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**THE  
SUNCOAST  
SIGNAL**

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



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***This Month's Meetings***

*Tuesday, May 10th: 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 May 17, 2011***

***Go to the RAS Page of FWCS Website for Latest Info!***

***Landfill Gas Recovery and Energy Technology***

*Friday May 20th, 2011*

*Registration 11:30AM-12:00PM*

*Speaker from 12:00PM-1:00PM*

***Details on page 5***

***Upcoming Event!***

***WIE and Consultants Network Co-Sponsored Event***

*Tuesday, June 21<sup>st</sup>, 2011*

*6:00PM to 7:30PM*

*Speaker Julie Oppgard*

***Details on Page 6***

## *This Month...(Editor's Column)*

Over the last couple of years I have become increasingly involved with lighthouses and being that most are more than 100 years old it is interesting to see the progression of technology. The lighthouse was created to be an aid to navigation and it accomplished this by a light that would be visible for miles and may flash one or more times. They used kerosene for fuel, a glass Fresnel lens to control the light and they rotated by a pendulum powered clock mechanism that had to be wound daily. The Fresnel lens, invented in France was a major technological advance for focusing light. Lighthouses have been modernized by halogen lamps with reflectors, automatic lamp changers and electric motors with battery backup for rotation. They are largely obsolete with advances in radio navigation and now GPS but there is a romanticism and mystique to them that modern nav aids can't reproduce. It is interesting to me to see how inventors and engineers of that time used what was available to them to build something that has stood the test of time.



## *Graduates of the Last Decade*

The first ten years after graduation from university can be challenging for young professionals. Employment searches, new jobs, professional growth, career development, and life status changes are common experiences for many recent graduates. Going through these challenges can be daunting but IEEE members never have to go through these experiences alone or uninformed. IEEE Graduates of the Last Decade (GOLD) was created in 1996 as a membership program to help students transition to young professionals within the larger IEEE community. IEEE young professionals are automatically added to the GOLD member community as they graduate.

IEEE GOLD is a vibrant community of engineers, scientists, and technical experts with member representation across the globe and throughout IEEE societies.

### **IEEE GOLD Member Benefits**

Young professionals have a wide variety of member benefits & opportunities available to them through IEEE membership. These highlighted benefits are geared towards the needs and interests of young professionals and revolve around professional growth, community, and technical development



*Attend Your Local IEEE Meetings  
and Take Advantage of the  
Networking Opportunities*

## **2011 IEEE EXECUTIVE COMMITTEE FLORIDA WEST COAST SECTION**

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All material for THE SUNCOAST SIGNAL is due in electronic form by 1<sup>st</sup> Sunday after the 1<sup>st</sup> Tuesday of the month preceding the issue month.

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## *What is the Teacher In-Service Program?*

The Teacher In-Service Program (TISP) provides a forum for IEEE volunteers to demonstrate the application of engineering, science and mathematics concepts by sharing their real-world experiences with local pre-university educators.

[IEEE offers training workshops](#) for its volunteers on how to provide in-service programs to local pre-university educators.

TISP functions essentially as a professional development workshop aimed at helping teachers bring exciting hands-on engineering lessons into their classrooms. Once trained, IEEE volunteers can connect with pre-university schools in their local communities to deliver the hands-on program.

### **What are the Goals of Teacher u Service?**

The program's goals are to:

- empower section volunteers to collaborate with their local pre-university community;
- promote applied inquiry-based learning;
- enhance the level of technical literacy of pre-university educators;
- encourage pre-university students to pursue technical careers, including engineering;
- increase the general level of technical literacy of pre-university students throughout their educational careers.

Through TISP, IEEE volunteers help support engineering education and the development of future engineering students by:

- increasing the level of technological literacy in local school districts;
- contributing to the establishment of pre-engineering programs;
- facilitating enhancements in school science and technology curricula;
- developing collaborative relationships with educators;
- exposing more female and minority students to technology-related professions

Since 2001, over 130 in-service presentations have been developed and presented by IEEE volunteers.

Approximately 3,200 pre-university educators have participated in an in-service program, impacting almost 350,000 students worldwide.



## *New USF Student Branch Officers*

The following list is the officers for the USF Student branch for the upcoming year. Congratulations to all!

**Chair - Victor Basantes**

**Vice Chair - Disha Saha**

**Treasurer - Ayaz Hemani**

**Membership Chair - Robert Lewis**

**Internal Secretary - Kelley Allenegui**

**External Secretary - Mikel Graves**

**Designs Chair/Webmaster - Palan Seemangal**

**Marketing Chair - Ruby Perez**

**Events Chair - David Touvell**

**SPAC Chair - Alexandria Oliveros**

**EXPO Chair - Naval Dhawan**



## *Upcoming WIE Event!*



WIE is sponsoring a Networking Mixer in July 2011. Please join us for a relaxed evening of networking, great conversation and good food! We'll be announcing the location date and time on the IEEE FWCS website in the near future and it will appear in the Signal. The link is [http://ewh.ieee.org/r3/floridawc/cms/?page\\_id=174](http://ewh.ieee.org/r3/floridawc/cms/?page_id=174)



## *IEEE- USF Student Branch Spring Picnic and S-PAC*

In March the IEEE student branch, the local GOLD affinity group and the Tau Beta Pi honor society hosted their Spring Picnic. It was a fun day where IEEE FWCS members, student members and their families got together and socialized while enjoying hot dogs and burgers which they worked off with soccer and volleyball.

