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THE SUNCOAST SIGNAL

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

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Inside This Signal...

Page 2

* *What does it takes?*

Page 3

* *IEEE USA Free e-Book*

Page 4

* *IEEE Senior Membership*

Page 5

* *Tour DeSoto Next Generation Solar*

Page 6

* *NFPA 70E-2015 Electrical Safety Seminar*

Page 7

* *Joint ISA / IEEE Meeting - Electric Vehicles*

Page 8

* *2015 Lignell Award Winners*

Page 9

* *IEEE SP/Comm Meeting*
* *Advertising Section*

Page 10

* *Calendar*

This Month's Meetings

Tuesday, March 3: EXCOM Meeting, 5:30PM at TECO Plaza
Register online at <http://time2meet.com/fwcs-excom/index.html>

Open to all FWCS Members

What does it take?
[Details on page 2](#)

IEEE-USA Free e-Book
[Details on page 3](#)

IEEE Senior Membership
[Details on page 4](#)

Tour DeSoto Next Generation Solar
[Details on page 5](#)

NFPA 70E- 2015 Electrical Safety Seminar
[Details on page 6](#)

Joint ISA / IEEE Meeting – Electric Vehicles
[Details on page 7](#)

2015 Lignell Award Winners
[Details on Page 8](#)

IEEE SP/Comm Meeting
[Details on page 9](#)

Calendar
[Details on page 10](#)

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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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What does it take?

As you can imagine the very success of a volunteer organization is a direct consequence of our volunteers. It is through their activities the perception of the organization is shaped not only in the community but within each of us as well. The natural question that comes to mind, what does it take to spark a volunteer to take an active role? When engaged in conversations there are several themes that consistently arise. Those that have made this commitment have found

- Increased satisfaction by participation
- Increased sense of connection to the community
- Personal productivity
- Experiences, interests and knowledge to share
- Learn New skills
- Make New friends
- Strengthened relationships when committing to a shared activity
- A lasting legacy
- Career advancement
- Mental and physical health through volunteer activities

While these are reasons for motivating an individual, it only answers part of the question. As most of us would agree, humans in general do not volunteer themselves; we generally wait to be asked. I recognize in today's business environment finding time can be quite challenging. The real question behind 'what does it take' is how much time? How much of a time commitment are you being asked to make? Will you make 10 minutes available? I ask that you go to the following link and refer a friend to join IEEE. <http://ieee.fluidsurveys.com/s/ieee-usa> (While the page indicates the program deadline is February 28, I understand that it will be extended through the current year 2015.) IEEE will do all of the work from there. We will all benefit and begin working on the second most frequently asked question, what does it take to increase membership?

Should you have 2 to 3 hours of time to volunteer, please reach out to your Chapter Chair or myself, claudio.pitts@ieee.org for opportunities such as judging Science fair or participation in a TISP or STEM project. What a great way to assist our youth in following a career in engineering.

By working together it is hoped that we add value and increase your satisfaction with your membership.

Thank you,

Claude Pitts

Chairman, Florida West Coast Section

IEEE Senior Membership

Have you been in engineering for over 10 years? If so, you may be qualified for Senior Level membership in IEEE. There is no additional fee to apply for senior member grade.

Senior member is the highest grade for which IEEE members can apply. IEEE members can self-nominate, or be nominated, for Senior member grade.

To be eligible for application or nomination, candidates must:

- be engineers, scientists, educators, or technical executives;
- have experience reflecting professional maturity;
- have been in professional practice for at least ten years;
- show significant performance for at least five years.

Benefits of Senior Membership

Recognition: The professional recognition of your peers for technical and professional excellence.

Senior member plaque: Since January 1999, all newly elevated senior members have received an engraved Senior Member plaque to be proudly displayed for colleagues, clients and employers to see. The plaque, an attractive fine wood with bronze engraving, is sent within six to eight weeks after elevation.

US\$25 coupon: IEEE will recognize all newly elevated senior members with a coupon worth up to US\$25. This coupon can be used to join one new IEEE society. The coupon expires on 31 December of the year in which it is received.

Letter of commendation: A letter of commendation will be sent to your employer on the achievement of Senior member grade (upon the request of the newly elected Senior member).

