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**THE
SUNCOAST
SIGNAL**

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.



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This Month's Meetings

Tuesday, September 13th: 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

Robotics and Automation Society Meeting
Meeting is Tuesday, September 20, 2011
Go to the RAS Page of FWCS Website for Latest Info!

Risk Management Web Seminar
Speaker Ed Perkins
September 21, 2011
Time: 2:00-3:00PM PM
[Details on page 5](#)

Zephyrhills Water Bottling Plant Tour
Friday, September 30, 2011
Time-4:00 PM
Free of Charge to Attend!
[Details on page 4](#)

Upcoming Events
Carbon Management Technology Conference
February 7-12, 2012
[Details on page 6](#)

This Month...(Editor's Column)

I'm sure that everyone has heard the news that Steve Jobs of Apple has retired due to his ongoing health problems. He has left the organization in the hand of Tim Cook till 2021. The stock market has reacted more or less favorably to the change. Jobs was voted out of the company a while back and Apple nearly went under. His return has brought Apple many years of growth and record profits and Jobs has been compared to Thomas Edison. He is relentless in his pursuit of innovation and has changed the way things have been done in many areas. The creation of technology products have led to new industries. The iPod changed the way music is delivered to consumers and changed the music industry itself. The iPhone has led to the creation of hundreds of thousands of Apps to support the device. The iPad was ridiculed by the pundits when it was released but the following year there were 80 similar devices released by competitors. I think that Steve Jobs is one of a kind and we are fortunate to have been a witness to all that he has done.



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Learn how to build your own web site from the ground up.

October 15
9 - 12

For more info, go to:
<http://goo.gl/fTEcd>

Attention All Life Members!

Bob Franklin is requesting that ALL Life Members update their e-mail information with the FWCS! He wants to schedule a second Life Members Technical Seminar before the end of this year but he is unable to reach interested members. Please contact him as soon as possible at boatseven@aol.com with the correct information.



IEEE Elections are under way
Don't forget to cast your vote!

2011 IEEE EXECUTIVE COMMITTEE

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Sunday after the 1st Tuesday of the month preceding the issue month.

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Electric Vehicle Conference

March 4 - 8, 2012 TD Conference Center and Clemson University International Center for Automotive Research Greenville, South



Carolina, The first IEEE International Electric Vehicle Conference provides a unique cross-organizational platform to exchange information among thought leaders of the fast-growing electric mobility ecosystem and to discuss new trends in technology, engineering, standards and deployment aspects on a global scale. IEVC is a venue for electrical vehicle designers, component and infrastructure system developers, manufacturers, utility experts, corporate executives, technical analysts, researchers, educators, entrepreneurs, venture capitalists, legislators, regulators and standardization experts to share a joint interest in the transformation of the transportation industry via electrification.



Nominations Open for EMBS Chapter Officers for the 2012 Term

The FWCS EMBS Chapter Nominations Committee is accepting nominations for the offices of Chair, Vice-Chair, Treasurer, and Secretary for the 2012 term. Potential candidates should contact one of the Nomination Committee Members below for more details on the positions and requirements. The slate of candidates for the 2012 term will be advertised in the Signal in November and we plan to hold the elections before the end of the year.

Serge.beauzile@ieee.org
Claude.Pitts-III@pgnmail.com
Nominations Committee



Cloud Computing Follow-up

This event was hosted by the FWCS Computer Society and had about 20 attendees. Davis Meyer gave a very informative and entertaining presentation on Cloud, Hyperscale and High



Performance computing solutions provided by Dell. He gave a shortened version of his 2 ½ hour presentation and it included a video clip featuring the hosts of “Myth Busters”. He used the clip to make a point on high performance computing.

You can view the clip on the Invidia website at http://www.nvidia.com/object/nvision08_gpu_v_cpu.html. I had a rather vague idea of what cloud computing was about but David’s presentation gave me enough information to better understand it. He defined Public clouds, Private clouds, Community clouds and hybrids.



Smart Grid Symposium 2011 Follow Up

PES held the second in a series of Smart Symposiums, Friday August 26, 2011 at Seminole Electric Coop Offices in Tampa Florida. This was an opportunity for Lee Collins- Tampa Electric Company Randy Dodson- Lakeland Electric, and



Jason Flynt- Progress Energy Florida to present an update in the implementation and highlights of their respective company’s’ Smart grid Vision. This symposium had close to 40

Lee Collins, Randy Dodson and Jason Flynt

in attendance. After lunch we were presented with a special treat, Mr. Flynt was joined by George Gurlaskie- Sr. Eng Progress Energy Florida, and allowed those in attendance the opportunity to’ get up close’ to two Progress Energy Florida Chevy Volt extended range electric vehicles. This was followed by a presentation on the Impact of Electric Vehicles on the Distribution Grid by Mr. Flynt.

