**ALMANACK**

Published Monthly, Ten Times per Year, January to June, a Summer issue covering July and August and September to December.

**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)

### APRIL 2017

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* Rowan Univ. 2017 R2 Student
* MATE PA Regional ROV
* May Inputs Due
* IEEE AWARDS NIGHT
IEEE SECTION NIGHT
Philadelphia Section Meeting
Tuesday, April 18, 2017


Note: In the event of bad weather please call the Sheraton after 1:00 PM the day of the meeting: 215-387-8000. Ask the front desk if the meeting has been canceled.

Tuesday, April 18, 2017
Dinner at 6:00 PM,
1st Speaker at 7:00 PM.
2nd Speaker at 8:00 PM.
Sheraton University City,
3549 Chestnut St,
Philadelphia, PA 19104,
(215) 387-8000

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 (with no dinner) for free, however, we ask that you register.

Registration Link
Parking is paid by the IEEE Philadelphia Section, make sure you have your parking ticket stamped at the meeting.

PROFESSIONAL DEVELOPMENT HOURS (PDH)
In 2017 the IEEE USA instituted a fee of $9 for each PDH certificate. Exceptions are for the speaker, which will get one free certificate (2 PDH) and a second for the other lecture (1 PDH). You can pay the fee when registering or at the door by cash/check.
First Talk

Academic MakerSpaces for Engineering Education
Brandon Terranova, Ph.D.
Assisting Teaching Professor
College of Engineering,
Drexel University

Abstract: The national need for improved STEAM education and the subsequent rise of the maker movement has ushered in a new era of engineering education. The engineering profession is in need of creative, diverse problem solvers able to work in multidisciplinary teams. Recently, large open-area spaces that blend formal and informal learning modalities supporting academic, extracurricular, and personal design activities have begun to appear in universities across the world which aim to address these needs. These "academic makerspaces" are being used to form new "maker" cultures, which are engaged and networked communities of practice united by entrepreneurial spirit and a democratized approach to making and doing. In addition to their potential to address the educational needs of the modern engineer, these active learning common grounds hold promise to provide a reduced entry barrier to engineering, and thus serve as a conduit for engineering outreach programs.

Biography: Dr. Terranova is an Assistant Teaching Professor in the College of Engineering at Drexel University. In his current role, he is the lead instructor for the freshman engineering program, and oversees activities in the Innovation Studio, a large-area academic makerspace. He has taught and developed courses in general engineering and mechanical engineering at Drexel. Prior to Drexel, he has taught and developed courses in physics and mathematics at SUNY Binghamton, University of Delaware, Missouri Online College, and St. Mark’s High School. Dr. Terranova’s research interests include plasmonics, optical tweezing, photonics, electromagnetism, and engineering education. He received his MS in Physics from SUNY Binghamton, and his PhD in Electrical Engineering with a concentration in Electro physics from Drexel University for his work in 3D plasmonic nanostructures.
Second Talk
Make for Engineering Outreach & Community Engagement
Lunal Khuon, Ph.D.
Director of Research/Associate Clinical Professor, College of Engineering, Drexel University

Abstract: Make, broadly defined, is the creation of a physical item and encompasses consideration as disparate as cooking (making food) to the arts (think 3D pieces such as sculptures) and crafts. By itself, Make does not hold a direct link to engineering nor the sciences. A large aspect of Make, for example, is to follow scripted procedures to make something/anything without fundamentally understanding what is being made. However, the Maker culture promotes active learning and present wonderful opportunities to generate excitement for science, technology, engineering, art, and mathematics (STEAM) fields. As engineers, we Make ideas into realities and thus, there is an opportunity for us to promote the fundamentals of STEAM within the context of Make and effectively utilizes Make as a tool to achieve outreach and engage the non-engineering communities. This talk will present some Make outreach programs, illustrates the engineering and technology within Make projects, and discuss opportunities for engineers to engage with the Make communities. We will follow the presentations with a Make activity for attendees to experience first-hand.