Announcements: Announcement of elevation can be made in section/society and/or local newsletters, newspapers and notices.

Leadership Eligibility: Senior members are eligible to hold executive IEEE volunteer positions.

Ability to refer other candidates: Senior members can serve as a reference for other applicants for senior membership.

Review panel: Senior members are invited to be on the panel to review senior member applications.

US\$25 referral coupon: Newly elevated senior members are encouraged to find the next innovators of tomorrow and invite them to join IEEE. Invite them to join and the new IEEE member will receive \$25 off their first year of membership.

If you are interested, you can submit your application online at; www.ieee.org/seniormember/ and select “Apply for senior membership” from the menu on the left.

How can your local IEEE section help you?

You will need a minimum of three references for your IEEE Senior Membership Application and that is where your local IEEE section can help. If you need references, please send your IEEE number and resume to tom_blair@ieee.org (please put “IEEE Senior Membership Reference” in the subject line) where we have many local IEEE volunteers that will be glad to provide a reference for you.



- Date:** Tuesday, March 10, 2015
- Time:** Registration: 11:00 A.M. Presentation & Tour: 11:30 A.M. - 2:00 P.M. (Includes lunch)
- Cost:** Student with ID \$10, IEEE members \$10, \$20 Non-members
- Speaker:** FP&L Professional presenting proceeded by their observation deck to view entire site.
- Location:** FP&L DeSoto Next Generation Solar Center, 4051 NE Karson St., Arcadia FL 34266
- RSVP:** Online at: <http://time2meet.com/fwcs-pes2/index.html>

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 25 registrants!!

Questions: Steve Antman at 813-523-3161 or steveantman@gmail.com

At Florida's first-ever solar energy center, 90,500 solar panels move into position to catch the sun's rays. The largest of its kind in the nation when it opened in 2009, this facility continues to serve customers using photovoltaic, or "PV," technology – a process for converting sunshine directly into electricity for our customers. It works for you during the day, when the sun is not hiding behind clouds, producing about 52,000 MWh of electricity annually. That's enough to power about 3,000 homes. The emissions-free center is estimated to help us eliminate nearly 37,000 metric tons of greenhouse gases each year and thousands of barrels of oil, making it a clean and energy independent way to bring you electricity

Come see the magic!

Coming from the north on US 17 they are about 1 mile south of the Hardee/DeSoto County line. When you turn onto Karson Street, go to the end of the road and fork to the right, come in through the gate and follow the road to a second gate, toward the building. (It's easy and you won't miss it). There is no signage on US 17, so you do have to look for Karson St.

When you pull up to the gate, press the call button and they will be able to remotely open the gate.

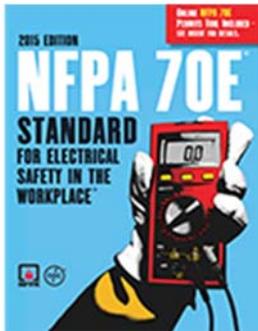
Pictures will be allowed and for safety reasons, **please wear closed toed shoes.**



**Updates and Training on NFPA 70E-2015
Electrical Safety in the Workplace.**

- Date:** Friday, March 27, 2015
- Time:** Registration & Breakfast: 8:00AM-8:30AM
Seminar: 8:30AM – 3:00PM
- Speaker:** John Leedy, P.E., Owner, LEEDY ELECTRIC EAST, LLC
- Location:** Seminole Electric Cooperative, 16313 North Dale Mabry, Tampa, Fl. 33618
- Cost:** \$150 Members, \$300 Non-Members , \$100 Students. Includes Breakfast, Lunch, & seminar text, “NFPA 70E – 2015 Standard for Electrical Safety in the Workplace” (a \$65 value)
- PDH Credits:** 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. Florida exempt provider #00015.
- RSVP:** Online at: <http://www.ewh.ieee.org/r3/floridawc/> (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 50 registrants!!!
- Questions:** Tom Blair at 813-228-1111, ext 34407 or thblair@tecoenergy.com

Seminar Text



A \$65 Value

Your local IEEE PES/IAS Chapter is offering this 6 hour training on Electrical Safety in the Workplace by John Leedy, Owner of Leedy Electric East.

