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# IEEE

## THE SUNCOAST SIGNAL

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

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### **Upcoming Meetings**

Tuesday, February 4, 2020 5:30PM  
EXCOM Meeting  
at TECO Plaza Register online at  
[http://time2meet.com/fwcs-excom/  
index.html](http://time2meet.com/fwcs-excom/index.html)

### ARC FLASH—A Fantastic Seminar

Friday, January 24, 2020 was the Arc Flash Seminar held at FRCC in Tampa. John Leedy, speaker, gave the attendees a great understanding of ARC Flash and safety in the workplace. Attendees received a copy of the “NFPA 70E – 2018 Standard for Electrical Safety in the Workplace”, which was included with this seminar. This training session will be devoted to the subject of Electrical Safety in the Workplace as it relates to the latest edition of the NFPA 70E-2018 and the updates contained therein. Topics such as “how does electrical safety and the NFPA-70E apply to the workplace” and “what is required to be compliant with the standard” was covered. Also, some real-life scenarios were discussed to address everyday application of the NFPA 70E requirements.



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<http://www.ieee.org/benefits> Global Benefits Finder

<http://www.ieee.org/discounts> Discounts Page

## PE Corner

Art Nordlinger, PE, Senior Member

### What Qualifies for Continuing Education Hours (Part 1)

It's a new year and you're thinking, "It's time I got serious about getting some Continuing Education Hours (CEHs)." This seems like an appropriate time to talk about what you can do to earn your CEHs. Maybe you are dreading the thought of having to sit through 16 hours of technical education (section 2, below). Well, there are other things that qualify for CEHs of which you may be able to take advantage. Sections 61G15-22.003 and .004 of the Florida Board of Professional Engineer's rules address this. The first section addresses Qualifying Activities for Area of Practice Requirement and the second Conversion of Education Units to Continuing Education Hours. I'll combine the sections here and provide some editorial commentary.

*Successful completion of college courses.*

*One (1) college semester hour credit is equal to 45 CEHs*

*One (1) college quarter hour credit is equal to 30 CEHs*

Yes, you can complete the entire requirement by taking one college level course in your area of practice. And no, you can't "carry over" CEHs from one renewal period to another. I would note that there are states (other than Florida) that do allow some amount of carry-over. This has been discussed by both the Continuing Education Committee and the full Board and, at least for now, no action is contemplated.

*Successful completion of short courses, tutorials, webinars, and distance education courses offered through delivery methods such as live, correspondence, recorded, Internet-based; or attending seminars (including in-house engineering seminars), workshops, or professional and technical presentations at meetings, conventions or conferences presented/ sponsored by a provider or vendor with specific knowledge related to the licensee's area of practice approved under Rule 61G15-22.011, F.A.C.*

*One (1) contact hour of professional development in course work, seminars (including in-house seminars at an engineering firm), or professional or technical presentations made at meetings, conventions, or conferences is equal to 1 continuing education hour.*

Note that Rule 61G15-22.011 requires that providers and content be approved by the Board. So if you are planning to go this route, make sure that the provider and content have been approved. IEEE and other professional societies are "exempt providers" and don't have to have individual courses approved.

*Teaching or instructing in subsection (1) or (2) above. However, teaching credit is valid for teaching a course or seminar for the first time only. Teaching credit does not apply to full-time faculty.*

*For teaching of subsections (1) through (3) above, apply a multiple of 2, if the requirements of subsection 61G15-22.003(3), F.A.C., are met.*

Here is a way for many of us to get double credit by teaching a course with appropriate technical content in our area of expertise. Talk to an IEEE officer about this opportunity.



# Wave Functions

## *Field Experience and Event Analysis 101*

**Date:** Friday, February 7, 2020

**Time:** Registration & Light Breakfast: 8:30AM - 9:00AM  
Seminar: 9:00AM - 2:00PM

**Speaker:** Richard D. Kirby, PE

**Course Level:** Intermediate.

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

**Cost:** \$100 Members, \$200 Non-Members, \$10 IEEE Students, \$20 Non-IEEE Students.  
Includes Light Breakfast, Lunch.