Biography: Dr. Lunal Khuon is an Associate Clinical Professor and the Assistant Department Head for Graduate Studies at Drexel University in the Engineering Technology (ET) Department. He also serves as the Director of Research for the ET Department and oversees the Biomedical Engineering Technology concentration. Prior to Drexel, he had previously held design and system positions at Texas Instruments, Motorola, Hughes Electronics, and IBM T. J. Watson Research Center and faculty positions as an Assistant Professor at Villanova University and Delaware State University and an adjunct Assistant Professor at the University of Pennsylvania. Dr. Khuon has published in the areas of integrated circuits and biomedical devices and additionally served as a panelist as well as a guest speaker for interdisciplinary teaching and university-industry partnerships in engineering education. He holds four US patent awards and one European patent award for innovative circuit and system approaches for dual band voltage controlled oscillator and
power-efficient amplifier designs and serves as a reviewer for journals and conferences on sensors, neural interface systems, rehabilitation engineering, microwave communication systems, humanitarian technology, healthcare point-of-care technologies, and circuits and systems. He is an IEEE Senior Member and participates in the IEEE Solid-State Circuits Society and IEEE Engineering in Medicine and Biology Society. He received his Ph.D. in Electrical Engineering and Computer Science from MIT.

MESSAGE FROM THE Chair

Peter Silverberg, LSM, P.E.

You would think that we could escape winter. Instead, both the January and the March ADCOM meeting were impacted by snow. We had to meet a week later. Our leaders set their calendars for these meetings, and then have to alter them. The changes go on – in April ADCOM meets on the 4th because of conflicts on the 11th. We hope that we can return to a normal schedule in May.

I don’t talk much about the job as chair but the biggest surprise is the sheer volume of emails. I get numbers and words from MGA, Region 2, Conference organizers, IEEE-USA, IEEE, and our own membership. I thought I got a lot of stuff when I was communication chair – this is about triple.

One thing helps a lot. ADCOM runs the section like a well-oiled machine. Many of the chairs have been in position for over ten years. They are our unsung heroes. Thing is, some have been working alone and they should have full committees. The list of the chairs appears on the web site. I encourage you to contact these persons and offer to be back-ups. They love what they are doing, but someday there will be retirement and the section will be better served if these positions can be filled easily.

April has some IEEE events. ADCOM April 4. Section Night April 18. Region 2 General Meeting in Wilmington April 21-23. The Congressional Visit will be April 25 & 26. Emilio Salgueiro is leading our delegation. There is a Life Member tour April 18 at a water plant in Delran NJ.
The BIG ONE is our Awards banquet April 29. There is more detail on the inside pages of the Almanack.

On March 8, we received formal approval of the new Solid-state Circuits Society Chapter. The chair is Dr. Firooz Aflatouni who is at the Moore School, U. Penn. We expect meetings to start soon.

We have made great progress in advancing persons from Member to Senior Member. There was a meeting in New Orleans Feb. 11 and 10 Members advanced to Senior Member. Congratulations: Firooz Aflatouni, Geoffrey Engel, Frank Ferrese, Kate Mcdevitt, Hui Niu, Wenzheng Qiu, James Rees, Masoud Soroush, Todd Zielinski

Volunteer judges can still sign up for STEM activity. Judging of the Delaware Valley Science Fair is April 5 in Oaks PA. Contact Drexel.edu/dvsf. If you like underwater robotics, MATE needs judges April 15 at Villanova university pool.

Contact:

vmvrobot@gmail.com.

New Senior Members
Following is a list of Members which were elevated to Senior Member in the past year:

November, 2016
- Robert Warren

June, 2016
- Desmond Lun,
- Jonathan Moore,
- Paul Leufkens and
- Donald Waschenko.

May, 2016
- Saad Khan,
- Fotis Koubiadis and
- James Peyton Jones.

April, 2016
- Stephen Vechy.

December, 2015
- Ko Nishino.
Message Received from SAC
Acknowledging IEEE Philadelphia Section Contribution

SAC stands for the Student Activities Conference, which is an annual conference for registered IEEE collegiate members. This page is for the 2017 Student Activities Conference of IEEE Region 2, which encompasses parts of Ohio, New Jersey, Pennsylvania, Delaware, Maryland, Washington DC, Virginia, West Virginia. The 2017 SAC will be hosted by Rowan University on April 7-9.