This training session will be devoted to the subject of Electrical Safety in the workplace as it related to the latest edition of the NFPA 70E-2015 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” will be covered.

A copy of the standard, NFPA-70E-2015 Standard for Electrical Safety in the Workplace is included in the training costs.

John Leedy graduated from University of Florida in 1982 with a Bachelor of Science in Electrical Engineering with an emphasis in Power Delivery. John worked for Dillard Smith Construction as a protective relay technician. He joined General Electric as a Field Engineer, specializing in Power Substations and DC Electronic Drive Systems in Paper Mills as well as Project Management of Paper Machine Drive System retrofits and substation construction and commissioning. John left GE to join the family business, Leedy Electric Corp, in 1987. He earned his PE license for the State of Florida in 1992 and the State of Georgia in 2013 and received his Masters in Engineering Management from the USF in 2002. John has been working with NFPA 70E regulation since 2002, performing hundreds of Arc Flash Risk assessments throughout the SE United States, training management and employees on the standard. Leedy Electric is located in Mulberry Florida, and has been in business since 1975, specializing in Engineering and Electrical Service for the commercial and industrial industries.



Joint ISA / IEEE Meeting – Electric Vehicles

Date: Thursday April 9, 2015

Time: 6PM to 7:00PM

Location: Big Bend Power Station
13031 Wyandotte Road, Apollo Beach, FL 33572
Space is limited to 35 attendees.

Cost: Free

Reservations: Reservation is required.

Please Contact Shaun Cross @ 813-228-1111, ext 48306 or by email at sfcross@tecoenergy.com to reserve a space.

Have you ever wondered how you could convert your gas powered car into an electric car? Or do you have an electric or hybrid car and always wanted to meet with others in the area with the same interest? Have you been thinking about possibly owning an electric vehicle and want to learn more about the technology?

Your local ISA and IEEE sections are hosting a joint meeting on electric vehicles. We plan to have two electric vehicles at the meeting to demonstrate the current technology. We will have a Nissan Leaf provided by Tampa Electric (<http://www.tampaelectric.com/company/electricvehicles/ourgreenfleet/>) and we will have a Honda Del Sol that was converted from gas to 100% electric. We will compare the differences between an OEM built electric vehicle and a converted project car. We will discuss the benefits and limitations of electric vehicles and share our experiences driving these automobiles with the group.

This is our second joint meeting between ISA and IEEE and we look forward to another interesting meeting. If you have an electric vehicle or hybrid vehicle we would encourage you to bring to our meeting so we can discuss differences in technologies and our experiences operating these machines.

Please have a current photo ID with you to gain access to the facility. Any questions, please contact Shaun Cross (@ 813-228-1111, ext 48306) or Thomas H. Blair (@ 813-228-1111, ext 48179).

2015 Lignell Award Winners

Cheryl Reve



Cheryl Reve earned a bachelor's degree from the University of South Florida and a master's degree from Webster University. She spent 15 years teaching in Brevard and Hillsborough County. She currently teaches Earth and Space Science, AP Environmental Science, and Marine Science at Dr. Earl Lennard High School in Ruskin, Florida. She co-wrote the curriculum for Earth and Space Science, is the Just-In-Time Physical Science trainer, is a sponsor for STEM Fair and the Envirothon competition team, and has established a partnership between USF graduate students and her AP students for the EcoMentor program. She is also a co-sponsor for the Key Club. She actively involves her students of all levels in lessons and practices learned through her training from GLOBE, NOAA, and numerous other local, state, and national agencies.

Missy Graham Allison



Missy Graham Allison has been teaching in Hillsborough County for 15 years. She received her Biology Degree from University of South Florida in 1997 and attained her M.Ed. from Argosy University in 2003. In addition to teaching, she coaches several competitive teams after school, participating in Science Olympiad, Planetary Lander Egg Drop competition, and most recently, Biology Olympiad. She requires the same level of commitment, engagement, and success for all of her students. Her policy is that the classroom is the students' safe haven, which allows students to be highly engaged and promoters of their own individual learning.

