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*Inside This  
Signal...*

Page 2

\*2014 Congressional  
Visit day Registration  
is Open

Page 3

\* IEEE-USA's Free  
E-Books

Page 4

\*Power System  
Harmonics Seminar  
\*Robotics &  
Automation March  
Meeting

Page 5

\* Tour Of NOAA  
National Weather  
Service

Page 6

\* IEEE USF Chapter  
2014 Upcoming dates

Page 7

\* EMBS & WIE Join  
Meeting Raspberry  
Module Introduction

Page 8

\*Calendar

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for 2014?**



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the perfect time to renew for 2014.

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*This Month's Meetings*

*Tuesday, February 4: EXCOM Meeting  
Meeting starts at 5:30PM At TECO Plaza*

*Register online at <http://time2meet.com/fwcs-excom/index.html>*

*Open to all FWCS Members*

*2014 Congressional Visit Day Registration is Open*

*Details on page 2*

*IEEE-USA's Free E-Books*

*Details on page 3*

*Power System Harmonics Seminar*

*Details on page 4*

*Tour of NOAA National Weather Service*

*Details on page 5*

*IEEE USF CHAPTER 2014 UPCOMING DATES*

*Details on page 6*

*EMBS & WIE Join Meeting Raspberry Module Introduction*

*Details on page 7*

*Calendar*

*Details on page 8*

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## **2014 Congressional Visit Day Registration is Open**

IEEE-USA's annual Congressional Visits Day (CVD) will be held this year on March 25 & 26 in Washington, DC. Any and all IEEE members who are concerned about declining federal investments in basic research, our national labs and our research universities is encouraged to attend.

The CVD offers concerned IEEE members an opportunity to meet directly with your members of Congress and their staff in Washington. This annual event is a crucial part of IEEE-USA's ongoing efforts to protect federal investments in science and engineering.

These efforts are especially crucial in 2014. After three years of tight federal budgets, Congress is looking for additional programs to cut. Basic research and R&D have so far survived the first few rounds of budget cuts with only modest reductions. But that may be about to change. Programs that the public doesn't know much about or that can be cut without doing immediate damage to too many people are prime targets. R&D fits the bill perfectly. While R&D is vitally important to America's long-term economic prosperity, the fact is, should Congress cut the programs, the country won't feel the impact of these cuts for a few years.

And how many Americans know we have national labs, let alone how they contribute to the country?

If IEEE members want Congress to protect the basic research and R&D budgets, we need to speak up and make sure Congress knows how valuable these programs are to us and our country.

There is simply no better way to get a legislator's attention than to have a voter come to Washington and ask for the legislator's support. Especially in an election year.

All IEEE members are welcome and encouraged to attend this year's CVD. To join your colleagues from across the country, go here to learn more and to register: <http://www.ieeeusa.org/policy/cvd/>

If you would like to speak with your members of Congress, but can't come to Washington, there may be opportunities to hold meetings in your local area. Please contact IEEE-USA staffer Russ Harrison to find out, or if you have other questions about this year's CVD. Russ can be reached at [r.t.harrison@ieee.org](mailto:r.t.harrison@ieee.org) or (202) 530-8326.

## IEEE-USA's Free E-Books to Members in February FREE E-BOOK

In February, IEEE-USA E-Books will offer "Technical Presentations - Book 3: Style – Dynamic Delivery Techniques," by Nita K. Patel.

"A personal introduction, captivating opening, interesting body and compelling conclusion comprise the four major parts of a successful presentation," Patel writes. "But once you have an organized and well-written presentation, it's time to shift your focus to delivery by incorporating eye contact, varied voice and fluid body language."

This e-book will be available to members in February.

To purchase IEEE members-only products, and to receive the member discount on eligible products, members must log in with their IEEE Web account.

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## *Power System Harmonics Seminar*

**Date:** Friday, April 4, 2014

**Time:** Registration: 8:30 A.M. Seminar: 9:00 A.M. - 2:30 P.M.

**Speakers:** Dr. Ralph E. Fehr III, P.E., Electrical Engineering Department, University of South Florida

**Location:** **Seminole Electric, Florida 33805**

**RSVP:** **Online at: <http://time2meet.com/fwcs-pes2/index.html>**  
**Space limited to the first 40 registrants!!!**

**PDH Credits:** 4 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 IEEE

**Cost:** \$100 Members, \$150 non-members, \$ 10 Student Members  
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Treasurer: PES/IAS Chapter 2593 Forest Run Court Clearwater, FL 33761-3716

**Questions: Serge Beauzile at 863-834-6511 or [serge.beauzile@lakelandelectric.com](mailto:serge.beauzile@lakelandelectric.com)**

This seminar examines the causes of harmonics in a power system, the effects of harmonics on power system components, and means of mitigating those effects. Both the utility and the customer perspectives will be addressed. Graphical methods will be used to illustrate concepts to keep the mathematical complexity of this somewhat complicated topic to a minimum.