From: "Golzy, John" <jgolzy@devry.edu>
Subject: Thank you for your contribution to 2017 IEEE R2 SAC
Date: February 22, 2017 at 9:41:43 AM EST
To: Philadelphia Section Officers

Dear Philadelphia Section Officers,

I would like to confirm the transfer of $5,000 from the Philadelphia Section to SAC account in support of the 2017 IEEE R2 SAC to be held at Rowan University April 7-9, 2017. On behalf of the SAC committee I would like to thank you for your generous contribution and continued support. We will include the Philadelphia Section as a sponsor on our website and all publications. We look forward to seeing many students from your section at the conference, Information on the 2017 R2 SAC can be found at:

2017 IEEE R2 STUDENT ACTIVITIES CONFERENCE

Please do not hesitate to contact Jake or me if you have any questions.

Best Regards,

John Golzy, R2 SAC Chair
jgolzy@devry.edu

Jacob Cullen, 2017 R2 Student Representative
cullenj5@students.rowan.edu
IEEE Life Member Tour
Tuesday, April 18, 2017, Delran, NJ

By M. Robert Paglee, P.E. (Ret.), IEEE LM

The IEEE Life Member Group has scheduled a tour of the New Jersey American Water plant in Delran NJ on April 18. The tour will start at 9:00 am and can last up to two hours.

The Delaware River Regional Water Treatment Plant was built and a pipeline was laid to serve a number of rapidly growing communities in southern NJ near Philadelphia. Water is drawn from the Delaware River, treated thoroughly and distributed to reduce the rate of well water being withdrawn from underground aquifers.

The plant can process more than 40 million gallons of water daily to provide high quality water for hundreds of thousands of New Jersey residents. It utilizes three of the most high-tech water treatment processes -- ozonation, clarification and filtration.

The water is disinfected by introducing ozone to destroy bacteria. Ferric chloride and a binding agent is added to form sticky particles called "floc". The water then enters the bottom of a basin where the floc is captured before passing through several layers of gravel and granular activated carbon to filter out small particles and organic materials.

It is then disinfected by introducing chlorine to destroy bacteria and microorganisms; subsequently it is transferred to a closed tank or reservoir for further disinfection. Water quality is continuously monitored by computerized online analyzers before being pumped into the distribution system.

Registration: The tour is open to IEEE members and others, but it is necessary to phone the IEEE Office at (484) 270-5136 to make a reservation, as space will be limited to 25 visitors. You must provide your name, employer's name (or "Retired"), citizenship (if not U.S.A., country where you now reside), e-mail and mailing addresses. The list will be finalized and submitted by April 13 no additions are possible beyond that date.

A government issued Photo ID and appropriate clothing are required. Wear long pants or slacks (no dresses), no sandals, no open-toe or high-heel shoes. No large bags or backpacks are allowed inside the facility and any item considered suspicious must be taken outside the facility.
Tour Description: The tour will begin with an orientation that includes safety and security briefing, emergency procedures. Picture taking is not permitted at American Water facilities except in designated areas.

Please Note: Cameras and mobile phones which incorporate cameras are not permitted to be used while touring the facility.

Directions: Situated beside the Delaware River, the Delaware River Regional Water Treatment Plant is located at 213 Carriage Lane, Delran, NJ. Traveling south on Route 130, about 1/8 mile south of Tenby Chase Drive turn right at "Auto Complex" sign at Carriage Lane; the Treatment Building is at the bottom of Carriage Lane. Park to the left of the Administration Building just inside the fence.
Maida Engineering served as a design consultant and subcontractor to Aerolab to provide a "Turnkey" open-jet wind tunnel air delivery system for Honeywell. Maida was responsible for the project from the conceptual phase through full commissioning, including engineering, design and system integration.

The system was designed at Maida's office in Philadelphia and constructed in Mexicali, Mexico. It consists of a 415,000 CFM blower with dampers and silencers, a 3,000 HP medium voltage motor, drive train coupling, a 3,000 HP medium voltage variable frequency drive, and a PLC-based monitoring and control system.

