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SIGNAL

#### THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

THE

Volume 59— No. 12	http://www.ieee.org/fwcs	December 2014		
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PE Renewal is Almost Upon Us Below are Opportunities to Get Your 4 Technical Hours Before the February 2015 Deadline

#### Brought to you by YOUR IEEE PE/IA Chapter

Friday, December 12th - Smart Grid Updates (TECO, DUKE, Lakeland)

Friday, January 23rd - Symmetrical Components & Fault Calculations - Ralph Fehr Presenting Friday, February 27th - TBD -

#### Watch your upcoming Signals for more information!

Also note that the PE Requirements change for future years. Refer to the article included in page 8 of this Signal.

#### FWCS Officer Nominations for 2015

The FWCS Nominating Committee has brought forward the following individuals as nominees for the 2015 Officer positions for the FWCS:

**Chair - Claude Pitts** Vice-Chair - Chris Lambrecht Secretary - Sean Denny Treasurer - Jim Howard

The elections for these officers will be held at our next Executive Committee Meeting on December 2nd at TECO Plaza.

#### FWCS Power & Energy and Industry Applications Joint Chapter Officer Nominations for 2015

The FWCS PE/IA Nominating Committee has brought forward the following individuals as nominees for the 2015 Officer positions for the FWCS:

Chair - Serge Beauzile Vice-Chair - Jim Howard Secretary/Treasurer - John Stankowich

The elections for these officers will be held at our next PE/IA Executive Committee Meeting on November 26th at Village Inn on Dale Mabry.



## IEEE USA Free e-Book

In November, IEEE-USA will offer "Writing for Success An Engineer's Guide -Volume 2: The Road to Excellence."

Author Tom Moran shares that while it would be great to "let our fingers fly across the keyboard to rough out a report, run spell check, and send the results off to be printed or distributed, the finished product would mostly likely be filled with inaccuracies, be unclear to the readers, and ultimately -- ineffective."

He points out that the road to writing excellence is filled with revisions. He emphasizes that writers must thoroughly examine what they write; ask questions to ensure their information is accurate, complete, logical and clear; and most importantly, that the information is necessary. Checking for spelling, punctuation and proper grammar is a must.

Moran writes that attention to detail takes a critical eye and that good writers test, write, rewrite and test again. Moran assures readers that following the process will gradually improve their writing and instill confidence "on the road to writing excellence."

"Writing for Success -- An Engineer's Guide --Volume 2: The Road to Excellence" can be downloaded at

http://www.ieeeusa.org/communications/ebooks/files/d ec14/83901nz/Writing-for-Success-Volume-2.pdf for free to IEEE members. \$9.99 for Non-Members.

In December, IEEE-USA E-books will offer "Starting Your Start-Up – Book 2: Market Size & Strategy" by Tanya Candia.

IEEE-USA E-books seek authors to write an e-book, or an e-book series, on career guidance and development topics. If you have an e-book idea that will benefit members on a particular topic of expertise, email your proposal to IEEE-USA Publishing Manager Georgia C. Stelluto at g.stelluto@ieee.org, and **IEEE-USA** Communications Committee Chair Gus Gaynor at g.gaynor@ieee.org.

IEEE-USA serves the public good and promotes the careers and public policy interests of more than 200,000 engineering, computing and technology professionals who are U.S. members of the IEEE.



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## Smart Grid Symposium Back By Popular Demand

Date: Friday, December 12, 2014

Time: 8:30am-9am Registration, 9am-3pm Seminar

Cost: \$100 members, \$200 Non-Members, \$20 Students (Includes Breakfast & Lunch)

Make checks payable to IEEE FWCS and mail a check in advance to:

John Stankowich

**IEEE PE/IA Chapter Treasurer** 

2593 Forest Run Court Clearwater, FL 33761-3716

Speakers: Jason Flynt, Duke Energy –Lee Collins, TECO – John McAuliffe, Lakeland Electric

Pdh's: 4 Pdh's will be awarded for this seminar. Be sure to enter your name and PE number on the

signup website as it appears on your license. IEEE Florida Provider Number is 3849

**Location:** Seminole Electric Cooperative, 16313 North Dale Mabry,

Tampa, Florida 33618

Parking: Use parking lot in front of building.

RSVP: Online at: <a href="http://time2meet.com/fwcs-pes1/index.html">http://time2meet.com/fwcs-pes1/index.html</a>

Space limited to the first 45 registrants!!!

Cancellation must be submitted online 24 Hrs prior to the seminar at:

http://time2meet.com/fwcs-pes1/index.html

No shows will be invoiced for the total cost of the seminar.