Jim Reve



Retired from Lockheed Martin after 26 years, Jim worked on the Titan, Atlas and Athena Launch vehicles. Jim is a past winner of Lockheed Martin's/United States Air forces Gold Medallion award for significant Contributions to the Space Program. Jim was part of the launch team that sent the Cassini Probe on its historic mission, which is still ongoing today. Married with one son, they currently live in Plant City, Fl. Jim has been teaching Science for the past three years at Dr. Earl Lennard High School, where among other things he teaches Astronomy Honors and is the Coach of the award winning Lennard Robotics team.

SP/Comm presents: Windfreak Dual Channel Signal Generator Meeting

Date: Thursday April 9th, 6:30 PM

Location: Largo STAR Center Corner of Bryan Dairy and Belcher
7887 Bryan Dairy Road Largo, FL 33777

Abstract: Windfreak is a company that was started by David Goins in 2008 after he realized that the cube life was not for him. He is excited to share his experiences in life after the cube and how that transition has played out for him. His latest product is a Dual Channel Signal Generator and there are plans for hardware, spectrum analyzer, and a live demonstration.

Here is a link to the product:

<http://www.windfreaktech.com/rf-microwave-dual-channel-signal-generator.html> And datasheet:
<http://www.windfreaktech.com/docs/synthhd/SynthHD-dual-channel-microwave-signal-generator.pdf>

Speaker: David Goins is Owner of Windfreak Technologies, LLC in Holiday, FL.

David graduated from Texas A&M with a BSEE in 1994 specializing in Analog Circuit Design. Since then he has worked at many small companies as an RF design engineer. Recently he worked for NASA – Johnson Space Center until 2010 where he was very bored, unhappy with corporate life, and had plenty of time to play with circuits he liked. On a lark he put a simple homemade RF signal generator on ebay. It was a huge surprise and endorphin rush when it sold and that was the start of Windfreak Technologies, LLC.

Organizer: For more specific information please contact:
Chris Lambrecht e-mail: chris.lambrecht@ieee.org, Phone: 727-458-9061

Cost is \$2 for Students and Life Members, \$4 for IEEE Members, and \$6 for Non Members.

Food and beverages will be provided. Please sign up at: <http://time2meet.com/fwcs-mtt/index.html>

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<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Size</th> <th colspan="2">One Month</th> <th colspan="2">6 Months</th> <th colspan="2">12 Months</th> </tr> <tr> <th>Member</th> <th>Non-Member</th> <th>Member</th> <th>Non-Member</th> <th>Member</th> <th>Non-Member</th> </tr> </thead> <tbody> <tr> <td>Business Card</td> <td>\$25</td> <td>\$33</td> <td>\$120</td> <td>\$150</td> <td>\$210</td> <td>\$252</td> </tr> <tr> <td>¼ Page</td> <td>\$40</td> <td>\$52</td> <td>\$190</td> <td>\$238</td> <td>\$335</td> <td>\$402</td> </tr> <tr> <td>½ Page</td> <td>\$75</td> <td>\$98</td> <td>\$360</td> <td>\$450</td> <td>\$630</td> <td>\$756</td> </tr> <tr> <td>¾ Page</td> <td>\$110</td> <td>\$143</td> <td>\$530</td> <td>\$663</td> <td>\$925</td> <td>\$1,110</td> </tr> <tr> <td>Full Page</td> <td>\$140</td> <td>\$182</td> <td>\$670</td> <td>\$838</td> <td>\$1,175</td> <td>\$1,410</td> </tr> <tr> <td>Insert / Sheet</td> <td>\$200</td> <td>\$260</td> <td>\$800</td> <td>\$1,000</td> <td>\$2,000</td> <td>\$2,400</td> </tr> </tbody> </table>			Size	One Month		6 Months		12 Months		Member	Non-Member	Member	Non-Member	Member	Non-Member	Business Card	\$25	\$33	\$120	\$150	\$210	\$252	¼ Page	\$40	\$52	\$190	\$238	\$335	\$402	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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Or fax your address changes to (732) 562-5445

March 2015 Calendar of Events (For more information see P. 1) *inside this Signal...*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 <i>EXCOM Meeting, 5:30 TECO Plaza</i>	4	5	6	7
8	9	10 <i>Tour of FPL's Desoto Next Generation Solar</i>	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26 <i>PES/IAS EXCOM Village Inn - 6am</i>	27 <i>NFPA 70E- 2015</i>	28
29	30	31	1	2	3	4