Key criteria for consideration of an effort for the Outstanding Engineering Achievement award are its demonstration of engineering challenges and innovative solutions and its importance to the engineering profession.

The project demonstrates engineering challenges and innovative solutions, including the integration of a blower, motor and VFD that will perform as required under harsh conditions with no mistakes, thereby enabling Honeywell to maintain its commitments, and the modification of commercially available equipment to meet the operational requirements of the wind tunnel.

The project's importance to the engineering profession to society is demonstrated through the function of the wind tunnel, which will be used for performance and endurance testing of equipment enhancing the safety of large commercial and military aircraft. Additionally, the wind tunnel would not be able to exist without the blower, motor, VFD and PLC System which are engineered products and systems.
The Creation of NASA
Reprinted from NASA History website:
https://history.nasa.gov/brief.html

"An Act to provide for research into the problems of flight within and outside the Earth's atmosphere, and for other purposes." With this simple preamble, the Congress and the President of the United States created the National Aeronautics and Space Administration (NASA) on October 1, 1958. NASA's birth was directly related to the pressures of national defense. After World War II, the United States and the Soviet Union were engaged in the Cold War, a broad contest over the ideologies and allegiances of the nonaligned nations. During this period, space exploration emerged as a major area of contest and became known as the space race.

During the late 1940s, the Department of Defense pursued research and rocketry and upper atmospheric sciences as a means of assuring American leadership in technology. A major step forward came when President Dwight D. Eisenhower approved a plan to orbit a scientific satellite as part of the International Geophysical Year (IGY) for the period, July 1, 1957 to December 31, 1958, a cooperative effort to gather scientific data about the Earth. The Soviet Union quickly followed suit, announcing plans to orbit its own satellite.

The Naval Research Laboratory's Project Vanguard was chosen on 9 September 1955 to support the IGY effort, largely because it did not interfere with high-priority ballistic missile development programs. It used the non-military Viking rocket as its basis while an Army proposal to use the Redstone ballistic missile as the launch vehicle waited in the wings. Project Vanguard enjoyed exceptional publicity throughout the second half of 1955, and all of 1956, but the technological demands upon the program were too great and the funding levels too small to ensure success.

A full-scale crisis resulted on October 4, 1957 when the Soviets launched Sputnik 1, the world's first artificial satellite as its IGY entry. This had a "Pearl Harbor" effect on American public opinion, creating an illusion of a technological gap and provided the impetus for increased spending for aerospace endeavors, technical and scientific educational programs, and the chartering of new federal agencies to manage air and space research and development.

More immediately, the United States launched its first Earth satellite on January 31, 1958, when Explorer 1 documented the existence of radiation zones encircling the Earth. Shaped by the Earth's magnetic field, what came to be called the Van Allen Radiation Belt, these zones partially dictate the electri-
cal charges in the atmosphere and the solar radiation that reaches Earth. The U.S. also began a series of scientific missions to the Moon and planets in the latter 1950s and early 1960s.

As a direct result of the Sputnik crisis, NASA began operations on October 1, 1958, absorbing into itself the earlier National Advisory Committee for Aeronautics intact: its 8,000 employees, an annual budget of $100 million, three major research laboratories-Langley Aeronautical Laboratory, Ames Aeronautical Laboratory, and Lewis Flight Propulsion Laboratory-and two smaller test facilities.

It quickly incorporated other organizations into the new agency, notably the space science group of the Naval Research Laboratory in Maryland, the Jet Propulsion Laboratory managed by the California Institute of Technology for the Army, and the Army Ballistic Missile Agency in Huntsville, Alabama, where Werner von Braun's team of engineers were engaged in the development of large rockets. Eventually NASA created other Centers and today it has ten located around the country.

NASA began to conduct space missions within months of its creation, and during its first twenty years NASA conducted several major programs:

- Human space flight initiatives-Mercury's single astronaut program (flights during 1961-1963) to ascertain if a human could survive in space; Project Gemini (flights during 1965-1966) with two astronauts to practice space operations, especially rendezvous and docking of spacecraft and extravehicular activity (EVA); and Project Apollo (flights during 1968-1972) to explore the Moon.