Questions: James Howard at 863-834-6585 or james.howard@lakelandelectric.com

Following up on our past two successful Smart Grid presentation, the IEEE FWCS PE/IA Chapter is pleased to present an update on the work done by local entities on Smart Grid. Where they are today, challenges they have experienced, and the future of their Smart Grid Systems. Our speakers, John McAuliffe, Jason Flynt, and Lee Collins representing Lakeland Electric, Duke Energy Florida and Tampa Electric Company. The Symposium expert speakers will present the latest information on state-of-the-art innovations in smart grid technologies and their applications in their respective company. They will provide an update on their progress implementing that vision and share intimate details of their plans. It will be an interactive presentation affording you the opportunity to participate and ask questions







## Symmetrical Components and Fault Calculations

Date: Friday, January 23, 2015

Time: Registration: 8:00 A.M. Seminar: 8:30 A.M. - 2:30 P.M.

Speaker: Dr. Ralph E. Fehr III, P.E., Instructor, University of South Florida

Location: Seminole Electric Cooperative

16313 North Dale Mabry Hwy. - Tampa, Florida

Cost: \$100 Members, \$150 Non-Members, \$25 IEEE Student Members

PDH Credits: 5 professional development hours will be awarded. Be sure to provide your name as it appears on

your Florida license and your license number to insure proper credit. Florida Provider #0003849 I

Reservations: Online at: <a href="http://time1meet.com/fwcs-meetings/">http://time1meet.com/fwcs-meetings/</a> (Select Reservations)

Make checks payable to IEEE FWCS and mail a check in advance to

IEEE PE/IA Chapter Treasurer:

PES/IAS Chapter 2593 Forest Run Court Clearwater, FL 33761-3716

Space limited to the first 40 registrants!!!

Contact: Serge Beauzile at 863-834-6511 or serge.beauzile@ieee.org

#### The seminar will include:

- Review of Basics
  - o Phasors, Per-Unit
- Symmetrical Components
  - o Physical Example of Vector Components
  - o Application of Symmetrical Components to Three-Phase Power Systems
  - o Electrical Characteristics of the Sequence Currents
  - o The Delta-Wye Transformer
- Sequence Networks
  - o Thevenin Reduction of the Sequence Networks
- Fault Calculations
  - o Momentary versus Interrupting
  - o Short-Circuit Faults
  - o Open-Circuit Faults

Ralph Fehr earned a B.S. degree in Electrical Engineering from Penn State, an M.E. degree in Electrical Engineering, concentrated in Power, from the University of Colorado at Boulder, and a Doctor of Philosophy degree in Electrical Engineering from the University of South Florida at Tampa. He has over 20 years of experience in the electric power industry and over 25 years experience in post-secondary teaching. In addition to serving on the USF Electrical Engineering faculty, he conducts power engineering training throughout the United States and worldwide.

Dr. Fehr was selected by the Institute of Electrical and Electronics Engineers (IEEE) from the 12 sections in the Florida Council, representing over 9,500 members, and named *Outstanding Engineering Educator* for 2009. Then in 2010, he was awarded the Joseph M. Biedenbach award for excellence in engineering education by IEEE Region 3. He also received the 2014 IEEE Power and Energy Society Florida West Coast Chapter Outstanding Engineer award. Dr. Fehr authored *Industrial Power Distribution* in 2002 (Prentice Hall). The second edition will be published later this year by Wiley/IEEE Press. He is a registered professional engineer in Florida and New Mexico.

## SAVE THE DATE

## Tampa Bay Engineers Week Banquet February 27, 2015

## **Keynote Speaker: Story Musgrave**

Story was an NASA astronaut for over 30 years and flew on six spaceflights. He performed the first shuttle spacewalk on Challenger's first flight, was a pilot on an astronomy mission, conducted two classified DOD missions, was the lead spacewalker on the Hubble Telescope repair mission and on his last flight, he operated an electronic chip manufacturing satellite on Columbia.



Join us to what will surely be an entertaining and inspirational presentation from one of NASA's greatest astronauts.

This Engineers Week, the engineering societies of the Tampa Bay area have put together the fifth annual Tampa Bay Engineers Week Banquet on Friday, February 27, 2015, at the:

A La Carte Event Pavillion (4050 Dana Shores drive, Tampa, Florida, 33634)

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 in each discipline, 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.

(continued)

## VENDOR/SPONSOR INFORMATION FOR TAMPA BAY ENGINEERS WEEK BANQUET

#### Platinum Level Sponsorship - \$1250 Donation

- Company logo displayed on signage at the event.
- Receives up to 10 tickets to the awards banquet
- Presents the Lignell Award.
- Receives recognition at Platinum Sponsor level on event slideshow & program.
- Receives recognition and link to website on the TBEWB website. Information about company and special acknowledgement will be made on the website.
- Display Table in Reception Area

#### Gold Level Sponsorship - \$900

- Company logo displayed on signage at the event.
- Receives up to 5 tickets to the awards banquet.
- Has company logo displayed at Gold Sponsor level on event slideshow & program.
- Receives recognition and link to website on the TBEWB website.
- Display Table in Reception Area, (if space available)