Also, in April, the IEEE student branch hosted the Spring SPAC at the University of South Florida. This semester's conference discussed preparation for advanced education and the importance of professional societies for engineers. Dr. Richard Pollenz, Interim Associate Dean of the University of South Florida's Graduate school informed and shared tips regarding the application and preparation for graduate education. Mr. Vishnu Pandey, chair of the SPAC committee, gave good advice on how to become a better "team player" and get the most from your professional organization. Finally, Dr. Jim Anderson told the attendees about his experiences going from college to obtaining his doctoral degree. It was an entertaining and useful overview of the process. The attendees included students from several departments and colleges around the university. Planning and running this conference helped us in the student branch strengthen our team and professional skills.



### *Job Opening: FRCC Compliance Engineer/Auditors*

FRCC Compliance Engineer/Auditor positions are responsible for the implementation of the FRCC Compliance Program that will monitor and enforce compliance to NERC Reliability Standards and FRCC Regional Reliability Standards. Implementation of this program involves working closely with all owners, operators and users of the FRCC Bulk Power System and with the North American Electric Reliability Corporation (NERC) compliance staff.



#### Required Qualifications:

- Bachelors Degree. (Engineering preferred)
- Five or more years experience in electric power system operations and/or planning. Planning preferred.
- Knowledge and understanding of NERC Reliability Standards
- **Highly Preferred - Extensive knowledge and experience with the technical aspects of the NERC Transmission Modeling (MOD) and Transmission Planning (TPL) standards**

#### Other:

- This position is located in Tampa, Florida.
- Travel is required.
- Excellent benefits

**Please forward resume to:**

**Mr. Barry Pagel**

**Director of Compliance**

[bpagel@frcc.com](mailto:bpagel@frcc.com) - Email



## ***Landfill Gas Recovery and Energy Technology***

**Date:** Friday, May 20, 2011  
**Time:** Seminar: Registration 11:30am-12:00pm, Speaker 12:00pm-1:00pm  
**Speaker:** Dan Cooper SCS Project Manager and Leader  
**Location:** FRCC 1408 N. West Shore Blvd., Suite 1002, Tampa, Florida 33607  
**Cost:** \$10 Members, \$20 Non-Members, \$5 Students. (Includes Lunch)  
**RSVP:** Online at: <http://time2meet.com/fwcs-pes3/index.html>  
**Make checks payable to:** IEEE FWCS  
**Send checks to:** John Stankowich, IEEE PES/IAS Treasurer  
2593 Forest Run Court  
Clearwater, FL 33761-3716  
**Space limited to the first 30 registrants!!!**  
**Cancellation must be submitted online 24 Hrs prior to the event at:**  
<http://time2meet.com/fwcs-pes1/index.html>  
**No shows will be invoice for the total cost of the event.**

**Questions:** Serge Beauzile at 863-834-6511 or [Serge.Beauzile@ieee.org](mailto:Serge.Beauzile@ieee.org)

The presentation will familiarize the participants with the basics of landfill gas generation and recovery and the control of landfill gas to reduce local and regional air pollution, to generate electricity, and for other beneficial end uses. The class will cover methods of construction, design elements, and permitting issues.

**Dan Cooper, P.E.** Mr. Cooper is currently a Project Manager and leader of the Florida landfill gas group with SCS Engineers in Tampa. Mr. Cooper has a Chemical Engineering Degree from University of Colorado at Boulder and Masters Degree in Environmental Engineering from the University of South Florida. Mr. Cooper has worked in environmental consulting for the past 6 years. Prior to entering consulting Mr. Cooper worked for an environmental instruments manufacture in their new product development division. Since joining SCS Engineers Mr. Cooper has performed a variety of engineering designs including landfill gas collection systems, solid waste transfer stations, municipal and industrial landfill closures and many general solid waste and environmental engineering projects.

## ***Section Members Receive Ninja Training -- Email Ninja Training!***

How many emails do you send every day: 10, 50, 100 or more? These days email seems to be the #1 way that we engineers both send and get information. Too bad you never took a class in high school on how to do email right. On Wednesday March 20th members of the IEEE section got together at TECO hall to learn the hidden secrets of how to become an Email Ninja.

Presentations were delivered by Mike McNally from the local direct marketing firm Genesis Direct and by PACE chairman Dr. Jim Anderson. Mike shared insights from his 30 years working in the direct mail industry. He brought lots of examples and showed just exactly how much detail direct marketing firms can work into the various letters and newsletters that get sent to our homes

When you send an email to someone, what do you want them to do? You'd like them to open your email, read it, and then do what you want them to do -- right? Now how often does that actually happen? I'm willing to bet that all too often you send an email off and it just vanishes never to be heard from again. Dr. Jim Anderson showed how to separate an email up into its three primary components, subject line, body, and signature, and then how to make each of these components work together to create a powerful and effective email.