- Robotic missions to the Moon Ranger, Surveyor, and Lunar Orbiter), Venus (Pioneer Venus), Mars (Mariner 4, Viking 1 and 2), and the outer planets (Pioneer 10 and 11, Voyager 1 and 2).

- Aeronautics research to enhance air transport safety, reliability, efficiency, and speed (X-15 hypersonic flight, lifting body flight research, avionics and electronics studies, propulsion technologies, structures research, aerodynamics investigations).

- Remote-sensing Earth satellites for information gathering (Landsat satellites for environmental monitoring).

- Applications satellites for communications (Echo 1, TIROS, and Telstar) and weather monitoring.

- An orbital workshop for astronauts, Skylab.

- A reusable spacecraft for traveling to and from Earth orbit, the Space Shuttle.
Ernest Thoughts

*Match making for sea birds: "One good tern deserves another"

In 1960, we were living in a very nice 4 room apartment, in a convenient location. We had 2 small children, but with another on the way, we decided to buy a house. We still live in that house, but all 4 children are now grown, with houses of their own. At that time, we were the "young kids" on the block, and shoveled the sidewalks for the elderly neighbors. Now, we are both in our mid 80's, and were very grateful during the recent storm that the younger neighbors came and shoveled our side walk, and the pile of snow in front of the car. As we say, "One good turn deserves another".

Another event in our lives is also an example of this. We have a Muslim friend. She is an electrical engineer from Bangladesh. Many years ago, I tried out college teaching. I was in the Engineering Department of Wilkes College, handling 3 sections of Electronics Lab, plus other courses. In the Spring semester, I volunteered to teach a course on Engineering Project Management, which made me a bit overloaded, so the college hired young woman to take one section of the lab course. Instead, we informally agreed to co-teach all three sections. When the students needed help with their circuits, there were 2 professionals available, in between, we had plenty of time to talk, and we became friends.

A number of years later, she had a responsible professional job with the General Electric company in Schenectady, New York. However, her husband was working in the Boston area, and she wanted to join him. First, I tried our oldest daughter, Beth, but she had no engineering contacts. Then, I tried my cousin, DP, who was in charge of Research and Development at a Boston company. He said that he could use another electrical engineer. But SH had forgot to tell us that she was pregnant.

To give you an idea of how long ago this happened, that baby is now a medical doctor. SH has great personal loyalty; she stayed with that company until DP retired. Shortly afterwards, she moved on, and was working for Bell Labs in New Jersey. That is when I asked her to talk at our Delaware County synagogues. Her topic was "A Modern Muslim in America".

So, one favor was returned with another.
PHILADELPHIA SECTION NOTES

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OBITUARY
Donald C. Dunn

Donald C. Dunn, husband of beloved Karen A. Dunn (nee Burke) was born on July 2, 1933 at the Bremerton Naval Hospital, while his father was deployed at sea on the USS Tennesse. Don is the son of Commander George Lee Dunn, USN-Ret. (all Navy basketball 11 years) and Mary Regina (nee Johnson) Dunn, both deceased. When Don was six years old, his eight year old brother, Bobby, intrigued by a movie about electrical linemen, climbed over a substation fence and was electrocuted. The tragedy contributed to Don’s interest in becoming an electrical engineer. Don and his younger brothers, Captain Jerry Dunn, USN Ret. (Naval Academy) and Lee Dunn, PhD, grew up in a career Navy family (three generations contributed 92 years of service to the Navy) and lived in the Philippines; Bermuda; Long Beach, CA; Newport R.I.; Norfolk, VA, and Gloucester City, NJ. With Navy relocations, Don attended six grammar schools, three high schools (graduating from Gloucester Catholic) and Villanova University (class of 1958 with a Bachelor of Science in Electrical Engineering) – all Catholic schools.

Don was a reservist in high school, served on active duty in the Navy during the Korean War, and was commended with the National Defense Service Medal. He attended Villanova University on the GI bill.