Speaker Bio: Dr. Ralph Fehr earned his B.S.E.E. degree from the Pennsylvania State University, his M.E.E.E. concentrated in Power from the University of Colorado at Boulder, and his Ph.D. from the University of South Florida. He has been employed in the electric power industry for over 20 years, has done consulting work on power systems, and has conducted a wide variety of power-related training courses worldwide. Dr. Fehr has contributed numerous articles to various trade magazines, and has authored Industrial Power Distribution, published by Pearson Prentice Hall. He is currently a member of the Electrical Engineering faculty at the University of South Florida and is a registered professional engineer.



## *Robotic & Automation Society March Meeting*

You are invited to the Monthly Meeting of the IEEE Florida West Coast Chapter of the (RAS) Robotics and Automation Society. It is every third Tuesday at 6:30pm at the location below under normal conditions.

Location: DeVry University at 5540 W. Executive Drive,  
Tampa, FL, 33609  
Room: 210  
Date: March 18, 2014



## *Tour of NOAA National Weather Service*

Date: Friday, March 28, 2014

Time: Registration: 12 noon to 12:30pm

Tour: 12:30pm to 2pm

Speaker: Daniel Noah, Warning Coordination Meteorologist

Location: NOAA National Weather Service – Tampa Bay Area

2525 14th Ave SE, Ruskin, FL 33570

Cost: \$10 (cost for lunch) {non members, \$20}.

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

Limitation: Limited to the first 20 that sign up online.

Questions: Tom Blair at 813-630-7008 or [tom\\_blair@ieee.org](mailto:tom_blair@ieee.org)

Reservations: <http://time2meet.com/fwcs-meetings>

PES West Coast Chapter invites you to the opportunity to attend a lunch meeting and tour of the National Weather Service Weather Forecast Office in Ruskin on Friday, March 28, 2014. The NWS office in Ruskin consists of the main operations building, WSR-88 D radar, an upper air inflation shelter, and a small maintenance building. NWS offices are open 24 hours per day, 7 days per week. The Tampa Bay Area office covers 15 counties across West Central and Southwest Florida, from Levy County to Lee County and east to Polk and Highlands Counties. The Tampa office also forecasts for the coastal waters adjacent to the coast up to 60 nautical miles from shore.

The local office of the Weather Bureau was established in Tampa in March 1890 to the Gould Building on the corner of Franklin and Madison Streets. The office moved to the Knight Building in 1892 then again in 1904 when it was moved to the new Post Office Building. The airport station was established in 1938 and in 1941 the downtown office in the Federal Building was consolidated with the airport station at Peter O. Knight field on Davis Island. The office left for Drew Field (Tampa International Airport) on June 6, 1946. In 1975, the station moved to Ruskin, southeast of Tampa, on the east side of Tampa Bay.

Ruskin is home to one of the 159 WSR-88D Doppler radars that the National Weather Service maintains around the country. Doppler radar has been one of the most important technological advances in hazardous weather prediction over the past quarter century. Forecasters using the WSR-88D can issue more timely and accurate hazardous weather information than was ever possible before. The radar dome (which is often said to resemble a soccer ball or golf ball) protects a 28 foot wide antenna. The antenna is made up of a transmitter and a receiver. The transmitter samples the environment by sending out a pulse of energy, which reflects off objects (like raindrops) and scatters the energy pulse in all directions. Part of the energy will be reflected back to the antenna and is measured by the receiver.

IEEE USF Chapter is keeping the high flow of student activities for spring 2014! If you want to get involve, learn technical skills, or simply just want to network, IEEE USF Chapter is your answer!

<b>IEEE USF CHAPTER 2014 UPCOMING DATES</b>			
<i>Events</i>	<i>Date</i>	<i>Time</i>	<i>Location</i>
<b>Main Events</b>			
Officers Meeting	Every Monday	1pm	ENB 313
Mini Projects/Hardware Team	Every Friday	12pm	ENB 110
Events or Workshops	Every Tuesday	4pm	ENB 313
USF Engineering EXPO	21-22 Feb	9am-4pm	
Picnic	1-Mar	10am	Riverfront Park
Southeastcon	14-16 Mar		Kentucky
IEEE Banquet	5-Apr	7pm	MSC
<b>General Body Meeting</b>			
1st	21-Jan	4pm	ENB 313
2 <sup>nd</sup>	18-Feb	4pm	ENB 313
3rd	18-Mar	4pm	ENB 313
<b>Workshops</b>			
Labview Intro	28-Jan	4pm	ENB 313
Engineering Careers: A Risky Proposition that need not be Risky	Feb 13	4pm	ENB 313
Soldering Intro	TBD	TBD	TBD
Pspice Basic	TBD	TBD	TBD
Communication Signal Session	TBD	TBD	TBD
<b>Tours</b>			
Kennedy Space Center	Around March 17		

**Main contact information:**

Chair: Kenneth Almirol Buchanan

[aalmirol1@mail.usf.edu](mailto:aalmirol1@mail.usf.edu)

**Check out and like IEEE USF Chapter's website**

**For more updated activities:**

<http://sites.ieee.org/sb-usf/>

<https://www.facebook.com/USF.IEEE>

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	1
2	3	4 <i>IEEE EXCOM TECO Plaza 5:30pm</i>	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27 <i>PES/IAS EXCOM Village Inn - 6am</i>	28 <i>Tour of NOA Weather Service</i>	29
30	31	1	2	3	4	5