On behalf of the local PES Chapter, my thanks to Seminole Electric for their continued support and assistance in allowing us the use of their facility to hold our symposiums.

*Serge Beauzile
Chairman*



Tour of Zephyrhills Water Bottling Plant

Sponsors: PES/IAS Chapter -FWCS

Date: Friday September 30, 2011

Time: 4:00PM

Cost: Free to members including students, \$20 non-members and \$5 for student non-members

Location: 4330 20th St., Zephyrhills, FL, 33542-6703

Cost: Free of Charge to attend!

RSVP Online at: <http://time2meet.com/fwcs-meetings>

Space limited to 15 Registrants!!!

Questions: Claude Pitts, 727-418-5272 or claud.pitts@ieee.org

This is a walking tour of the Zephyrhills Water Bottling Plant. Zephyrhills Water, a division of Nestle Waters North America, is located in Zephyrhills Florida in a community originally named Abbott Station. Zephyrhills Water produces several types of bottles one of which is a specially designed "Eco-Shape" bottle that requires 30 percent less plastic to manufacture, features reduced-size labeling and is 100 percent recyclable. Please join us as we see the incredible transformation of a piece of plastic into a variety of containers ranging from 'child-sized' to 5 gallon containers of spring water.



Did You Miss It?

On Thursday, July 14, 2011, the local PE/IA and EMBS chapters jointly sponsored another tour of the Tampa LabCorp Facility. The previous tour was in October 2010. This tour recapped the areas that we saw last year and included some new areas. There were 12 attendees at the event.

When your doctor prescribes a blood test, or takes a sample for culture, there is a chance that your samples were delivered here, or to one of the 150 LabCorp sites throughout the state, for testing. This facility processes samples from Florida, Mexico, and the Caribbean, and mostly within a 24 hour period.

The tour was led by Dr. Thomas Herman, the facility's Technical Director. The tour covered the process from accessioning, through some of the various tests that your doctor may have ordered. (CBC-Complete Blood Count, Blood Glucose, and Blood Enzyme tests, to name a few).

The tour continued through the microbiology and molecular testing labs. Unlike the first part of the tour that utilizes mostly automated equipment, these labs use a mixture of both skilled manual and automated analysis to complete the testing. These labs help to identify various organisms, like strep, staph, and E. Coli bacteria, as well as test their susceptibility or resistance to possible drug therapies; all with a 24 hour turnaround time.



The Tampa LabCorp facility is the headquarters for the Florida region and processes approximately 40,000 samples every day, on a 24/7 schedule, using very sophisticated, sensitive, and highly automated equipment from companies like Siemens, Beckman-Coulter, Sysmex, and others, each with specialized infrastructure and utility requirements. The LabCorp facilities are standardized, so samples can be easily diverted to another LabCorp facility in the event of inclement weather or natural disasters.

Dr. Herman said that the trend towards automation has been driven, in part, by the anticipated retirement of 50% of the Medical Technologists in the next 5 years. In addition to the obvious process improvements that automation provides, it is interesting to know that automation has also resulted in the 1000x reduction in the required sample size for some tests; from 5 milliliters, down to 5 micro liters.

Special thanks to Dr. Herman for opening the facility to our group and for taking the time to share his knowledge and enthusiasm.

IEEE-USA offering Risk Management Seminar Series

Seminars are monthly, started July 20 with "Cyber Security in the Electric Utility Sector"

For details/registration, visit:

<http://www.ieeeusa.org/careers/webinars/2011/Risk-Management.html>



Recent events have highlighted the importance of risks. Modern systems are becoming more complex and the economic, safety and other consequences of a system failure more serious. Managing the risks of disruptive events is becoming a critical focus for business and society. For example, the need for security to mitigate electric reliability risks has been formalized as a regulatory requirement known as NERC Critical Infrastructure Protection (NERC CIP). With the adoption of the Smart Grid, electric utilities have more exposure to risks. Ignoring risks because they are improbable and not worth analysis has proven to be highly risky in itself. Volatility, uncertainty, complexity, and ambiguity ('VUCA') factors drive the consideration of risk. US Statutes and Federal regulations recognize this risk and mandate critical infrastructure protection (CIP) which is driven by risk management. Risk management is much more than identifying and mitigating technical and operational risks; it can be used to arrive at better solutions and decisions which reduces time and costs. Success comes from managing risks associated with technology adoption and implementation, a project, business decisions, engineering economics, interpersonal interactions, acquiring skills, and career decisions to name a few.