From Villanova, Don worked for the Philadelphia Electric Company for 38 years, primarily as a project engineer for aerial and underground transmission lines. Other projects included safe-shutdown systems at a nuclear power station. For two years following his retirement from PECO, he worked for Pirelli in a Philadelphia power cable project contracted from PECO. As a registered Professional Engineer, he was active in the Engineer’s Club. He was very active in the Institute of Electrical and Electronics Engineers (IEEE). He served as the IEEE Philadelphia Section Chairman (eight county areas with 5500 members) in 1976-1977 and subsequently remained active in the section’s Awards Committee.
As he participated in his children’s lives, Don provided decades of volunteer service to the Cub Scouts, Whitman Square Community Club, and the Tri-County Swim League. He was a lifetime member of the Knights of Columbus. Don founded the Tri-County Master’s Swim Competition. He was a life-long loyal fan of the Gloucester Catholic girls’ basketball and soccer teams, and he enjoyed cheering on Gloucester Catholic graduates when they continued to play at Villanova.

In retirement, “The Walker” covered miles of Turnersville roads daily picking up community trash along the way – like an advanced boy scout. A concerned member of the public, he actively wrote editorials for New Jersey and Pennsylvania newspapers. He looked forward to daily conversations and humor with breakfast club friends. Don and Karen studied bible history near Ocean City, NJ and both served as Eucharistic Ministers at Saint Charles Borromeo. While he deeply loved his country, alma maters, profession, church, and community, it was to his family that Don gave his greatest service.

In 1962, Don and Karen A. Burke were married. Karen graduated the prior year from Rosemont College (a product of 16 years of the Holy Child nuns). Subsequently, they were blessed with six children, all of whom graduated from St. Agnes grammar school (where Karen taught), Catholic high schools (Bishop Eustace Prep, Paul VI, and Saint Augustine Prep), and colleges (Villanova, LaSalle, Widener, Columbia, and Chestnut Hill). Always in the car over a 20-year period when his children were spread out in multiple schools, he loyally taxied them from after-school practice and weekend sporting events.

The result was six bachelor degrees, four master’s degrees, one doctorate, character, and multiple careers of service.

Donald C. Dunn passed on March 22, 2017 at age 83, the beloved husband of Karen (nee Burke). Dear father of Commander Thomas P. USNR-Ret., Brian D., Paul E. (Michelle), Mark C., Nancy C. Pimental (Christopher) and Frank W. Loving grandfather of Julia, Paul, Jr., Colin, Grace, Joshua and Jolee. Dear brother of Captain Gerald Dunn USN-Ret. (Karen) and Lee Dunn (Kathy).

Relatives and friends are invited to attend his viewing Tuesday, March 28 9:00 – 10:45 AM at St. Charles Borromeo Church, 176 Stagecoach Road, Sicklerville, NJ 08081. Mass of Christian Burial 11:00 AM. Interment New St. Mary’s Cemetery, 515 West Browning Road, Bellmawr, NJ 08031.
In lieu of flowers, donations in Donald’s memory may be made to Gloucester Catholic High School, Office of Advancement, 333 Ridgeway Street, Gloucester City, NJ 08030. Condolences may be shared with the family at www.egizifuneral.com.

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LATEST NEWS/UPDATES.

CHECK BACK HERE FOR THE LATEST NEWS/UPDATES FOR THE SAC 2017!

Thank you to all who are interested in attending SAC 2017. We will be hosting a variety of schools in IEEE Region 2.
ABOUT THE SAC

SAC stands for the Student Activities Conference, which is an annual conference for registered IEEE collegiate members. This page is for the 2017 Student Activities Conference of IEEE Region 2, which encompasses parts of Ohio, New Jersey, Pennsylvania, Delaware, Maryland, Washington DC, Virginia, West Virginia. The 2017 SAC will be hosted by Rowan University on April 7-9.

CONTACT US

* Rowan IEEE Branch Office: Back of Room 237 (2nd Floor)
* Rowan University: 201 Mullica Hill Rd, Glassboro NJ 08028
* ieee@rowan.edu

PHOTOS

View photos from the 2017 SAC
You may also add photos from the 2017 SAC to our website!