#### Silver Level Sponsorship - \$600

- Company logo displayed on signage at the event.
- Receives up to 2 tickets to the awards banquet.
- Has company logo displayed at Silver Sponsor level on event slideshow & program
- Receives recognition and link to website on the TBEWB website

#### Vendor Level Sponsorship - \$400

- Receives display table to present company products during the Pre-Dinner Social.
- Receives recognition at Vendor level in program and on the TBEWB website
- Receives up to 2 tickets to the awards banquet

#### Donor Level Sponsorship - \$200 or More

- Donor Level individual names will receive recognition at Donor Level on event slideshow, TBEWB website and signage at the event
- · All Donations are greatly appreciated
- All individual donors will be listed in the program unless requested

#### Friends Level Sponsorship - \$50 or More

 Friends Level individual names will receive recognition at Friends Level on event slideshow and will be listed in the program unless otherwise requested.

#### Speaker Sponsor - \$1,500

- Speaker will join you at your Company Table for the event!
- Company logo displayed on signage at the event.
- Receives up to 10 tickets to the banquet.
- Company representative may participate in Lignell Award presentations.
- Recognized as Speaker Sponsor level in program and event slideshow (5 slides).
- Company Logo and link to website on the TBEWB website.
   Display Table in reception area.





## Changes to Continuing Education Requirement For your P.E. License

Licensed professional engineers are currently required to obtain eight (8) continuing education (CE) course hours every two years in order to renew their licenses. Of the eight hours, four hours are required to be on the laws and rules of professional engineers. **Effective March 1, 2015**, HB713 requires a total of **18 continuing education course hours** in order for licensed professional engineers to renew their licenses. Of the 18 hours, one must be related to the laws and rules of professional engineers, one must relate to professional ethics, and four must relate to the licensee's area of practice. The remaining hours may correlate to any topic pertinent to the practice of engineering. Four hours of the continuing education course hours may be obtained by being an officer for a Board-recognized professional or technical engineering society. The required hours relating to law, rules and ethics may also be earned by a PE serving as a member of the Legislature or as an elected state or local official. Since the portion of the Bill relating to CE requirements does not take effect until March 1, 2015, **the new CE requirements will not apply until the 2015-2017 biennial renewal.** 



## What Recruiters Say and Job Seekers Hear

Are job seekers and recruiters from different planets? With unemployed people outnumbering job openings three to one, you'd think recruiters could find the talent they need to fill positions. The problem is only 50 percent of job seekers actually have the qualifications needed for the job they apply to. It's time to bridge the gap in communication between recruiter needs and job seeker strategies. This infographic, compiled by MedReps.com, a job board which gives members access to the most sought after medical sales jobs and pharmaceutical sales jobs on the Web, provides solutions for common miscommunication between job seekers and employers. Some points to note include:

38 percent of companies have open positions they cannot find talent to fill 46 percent of resumes submitted contain some form of false information On average, it takes 24.5 working days to fill a position In the tech industry, it takes 38.9 days to fill a position

What do you think? What are some other reasons miscommunication occurs between job seekers and recruiters?



#### WISE

#### Washington Internship for Student in Engineering

## Connecting Engineers & Scientists with Public Policy Since 1980

Founded in 1980 through the collaborative efforts of several professional engineering societies, the Washington Internships for Students of Engineering (WISE) has become one of the premier Washington internship programs. The WISE goal is to prepare future leaders of the engineering profession in the United States who are aware of, and who can contribute to, the increasingly important issues at the intersection of science, technology, and public policy.

Each year, the WISE societies select outstanding 3rd or 4th year engineering/ computer science students, or students in engineering/ computer science graduate programs, from a nation-wide pool of applicants. The students spend nine (9) weeks in the summer in Washington, D.C. during which they learn how government officials make decisions on complex technological issues, and how engineers can contribute to legislative and regulatory public policy decisions.

Questions regarding the WISE program and how to apply should be <u>directed at your appropriate WISE</u> sponsor. However, please first review these webpages since most questions can be answered here..

## **Application** Deadline for the 2015 program - 31 December 2014

## **Advertising Section**





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½ Page	\$75	\$98	\$360	\$450	\$630	\$756
¾ Page	\$110	\$143	\$530	\$663	\$925	\$1,110
Full Page	\$140	\$182	\$670	\$838	\$1,175	\$1,410
Insert / Sheet	\$200	\$260	\$800	\$1,000	\$2,000	\$2,400



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#### December 2014 Calendar of Events (For more information see P. 1) inside this Signal...

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	1	2 EXCOM Meeting, 5:30 TECO Plaza	3	4	5	6
7	8	9	10	11	12 Tampa Smart Grid Seminar Seminole Electric	13
14	15	16	17	18  PES/IAS  EXCOM Village Inn - 6am	19	20
21	22	23	24	25 Merry Christmas	26	27
28	29	30	31	1 Happy New Year	2	3