IEEE-USA has organized a 6-part monthly 1-hour web seminar series where you can learn about two of the most critical life skills that engineers and operations professionals need today: 1. Risk-based problem-solving and 2. Risk based, decision-making under uncertainty. The series will focus on the application of risk management frameworks, standards and practices in engineering with a specific focus on cyber security, public safety and critical infrastructure protection (CIP). We have recruited a set of subject matter experts who will teach the seminars. The next seminar in the series is shown below.

Participants will secure the following benefits from the risk management online seminars:

- An understanding of risk management standards, practices, concepts, and tools.
- How risk management can be used to arrive at better solutions and decisions.
- Risk applications in software, controls, security, project management and quality.
- Risk management's role to reduce vulnerabilities and increase security in critical infrastructure including the electric power grid, cybersecurity, IT, the Internet and more.

Cost is \$19 per seminar (\$89 for the series) for IEEE members (non-member rate \$38/\$189). Participants will have access to a host of online risk resources, including articles in IEEE-USA's Today's Engineer<<http://www.todaysengineer.org/>>, webinar replay, risk articles, blogs, comment/discussion with risk experts, and much more. The next seminar is shown below.

21-Sep; 2-3 PM

Risk Management Standards and Decision-making

Ed Perkins



***IEEE Elections are under way
Don't forget to cast your vote!***

"Empowering Members to Create the Future."

Members of the Florida West Coast Section attended IEEE Section Congress 2011. Sections Congress is a triennial gathering of Section leadership, sponsored by the IEEE Member and Geographic Activities (MGA) Board. It is the opportunity for IEEE representatives from all over the world to participate in an event which provides them with the tools which will assist their unit in focusing their activities solely on the member and increase members' participation in IEEE activities. Sections Congress was focused on providing Section leaders with an opportunity to network, receive training, and provide input into IEEE programs and projects.

The goals of SC2011 were three-fold:

- to provide an opportunity for delegates to gain information and training skills;
- to network and build relationships with other volunteers within IEEE;
- to serve as a forum for Section representatives and other local leaders, enabling them to voice – on behalf of the collective membership – the ideas, issues, and recommendations which will impact the development and growth of IEEE throughout the world, reinforcing its vitality and relevance to those it serves.

During the Closing Ceremony, the delegates had the opportunity to assign a priority level to each of the SC2011 Recommendations (34 of them) through the balloting process. The results were announced as part of the Ceremony and will be delivered to the MGA Board, and reported to the IEEE Board of Directors, for implementation in strategic planning for the future of IEEE. The following are the top 5 recommendations:

- IEEE to develop a comprehensive long-term strategy to increase the number of next generation youth pursuing science and engineering careers.
- As members maintain their IEEE membership over their years, IEEE must reward them for their loyalty. Rewards ought to be tangible and useful and can be done simply and inexpensively.
- Create Global Fidelity Programs including: (a) Continue membership Recognition 5-10-15-20 years of membership (b) Bonus for specific Benefits (e.g., reduced fee, IEEE merchandise, etc).
- IEEE membership (including e-Membership) should include a Society membership as part of the basic membership fee.
- Increased support to students in technical activities with grants to attend conferences and organization of technical competitions.

To encourage interest in pre-university students in engineering careers, IEEE to publish a subscription periodical (paper or electronic) targeted to high school students that highlights engineering activities of interest to those students. The periodical should also have articles promoting the benefits of an engineering career and what the students can do in college to get involved with IEEE.



USF Polytechnic IEEE Student Branch – Brand New!

USF Polytechnic in Lakeland is forming the University of South Florida Polytechnic IEEE Student **Branch**. **The Branch's first function will be** the Polytechnic Student Club Rush Event at USF Polytechnic entrance, LTB 1104, on August 22-24 from 3:30-5:30pm.

If you work with Engineers and want to be involved in the USFP Student Branch, please visit the rush event, and encourage potential student members to do so too. You can also contact us:

Ralph Fehr, Ph.D., P.E.

USFP Assistant Professor of Engineering and

IEEE Senior Member

fehr@poly.usf.edu



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Florida West Coast Section, Tampa

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Or fax your address changes to (732) 562-5445

September 2011 Calendar of Events (For more information see P. 1) *inside this Signal...*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	1	2	3
4	5 	6	7	8	9	10
11	12	13 <i>EXCOM meeting at TECO Plaza</i>	14	15	16	17
18	19	20 <i>RAS Meeting, see page 1</i>	21	22	23 <i>First day of Autumn</i>	24
25	26	27	28	29	30 <i>Z-Hills Water Plant Tour, see page 4</i>	1