USEFUL LINKS

Rowan IEEE Website
IEEE Official Site
Rowan University

Built by Rowan University's SAC 2017 Web, iOS, and the BEST MOBILE OPERATING SYSTEM committee
Calling ALL Engineers to Judge Student “Posters, Technical Reports, or ROV Missions” Worthwhile Experience!

VILLANOVA UNIVERSITY
PAVILION SWIM COMPLEX
VILLANOVA, PA

SATURDAY,
APRIL 15, 2017

REGISTRATION:
www.marinetech.org

“MIDDLE SCHOOL, HIGH SCHOOL, & COLLEGE TEAMS”

CONTACT: V. V. MORRIS,
REGIONAL COORDINATOR
vmvrobot@gmail.com
Judge Form
Villanova University
Bartley Hall & Pavilion Swim Complex
50th Ithan Avenue
Villanova, PA 19085
April 15, 2017

(Print please)
Name: ___________________________ Email: ___________________________
Regional: Pennsylvania Company/Univ./Org. ___________________________ Title _______________________
T-Shirt size: S M L XL XXL XXXL Cell Phone #: ___________________________

Have you previously judged any Robotics competitions?  o YES  o NO
  o BEST  o FIRST Tech  o FLL  o MATE  o VEX

If YES, what categories have you judged? (Check all that apply)
  o Technical Reports  o Engineering Presentations  o Poster Displays/Interviews
  o Spirit/Sportsmanship  o Remotely Operated Vehicles (ROVs)
  o Coach Award  o Innovative Design Award  o CAD Awards  o Special Competition Awards

Please check the one that best describes your affiliation:
  o Business/Corporation  o College Student  o Government  o University Faculty/Employee
  o High School Faculty/Employee  o Community Volunteer  o Retired  o Other

Check the events that you would be willing to judge:

<table>
<thead>
<tr>
<th>Check</th>
<th>Judging Category</th>
<th>Location</th>
<th>Day</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Product Demonstration Remotely Operated Vehicle (ROV)</td>
<td>Pavilion Swim Complex</td>
<td>Saturday, April 15</td>
<td>10:00 am – 2:00 pm</td>
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<tr>
<td></td>
<td>Engineering &amp; Communication: Product Documentation</td>
<td>Bartley Hall Lobby- Room #1064</td>
<td>Saturday, April 15</td>
<td>10:00 am – 2:00 pm</td>
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<td></td>
<td>Engineering Communication: Marketing Display</td>
<td>Bartley Hall Lobby</td>
<td>Saturday, April 15</td>
<td>10:00 am – 2:00 pm</td>
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<td></td>
<td>Engineering Communication Product Presentation</td>
<td>Bartley Hall Rooms 2044-6 &amp; 2075-76</td>
<td>Saturday, April 15</td>
<td>10:00 am – 2:00 pm</td>
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<td></td>
<td>Spirit and Sportsmanship</td>
<td>Bartley Hall Atrium &amp; Pavilion Swim Complex</td>
<td>Saturday, April 15</td>
<td>10:00 am – 2:00 pm</td>
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<td></td>
<td>Special Challenge Awards</td>
<td>Bartley Hall Pit/Pavilion Swim Complex</td>
<td>Saturday, April 15</td>
<td>10:00 am – 2:00 pm</td>
</tr>
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We invite you to check the categories that you would be WILLING to judge. We thank you for volunteering.
All should wear comfortable clothing, rubber soled shoes or sneakers. Judges Registration - Lecture Hall - Judges Orientation will be held in the Bartley Hall - Lecture Hall at 8:50 am. Opening ceremonies will begin at 9:30 am in the Bartley Hall Atrium. VU COE will provide breakfast and lunch. See you soon.

Email Form by March 22 to: V. Vanessa Morris ♦ MATE PA Regional Coordinator ♦ Email: Vmvrobot@gmail.com
Garrett Clayton ♦ MATE PA Judge Coordinator ♦ Email: garrett.clayton@villanova.edu
LIGHTING THE WORLD

Honoring Nick Holonyak, Jr.
Recipient of the 2017 Benjamin Franklin Medal in Electrical Engineering

The visible light emitting diode (LED) has affected the quality of life of over 1.5 billion people worldwide, with photonic devices such as lasers and LEDs providing the backbone of the internet. Distinguished speakers discuss the influence the work of Nick Holonyak, Jr. whose inventions have helped literally light the world and produce the engine of the information age.