**CEH Credits:** **4 Professional Development Hours will be awarded.** Be sure to enter your name and PE number on the signup website as it appears on your license.  
**IEEE Florida Provider Number is 0003849.**

**RSVP:** Online at <http://time2meet.com/fwcs-pes1/index.html> (Meeting)  
**Make checks payable to: IEEE FWCS**  
**Send checks to: Jim Howard, IEEE FWCS Treasurer**  
**3133 W. Paris Street**  
**Tampa, FL 33614-5964**

**Questions:** Anthony Springsteel at 727-494-3992, or [anthony.springsteel@selinc.com](mailto:anthony.springsteel@selinc.com)

### Key Areas to be Covered:

During this session, participants will:

- Gain insights about performance from recent field events.
- Learn how to analyze traveling-wave events and the operation of time-domain protection.
- Learn how to perform traveling-wave-based fault locating offline for simple and complex line configurations.
- Learn about the continuous line-monitoring feature for detecting incipient events.
- Hear about the new relay features coming in 2020
- Demonstration of software to view traveling-waves and create Bewley lattice diagrams.

### **Speaker:**

Richard D. Kirby, PE, is a Senior Product Sales Manager at Schweitzer Engineering Laboratories, Inc. (SEL) in Houston, Texas. His current focus is Time-Domain protection technology. He has 27 years of diverse electric power engineering experience. He is an IEEE Power & Energy Society and Industrial Applications Society Senior Member.

Looking for some PD Hours? Check out the IEEE-USA website at <https://ieeeusa.org/careers/webinar-listing/> to see the list of FREE Webinars that are offered. There are also archived webinars that you can view.



## IEEE-USA offers free Webinars

If you have participated in an IEEE-USA Webinar, you can earn professional development hours (PDHs) from IEEE's Educational Activities Department by clicking [here](#) to request a certificate.\*

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## IEEE SENIOR MEMBERSHIP

IEEE Senior membership is the highest grade for which application may be made and requires experience reflecting professional maturity. Candidates need to be an engineer, scientist, educator, technical executive, or originator in IEEE-designated fields in professional practice for at least ten years and shall have shown significant performance over a period of at least five of those years.

An [application for Senior membership](https://connect.ieee.org/Xa30kEP0U000Hy3H603dGn0) requires three references unless nominated by a Senior member, and in that case requires two references. Information can be found at <https://connect.ieee.org/Xa30kEP0U000Hy3H603dGn0>.

For more information on how to become a Senior Member, or to have volunteer Section members assist you with the process and references, please contact Herman Amaya at [hamaya@tampbay.rr.com](mailto:hamaya@tampbay.rr.com).

## IEEE WOMEN IN ENGINEERING (WIE) SPRING EVENT

IEEE WIE FWCS Event: Spring Social

Location: Tampa Armature Works – 440 S 78<sup>th</sup> St., Tampa, FL 33619

Gathering area: Outside between the Heights Public Market building and the river

Date: Friday, March 6, 2020

Time: 7:00PM to 9:00PM

Who: IEEE members, friends and family

### **Event Description:**

Join us to celebrate our first anniversary since the rebirth of the IEEE WIE FWCS and the International Women Day at the Spring Social event. This event aims to connect IEEE student members with Young professionals for strong networking and collaboration. Your presence helps show support for women in engineering. We look forward to seeing you, your family and friends there.

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## IEEE RENEWALS—HAVE YOU RENEWED YOUR MEMBERSHIP YET???

We have approached 2020, and the IEEE database will remove all those who have not renewed at the end of February. This means you will be dropped out of the Florida West Coast Section database. This means you will no longer receive any communications from the Section. Please take the time now to renew, so you don't miss opportunities coming your way.

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## Share Your IEEE Membership Experience and Get Rewarded!

The IEEE Member-Get-A-Member (MGM) program offers you rewards up to US\$90 in individual earnings for successfully recruiting new IEEE Members.

Your rewards can be applied toward IEEE dues, IEEE Society fees, or the purchase of IEEE products and services.

