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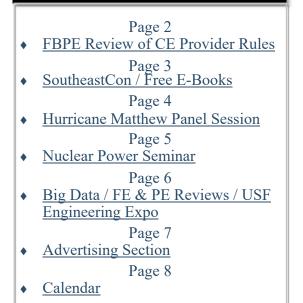


THE SUNCOAST SIGNAL

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

Volume 63—No. 3 March 2017

IN THIS SIGNAL:



Robofest – Help Needed!

The Robofest World Championship is being held in June at the St. Pete Beach Community Center. Future engineers from all corners will be competing in this prestigious contest, which uses contests and events utilizing autonomous robots to help students learn about science, technology, engineering, math, and computer science. Students design, construct, and program the robots using any robotics kit and any programming language.

Spectators are welcome, but volunteers are needed! Prior to the championship will be a qualifying competition (see announcement at bottom of this page). Judges and facilitators will be needed for both events. For details, contact Sean Denny at **venner20@aol.com** or Emma Alaba at simplepc4u@aol.com.

Come out and see what these aspiring engineers are able to do, and help encourage them to pursue an engineering career.

Robofest Qualifying Competition

When March 11th 9am – 4pm Where



501 Brooker Creek Blvd, Oldsmar, FL 34677

Robofest World Championship

When June 1 – 3rd 9am – 4pm Where



St Pete Beach Community Center 7701 Boca Ciega Dr, St Pete Beach, FL 33706

Questions Contact: Emma Alaba

Director & Host Organizer of Robofest in FL Email: simplepc4u@aol.com, www.simplepc4u.com

Jennifer McMahon

CPRP Recreation Director, City St Pete Beach FL rddirector@stpetebeach.org, www.stpetebeach.org Robofest is a program of Lawrence Technological University, Southfield, MI, USA. All rights reserved.

USF Engineering Expo a Big Hit

A tradition dating to 1973 continued on the USF Tampa Campus with Engineering Expo on Feb. 17 and 18. More than 10,000 visitors were dazzled by over 60 exhibits. For more on Expo 2017, see Page 6.

Upcoming Meetings

EXCOM Meeting

Tuesday, March 7, 2017 5:30PM at TECO Plaza Register online at <u>http://time2meet.com/fwcs-excom/</u> <u>index.html</u> Open to all FWCS Members

Hurricane Matthew Panel Session

Friday, March 17, 2017 10:30AM at FRCC Headquarters Register online at <u>http://time2meet.com/fwcs-pes3/</u> <u>index.html</u>

IEEE SoutheastCon 2017

The Internet of Smart Ideas March 30-April 2, 2017 Embassy Suites Hotel Golf Resort and Spa Charlotte / Concord, NC



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All material for THE SUNCOAST SIGNAL is due in electronic form by 1st Sunday after the 1st Tuesday of the month preceding the issue month.

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Useful links:

http://www.ieee.org/benefits Global Benefits Finder http://www.ieee.org/discounts Discounts Page **PE Corner** Art Nordlinger, PE, Senior Member **FBPE Review of CE Provider Rules**

The Florida Legislature makes laws governing the practice of engineering in Florida. These laws are generally found in Sections 471 (Engineering) and 455 (Professional Regulation) of the Florida Statutes. It is up to the Florida Board of Professional Engineers (FBPE) to put in place rules that put these statutes into practice. These are found in Chapter 61G15 of the Florida Administrative Code.

IEEE is a continuing education provider in that it is a nationally recognized professional society. Your local chapter strives to provide seminars that both bring interesting and relevant continuing education content to our members as well as provide Continuing Education Hours (CEH) credit for our Professional Engineer members who need these for license renewal. We welcome member feedback as to how we are doing in this regard and suggestions for course content as well.

Recently, the FBPE formed a committee to review the rules for Continuing Education (CE) providers. These may be found in Chapter 61G15-22.0105 through 22.014. The most recent FPBE newsletter states, "The intent of the committee is to review the current rule and recommend possible revisions that will provide better guidance to providers on course material and address any other issues dealing with continuing education (CE) that will enhance the implementation and quality of the CE credit obtained, if deemed appropriate by the committee. The formation of this committee is in direct response to concerns raised by Florida's licensees relating to the lack of quality in the number of *Professional Ethics Continuing Education* (CE) courses, amongst other CE course issues."