MAY 4, 2017
9:00 AM – 12:00 PM
Mitchell Auditorium
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3120-40 Market Street
Philadelphia, PA 19104

SPEAKERS:

M. GEORGE CRAFORD, Ph.D.
CTO, Philips Lumileds Lighting Company (retired)
2015 NAE Charles Stark Draper Prize Awardee

RUSSELL DUPUIS, Ph.D.
Steve W. Chaddick Endowed Chair in Electro-Optics
Georgia Institute of Technology
2015 NAE Charles Stark Draper Prize Awardee

FRED KISH, Ph.D.
Senior VP, Infinera Corp
Member of National Academy of Engineering

SHUJI NAKAMURA, Ph.D.
Cree Distinguished Professor, UC Santa Barbara
2002 Benjamin Franklin Medal in Engineering Awardee
2014 Nobel Laureate

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For more than 190 years, The Franklin Institute has honored the greatest minds in science, engineering, technology, and business. The Franklin Institute Awards are amongst the oldest and most prestigious comprehensive science awards in the world. Recognizing these brilliant men and women from around the world is one important way that the Institute preserves Benjamin Franklin’s legacy. They are the Franklin of today; they will inspire the Franklin of tomorrow.
Paul Steinke serves as executive director of the Preservation Alliance for Greater Philadelphia, a membership-based organization whose mission is to promote the appreciation, adaptive re-use and development of the Philadelphia region’s historic buildings, communities and landscapes. He started in this role in June 2016 after serving on the organization’s board of directors for many years.

Paul ran for Philadelphia City Council in the May 2015 Democratic primary. Although he was not elected, Paul received endorsements from the Philadelphia Inquirer, Daily News, Philadelphia Tribune and former Pennsylvania governor Edward G. Rendell, and was recommended by the Greater Philadelphia Chamber of Commerce.

Prior to his run for public office, Paul served as general manager of the Reading Terminal Market for 13 years, where he oversaw numerous improvements in the facility and tenant mix. In 2014, the market was recognized by the American Planning Association as one of the Great Places in America.

Earlier in his career, Paul served for four years as the founding Executive Director of University City District, a neighborhood improvement organization that has been central to the revitalization of West Philadelphia. Before that, Paul was a founding staff member of the Center City District, Philadelphia’s downtown improvement agency, where he spent seven years as its Finance Director.

A lifelong Philadelphian, Paul holds a Bachelor’s Degree in Business Administration and Economics from Pennsylvania State University, and pursued an MBA at Drexel University. Paul serves as board co-chair of the William Way LGBT Community Center. He lives in University City with his husband and partner of 21 years, David Ade, an architect with a practice based in Center City.
IEEE Philadelphia Section
Awards Banquet & Gala
Sat., April 29, 2017 – 5:45 PM to 10:00 PM
The Union League of Philadelphia

The IEEE is a non-profit, technical association with over 415,000 individual members in about 175 countries, making it the world’s largest professional association advancing innovation & technical excellence. IEEE inspires members through its highly cited publications, conferences, technological standards, professional & educational activities. The Philadelphia Section of IEEE serves over 3,900 members in the Delaware Valley. IEEE is the trusted “voice” of Engineering, Computing & IT around the globe.

IEEE Philadelphia Section 2017 Awards Banquet – Sat., April 29, 2017 at the prestigious Union League, 140 S. Broad St., Philadelphia, PA 19102. An annual event, 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.

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Broad and Sansom Streets, Philadelphia, PA 19102

Saturday, April 29, 2017
Hosted Reception 5:45 PM | Dinner 6:45 PM

$850.00 Table of 10
$90.00 pp: April 1 - April 14th | $100.00 pp after April 14th
Dress is Business Attire

Final Registration Deadline: April 21, 2017. Please note: Cancellation must be made in writing by April 21, 2017 to receive a refund or not be liable for payment.

Registration: # _____ Persons at $_____ per person | # _____ Table (s) at $850
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