### Program Rules:

1. Only open to current IEEE members (IEEE Society affiliates are not eligible).
2. Completed application (either print or online), with full dues payment, must be submitted with the recruiter's name and membership number in the proper recruiter box that is provided on the application.
3. Applications received without a recruiter's membership number will be disqualified—there will be no retroactive qualifying of recruiters.
4. Applications must be received at IEEE before 15 August 2020.
5. Maximum individual earnings: US\$90 annually

Full rules are available online at [www.ieee.org/mgm](http://www.ieee.org/mgm)



**Register to be a judge at the 65<sup>th</sup> State Science and Engineering Fair of Florida – STEM Competition****Online Registration Now Open** <https://ssefflorida.com/judging/>

Join your colleagues on **Wednesday, March 25, 2020 at the RP Funding Center**, Lakeland, Florida to support the young scientists of the State Science and Engineering Fair of Florida – STEM Competition.

More than 400 judges are needed in 13 scientific disciplines for both Junior and Senior Sections. Judging is the single most important event of the SSEF of Florida for finalists and, in the words of a recent judge, *"Judging was one of the most personally challenging, educational and rewarding experiences I have had in some time. These are truly amazing people!"* And from another, *"I cannot emphasize enough what a fantastic experience this science fair is for students and judges alike."*

We are pleased that our Judges provide outstanding interview experiences that allow our Finalists to be successful in our affiliate competitions! Our Florida students are able to successfully compete at the highest level of competition and represent the very best in independent STEM research at all levels of STEM related competitions. Thousands of hours have been invested by students across the state as they combine what they have been taught with what they believe possible to create a future as the developers of technologies and the innovators necessary to drive our economy and be creators of jobs for the future.

**Why Judge at the SSEF of Florida – STEM Competition?**

- Gain personal satisfaction and inspiration from these motivated young scientists and engineers
- Support STEM education
- Serve as an outreach representative for your business, school, or institution

Take a break and give back to a good cause

More than 950 students representing all Districts in the state of Florida will be in Lakeland to compete for more than 1.2 million in awards, scholarships, internships and prizes. These middle and high school students are the top winners of our 37 regional science fairs from Florida.

Student finalists overwhelmingly say that the most significant interactions that they have at the fair are with the judges. Likewise, judges find their discussions with these outstanding students to be a positive and uplifting experience. The objective evaluation of projects by Category Place Award Judges is the most important aspect of the fair and determines the distribution of prizes, awards, and scholarships.

By volunteering for only one day, you can play an important role in encouraging these students to become the future science and engineering leaders of tomorrow. Judging will take place at The RP Funding Center starting at 8:00 AM and lasting through 5:00 PM on Wednesday, March 25, 2020. Unfortunately we are not able to support travel expenses, but we will provide parking and breakfast, breaks, and lunch between Judging Rounds.

**A Category Place Award Judge must have one of the following qualifications:**

- Have related professional experience beyond receiving their B.A., B.S., or Master's degree, **OR**
- Have a Ph.D., M.D., or equivalent (D.O., Ed.D., D.D.S., D.V.M., etc.), **OR**
- Be a current graduate student with research experience
- Must agree to the Ethics Statement posted on the website

Must review the Policies and Procedures for Judging at the SSEF of Florida

Judges may include university faculty and scientists, industrial engineers and scientists, representatives of private and federal research centers and agencies, medical researchers, post-doctoral fellows, and graduate students.

**A Category Place Award Judging CAPTAIN must have the following qualifications:**

Be accepted as a qualified Category Place Award Judge

- Be able to coordinate the Judging Team for the assigned Category
- Have previous experience as a Judge for the SSEF of Florida
- Be **committed** to arriving early to coordinate the Category Team and stay for Final Round 3 Judging
- Must NOT have a "conflict of Interest" student/mentee/child participating in the SSEF

Have fully reviewed the Judging Policies and Procedures - You may view the [Judging Schedule](#) and our [Judging Policies](#) and [Procedures](#) at <https://ssefflorida.com/judging/> You will receive a confirmation after your registration has been approved so please, please **MARK YOUR CALENDAR** for this important event! As we get closer to March you will receive updates on your judging expectations and parking information. If you know of any other contacts for Judging, please direct them to this website and/or send the information to [nancybesley@gmail.com](mailto:nancybesley@gmail.com) Thank you and we look forward to seeing you **WEDNESDAY, March 25<sup>th</sup>, 2020** at the RP Funding Center Lakeland.