I should emphasize here that the committee is reviewing the *rules* surrounding CE providers, and not continuing education requirements generally. Thus, though the Board is certainly interested in your feedback in terms of continuing education courses or providers that aren't "up-to-snuff," I believe that the committee is specifically looking at possible rule enhancements to try to prevent such deficiencies. I would additionally note that the requirement of 18 hours of continuing education for engineering license renewal is, in fact, in the Florida Statutes and then implemented by the Board. So issues with the number of hours required should be addressed to your state legislators.

The Board's newsletter goes on to say, "Should any professional engineer have a concern regarding any aspect of the current continuing education rule, or if you are a continuing education provider and would like to provide feedback for the committee to review during this potential rule revision process, please send an email to the Board at <u>board@fbpe.org</u>." I encourage you to send your feedback to the committee. I would note that the committee will be accepting feedback for several weeks but not for an unlimited time, so don't delay.

Whether you are a PE looking to attain required CEHs, or an engineer looking to learn something new or keep current with the latest trends in the profession, IEEE has seminars that will meet your needs. Better start earning those CEHs now!

SoutheastCon 2017 Charlotte, NC—March 30-April 2, 2017 "The Internet of Smart Ideas" You still have time to make plans to attend!



This year's Region 3 conference promises to be another outstanding event, offering a superb technical program and a demanding student program, all set in the beautiful Embassy Suites Hotel Golf Resort and Spa, in the Charlotte / Concord metroplex. Registration for the conference is already open, and can be accomplished on the conference's website:

http://sites.ieee.org/southeastcon2017/.

Early registration fees start at \$385 for the technical program and \$125 for students and life members.

Next year's Region 3 conference will be held right here in the



Tampa Bay area, hosted by the Florida West Coast Section. It will be the first SoutheastCon held in our area since 1996. Make plans to attend the 2018 conference, or better yet, get involved with its planning and implementation. If you or your employer are interested in supporting SoutheastCon, either as a volunteer or as a sponsor, please contact a section officer (page 2 of this Signal). Corporate sponsorship and individual volunteering opportunities will be forthcoming over the next several months—keep watching the Signal for details. We'd love to have you on the team!

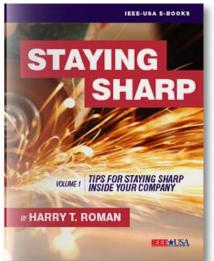
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FREE IEEE-USA E-BOOK Gives Tips for Staying Sharp at Work

As a special benefit to IEEE members, IEEE-USA provides members with one complimentary eBook each month. Through 15 March, members can download at no charge <u>Staying Sharp - Volume 1 - Tips for Staying Sharp</u> <u>Inside Your Company</u>. To download your free eBook, go to the <u>IEEE-USA Shop</u>, sign in with your IEEE web account, add the book to your cart and use promo code FEBFREE17 at checkout.

At this time of rapid change and shifting corporate strategies, complacency can easily threaten an engineering career.

Global competitiveness is unforgiving; and if not sharpened regularly, an engineer's skills can obsolesce quickly. A robust engineering career is all about continuing education.



Additional eBooks are available at a reduced cost to IEEE members. To browse the entire collection of IEEE-USA eBooks, visit http://www.ieeeusa.org/communications/ebooks/.

Request for Technical Topics Computer & Aerospace and Electronics System Societies

As the chair of the CS/AESS chapter for the Florida West Coast Section, I welcome you to submit any ideas for topics of discussion that may result in one of our next technical meetings! Do you have an idea for a topic or meeting you'd like to discuss with engineers and IEEE members from around the area?

Are you interested in actively participating, organizing and administering technical discussions for the CS/AESS Chapter? There are great opportunities still available for 2017.

Call Jim Cavanaugh at (484) 459-9418 or E-mail him at <u>James.A.Cavanaugh@ieee.org</u> for more details.



