Ohio State University  
[zhang.491@osu.edu](mailto:zhang.491@osu.edu)

### Exhibits Chair

Dennis Williams  
LyondellBasell  
[dennis.williams@lyondellbasell.com](mailto:dennis.williams@lyondellbasell.com)

### Vice-Chair: Special Sessions

Rafael Fierro  
University of New Mexico  
[rfierro@unm.edu](mailto:rfierro@unm.edu)

### Vice-Chair: Invited Sessions

Aranya Chakraborty  
North Carolina State University  
[achakra2@ncsu.edu](mailto:achakra2@ncsu.edu)

### Vice-Chair: Industry & Applications

Stefano Di Cairano  
Mitsubishi Electric Research Laboratories  
[dicairano@ieee.org](mailto:dicairano@ieee.org)

### Vice-Chair: Student Affairs

Anouck Girard  
University of Michigan  
[anouck@umich.edu](mailto: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/>



## About Electric Expo 2019

Hosted by the Electrical Association of Philadelphia, Electric Expo is a tradeshow comprised of over 250 exhibitors consisting of manufacturers and manufacturers' representatives who make or sell products used in the electrical industry.



Fran Pollart, Expo Chairman

*On behalf of the Expo Committee, thank you for your interest in Electric Expo 2019. Since 1931, the Electrical Association of Philadelphia has hosted a well-attended and high-value Electric Expo, bringing together all segments within the electrical industry in the Greater Philadelphia region. As we look ahead to our next show, the Expo Committee and EAP staff have assessed some key feedback, resulting in the addition of new sponsorship opportunities now available to our Distributor Partners. There are limited opportunities to engage, so don't wait to book your*

*sponsorship at the region's largest electrical tradeshow.*

*See you in October!*

*Fran*

[Electric Expo Information](#)



# **INTERNATIONAL TEST CONFERENCE 2019**

**Will be held during the  
International Test Conference Week  
November 10-15**

**Tuesday, November 12 – Thursday, November  
14, 2019 Washington, DC  
Marriott Washington Wardman Park Hotel**

**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.**

**[Information and Registration](#)**

Ninth Annual

# IEEE Signal Processing in Medicine and Biology Symposium (SPMB19)

Saturday, December 7, 2019

Temple University, Philadelphia, Pennsylvania

IEEE SPMB19 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](mailto: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](mailto: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](mailto:submit@ieeespmb.org).

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

## Important Dates:

Paper Submission	July 1, 2019
Notification	Oct. 1, 2019
Paper Revisions	Nov. 1, 2019
Early Registration	Nov. 15, 2019
Final Program	Dec. 7, 2019

## Organizing Committee:

### General Chairs:

Joseph Picone (Temple)  
Ivan Selesnick (NYU-Tandon)

### Technical Program Chair:

Silvia Lopez (Blackfynn)

### Program Chairs:

Nashwa Elaraby (Penn State)  
Hansen Mansy (UCF)  
Iyad Obeid (Temple)  
Vira Oleksyuk (Temple)  
Amrita Sahu (Altria)  
Vince Stanford (Del Rey Analytics)

### Industrial Liaison:

Michael Mayor (IEEE SPS)

### Publications Chair:

Georgios Lazarou (USA)

### Local Arrangements:

Sean Ferrell (Blackfynn)  
Dee Fuller (Temple)

Web: <http://www.ieeespmb.org/2019>

Contact: [help@ieeespmb.org](mailto:help@ieeespmb.org)