## Tampa Bay E-Week Banquet

**DATE:** Thursday, February 20, 2020

**TIME:** 4:30 – 6:30 PM Networking & Exhibition

6:30 - 9:00 PM Dinner Program & Awards



4121 N. 50th Street

Tampa, FL 33610

This premier event brings together local leaders and engineering professionals to recognize the outstanding achievements of Engineers, Science Teachers, Math Teachers, and Students in our community. Additionally, awards will be presented to outstanding engineers, as well as local engineering students excelling in their engineering related studies and Young Professionals. The banquet also features the Lignell Awards. These awards, named after a former Chairman for the Institute of Electrical and Electronics Engineers (IEEE), are given to local High School educators who are performing outstanding work in the instruction of the STEM topics (science, technology, engineering and math). The organizers of the event recognize the important role these individuals play in encouraging students to pursue technological degrees in college.

The banquet is a combination of efforts by all the Engineering Societies of West Central Florida. This event brings together professionals in all fields from all around Tampa and Florida's west coast.

### KEYNOTE SPEAKER: VINCENT "BLUTO" SPAORITO



Vince is a retired combat veteran and an experienced executive, currently serving as the Chief of Staff at Check-6 Inc. Since joining the Human Performance Consulting company in 2009, "Bluto" has coached and mentored leaders and teams in the Oil & Gas, Mining, Construction, Manufacturing, and Financial sectors, in the U.S., Canada, and Latin America. Vince's extensive background stems from his 24-years of service flying fighter jets for the U.S. Navy, as well as his experience as a military diplomat. He has flown the F-14A/B/D Tomcat and F/A-18A/B/C/E/F Hornet, accumulating more than 2900 flight hours, 449 aircraft carrier landings and 45 combat missions in the Middle East and Adriatic.

In recognition of his distinguished service, he has received the U.S. military's Legion of Merit, multiple combat awards for valor in battle, as well as being honored with the Chilean Navy's Naval Order of Merit (Category of Knight). Vince graduated from Texas A&M University with a degree in Aerospace Engineering and holds a master's in business administration. His articles Taking the Mining Industry to a Higher Level of Excellence and Validating the Need for a Checklist Culture in Mining have been published in multiple mining magazines. "Bluto" has demonstrated a track record of affecting culture changes in high-reliability organizations resulting in dramatic performance and consistent, sustained safety improvements.

**FOR MORE INFORMATION VISIT: [www.tbewb.com](http://www.tbewb.com)**

## INTERMOUNTAIN ENGINEERING, TECHNOLOGY AND COMPUTING CONFERENCE (I-ETC)

The first Intermountain Engineering, Technology and Computing (i-ETC; <http://www.i-etc.org/>) Conference will be held in the picturesque campus of Utah Valley University (UVU), Orem, Utah, USA; May 4th-5th, 2020.

i-ETC is a place for industry professionals, professors, and students to gather, collaborate and foster a community that can help move us forward to the next milestones in our respective industries. Attending the i-ETC conference will be beneficial for all as we will have guest speakers, workshops, paper submissions and much more.

The conference is technically co-sponsored by UVU, Brigham Young University (BYU), University of Utah, Utah State University, the Institute of Electrical and Electronics Engineers (IEEE), Rock Mountain Power and a number of Utah's tech Industries along the Silicon Slopes.

Selected papers presented at i-ETC 2020 will be published in the conference proceedings and posted in the IEEE digital library (Xplore). The conference will offer several prize paper awards and travel grants to eligible students. Full Paper Submissions are due February 18, 2020.

Undergraduate students can submit abstracts of their Capstone Project Posters by the February deadline. The Camera-Ready of accepted posters are due April 20, 2020

Download Call for Papers at <https://www.uvu.edu/cet/i-etc/docs/i-etc-conference-v13.pdf>.



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### Speech Research Development Engineer

Digital Voice Systems, Inc. (DVSI) is seeking a qualified Speech Research & Development Engineer at our new office in Clearwater, Florida. This is a great opportunity to join our team of world class engineers in designing high quality voice compression technology that is implemented in hundreds of millions of telecommunication systems world-wide.

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**February Calendar of Events (For more information see P. 1) in this Signal...**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4 FWCS EXCOM TECO, 5:30 p.m.	5	6	7 Wave Functions Field Experience and Event Analysis 101 See Page 3	8
9	10	11	12	13	14 <i>Happy Valentine's Day</i>	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
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