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Hurricane Matthew Panel Session Tampa Electric Co. (TECO), Duke Energy Florida (DEF), and Seminole Electric

Date: Friday, March 17, 2017

Location: FRCC 3000 Bayport Dr. #600 Tampa, FL 33607

Parking: Use parking lot for Hyatt (North side only) Time: Registration Meeting 10:30am—11:00am 11:00am—2:00pm

Cost: \$10 Members, \$20 Non-Members, and \$10 Students Lunch Included

3 Continuing Education Hours (CEHs) will be awarded

Speakers: Robert Lee Collins, III — TECO Jimmy Guzman — DEF John Price — Seminole Electric

RSVP: Online at: <u>http://time2meet.com/fwcs-pes3/index.html</u> Make checks payable to: IEEE FWCS

> Send checks to: Jim Howard, IEEE FWCS Treasurer 3133 W. Paris Street Tampa, FL 33614-5964

Space limited to the first 50 registrants!!!

Questions: Jim Howard at 863-834-6585, or jim.howard@lakelandelectric.com

TECO will be reviewing the details of what was required to get facilities restored at Grand Bahama Power Company, their Emera sister company. TECO shipped men, materials, trucks, generators, etc. down to Grand Bahama, where 90% of their system was destroyed by Hurricane Matthew. They will be sharing the many, many challenges they experienced in working to get this system restored.

DEF plans to cover their response to both Hurricanes Hermine and Matthew, and share with the group lessons learned from these experiences.

Seminole Electric will be sharing with the group the details of getting their system, along with their member's systems, restored following these devastating storms.







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Time: Registration

Meeting



Nuclear Power: A Relic or the Sustainable Path Forward?

Date: Friday, April 7, 2017

- Location: FRCC 3000 Bayport Dr. #600 Tampa, FL 33607
- Parking: Use parking lot for Hyatt (North side only)

\$100 Members, \$150 Non-Members, and \$10 Students

9:30am—10:00am

10:00am-2:30pm

(North side only) Lunch Included 4 Continuing Education Hours (CEHs) will be awarded

Cost:

- Speaker: Matthew Lovitt Chemistry and Environmental Manager Sequoyah Nuclear Plant Tennessee Valley Authority
- RSVP: Online at: <u>http://time2meet.com/fwcs-pes4/index.html</u> Make checks payable to: IEEE FWCS Send checks to: Jim Howard, IEEE FWCS Treasurer 3133 W. Paris Street Tampa, FL 33614-5964

Space limited to the first 50 registrants!!!

Questions: Ralph Fehr at <u>r.fehr@ieee.org</u>

Energy ranks as one of the most important geopolitical issues we face. As the world requires substantially more energy due to increased energy usage in developing countries, the ability to produce this energy while minimizing impact to the environment poses a major engineering problem. Is nuclear power part of the solution?

Mr. Matthew Lovitt from Tennessee Valley Authority, one of the nation's largest nuclear operators, will make a presentation including a brief history of nuclear power, a technical description of how nuclear reactors work, challenges to the nuclear industry, as well as an overview of career opportunities in the nuclear field.

Matt is the Chemistry Manager at Sequoyah Nuclear Plant in Soddy Daisy, Tennessee. He previously held multiple roles in the Operations Department, including onshift Senior Reactor Operator, Shift Technical Advisor, and Shift Manager.

Prior to Sequoyah and TVA, Matt served in the U.S. Navy as a Nuclear Surface Warfare Officer, performing tours onboard USS Roosevelt (DDG 80) and USS George Washington (CVN 73). He was also a Navy ROTC Instructor at the University of South Florida, where he taught naval engineering and navigation courses.

Matt's education includes a Bachelor of Science in Systems Engineering from the U.S. Naval Academy and a Master of Science in Electrical Engineering from the University of South Florida.



Matt and his wife Amy reside in Hixson, TN with their 3 children Carson, Stella, and Ellie.



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Membership Benefits of the Computer Society and Big Data Discussion

Along with the IEEE student branch members and Computer Society student members, the IEEE Computer Society and AESS will meet to discuss the benefits of membership in the Computer Society. Additionally, an introduction and update of recent activity regarding the Big Data group underway on campus at USF will be provided.

Date: April 6, 2017 Time: 5:00 – 6:00pm Location: Engineering Building ENB – Room 313 USF Tampa Campus 4202 E Fowler Ave, Tampa, FL 33620 Cost: Free

Please bring questions regarding membership in the Computer Society (student or professional), ideas for future discussion topics and any interest in the Big Data group.

Contact Jim Cavanaugh, Allen Tools, Victor Basantes, or Victoria Leppold with any questions about this upcoming meeting.

<u>James.A.Cavanaugh@ieee.org</u> <u>atools@mail.usf.edu</u> <u>vbasante@mail.usf.edu</u> <u>victorialepp@mail.usf.edu</u>

Because there may be limited space, register in advance: <u>https://events.vtools.ieee.org/m/43770</u>.

Hope to see you there!

FE/PE Exam Review Sessions

The FWCS is frequently asked if they provide review sessions for the Fundamentals of Engineering (FE) and Professional Engineer (PE) examinations. Well, the answer is no as of now, but that could be changing—if you want it to.

FE reviews have been run twice a year for quite a few years by the Upsilon Gamma chapter of the Theta Tau engineering fraternity at the University of South Florida. FWCS members support this effort by instructing portions of the review. Information on the FE review can be obtained by contacting Jahlil Milis of the USF chapter of Theta Tau at fe.review.sessions.usf@gmail.com or by visiting http://www.usfthetatau.com/fe.

The PE-Electrical exam was replaced in April 2009 by three separate exams: Computer Engineering, Electrical and Electronics, and Power. Engineers-in-training with an EE background now opt for one of those three exams.

A 10-week, 30 contact hour review seminar for the Power exam was developed in 2009 by two FWCS members. Although it has not been taught "live" for several years, it can be accessed via archived webcasts. Bringing back the "live" presentation twice a year will be considered by the FWCS PES/ IAS chapter, if sufficient member interest exists. Please contact one of the PE – Power review seminar developers, Ralph Fehr (**r.fehr@ieee.org**) or Tom Blair (**thblair@tecoenergy.com**), for information or comments regarding the Power review.

Although local review sessions for the Computer and Electronics exams have never been offered, chapters within the FWCS will consider offering review sessions if sufficient member interest exists. Please contact the section chair Claude Pitts (claude.pitts@ieee.org) if you are interested in these review seminars.

USF Engineering Expo Impresses Thousands of Visitors

The 45th annual USF Engineering Expo got Engineers Week off to a great start by impressing the 10,000+ visitors with displays and demonstrations from some of the area's biggest names in engineering. The Friday event drew K-12 students from the entire west central Florida area as well as Boy Scouts, Girl Scouts, and other youth organizations.



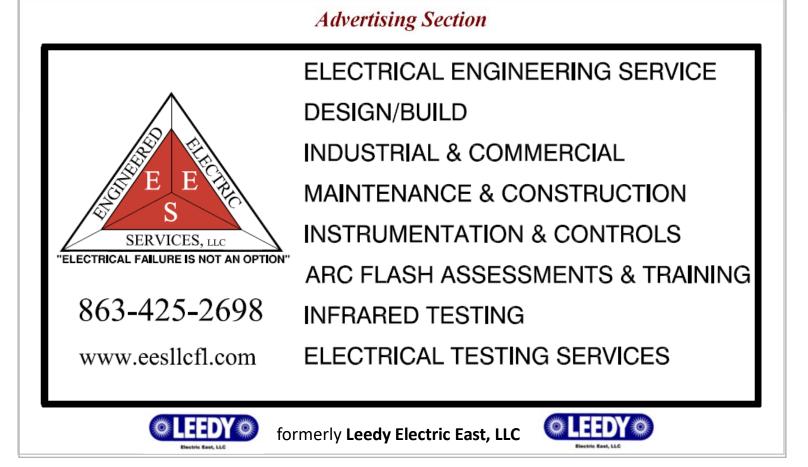
New this year was a lecture series, designed to engage future engineers and show them some of the challenges and opportunities their generation will face. The two lecture topics this year were "Engineering the Future" by Dr. Ralph Fehr and "Engineering on Mars" by Prof. Antonio Paris. The lectures were enjoyed by the youth and by their parents too.



The Chemistry and Physics shows and the "Wave Demo" by the X-Labs student organization (featuring their 10-foot tall, 2 million+ volt Tesla coil modulated to music and accompanied by a bass guitar and drum set) were crowd pleasers, as were the Electrathon car races, 3D printer demos, flight simulators, and the many, many robots that seemed to overtake the USF campus during the expo. Fun was had by all, and everybody in attendance couldn't help but to learn something about engineering and how the field is evolving at an almost unbelievable pace. Plans are already underway for next year's Expo. If you missed it this year, be sure to mark your calendar for 2018!



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