If you weren't able to attend this seminar, we've got good news for you. We were able to video record it and Dr. Anderson is looking into ways to make this recording available to section members. Stay tuned for more information. You can become an email ninja!

***Jim Anderson***



## *Upcoming WIE and Consultants Network Co- Sponsored Event*

WIE and The Consultants Network will co-sponsor a dinner seminar on Tuesday, June 21st, 2011 at CDB's Southside (in the Private Dinner area in the back of the restaurant) located at 3671 S. West Shore Boulevard in Tampa, FL, 33629.

**Time: 6:00 PM – 7:30 PM**

Cost (includes dinner)

**IEEE Members – \$ 20.00**

**Non-Members - \$ 25.00**

**Please register for this event at the IEEE FWCS Website!**

Title: 4G: A Closer Look at Wimax and LTE.

Speaker: Julie Oppegard, 4G RF Engineering and Deployment, Sprint Nextel Corporation

Topic: Do you want to know more about the two top technology contenders vying for the lead 4G technologies in the U.S.? Join us for a seminar by Julie Oppegard describing the basics of Wimax and LTE in which she will cover concepts including the spectral efficiency, network architecture, QoS, and coding and modulation schemes of each. In addition, Julie will briefly touch on other technologies including, HSPA+, UMTS and Edge Evolution.

Bio: Julie has enjoyed her career as an RF engineer in the telecommunications field, first at Nextel and then at Sprint after the merger of the two. Her expertise includes design, performance, frequency planning, optimization and deployment of 2G, 3G and now 4G networks with a heavy focus on in-building systems, from small repeaters to campus-wide base-station-fed systems.

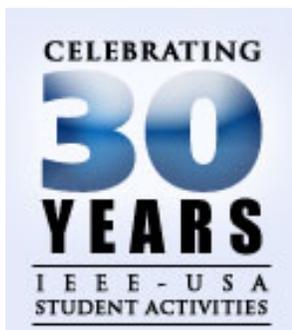
Julie is now part of the 4G RF Engineering and Deployment team at Sprint and manages 4G projects for both internal and external customers. She has experience in deploying 4G repeater systems and base stations for in-building solutions. Julie graduated with her BSEE from USF in August of 1999



## *What is S-PAC?*

Engineers must be proficient, professionally astute, and clearly aware of their responsibility to society. Student Professional Awareness Conferences (S-PACs, pronounced "ess-paks") explore the subjects that affect engineers' careers, regardless of how well engineers prepare themselves technically.

First introduced in 1979, S-PACs are an effective vehicle to transmit the professional awareness that enhances the technical education they receive in engineering school. S-PACs permit students to learn from the varied experience of successful engineers. The conferences have potential to increase student membership and to encourage ongoing participation in [IEEE](#). S-PACs are becoming a strong force for improving the electrical engineering profession over the coming years. S-PACs are structured events where students listen to experienced engineers from diverse backgrounds discuss topics from the [six critical categories](#). Students have a chance to interact with the speakers, usually through a roundtable discussion. Typically, S-PACs are half a day, and involve two or three [speakers](#).

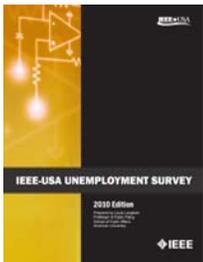


## Advertising Section

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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> </tr> <tr> <th>Member</th> <th>Non-Member</th> <th>Member</th> <th>Non-Member</th> </tr> </thead> <tbody> <tr> <td><b>Business Card</b></td> <td>\$25</td> <td>\$30</td> <td>\$120</td> <td>\$145</td> </tr> <tr> <td><b>1/4 Page</b></td> <td>\$40</td> <td>\$50</td> <td>\$190</td> <td>\$240</td> </tr> <tr> <td><b>1/2 Page</b></td> <td>\$75</td> <td>\$90</td> <td>\$360</td> <td>\$40</td> </tr> <tr> <td><b>3/4 Page</b></td> <td>\$110</td> <td>\$135</td> <td>\$530</td> <td>\$650</td> </tr> <tr> <td><b>Full Page</b></td> <td>\$140</td> <td>\$175</td> <td>\$670</td> <td>\$840</td> </tr> <tr> <td><b>Insert / Sheet</b></td> <td>\$200</td> <td>\$250</td> <td>\$800</td> <td>\$1,000</td> </tr> </tbody> </table>		Size	One Month		6 Months		Member	Non-Member	Member	Non-Member	<b>Business Card</b>	\$25	\$30	\$120	\$145	<b>1/4 Page</b>	\$40	\$50	\$190	\$240	<b>1/2 Page</b>	\$75	\$90	\$360	\$40	<b>3/4 Page</b>	\$110	\$135	\$530	\$650	<b>Full Page</b>	\$140	\$175	\$670	\$840	<b>Insert / Sheet</b>	\$200	\$250	\$800	\$1,000	<p style="text-align: center; font-size: 1.2em;"><i>Blue Elephant Consulting</i></p> <p style="text-align: center;"><b>IT Transformation Consultants:</b> PEOPLE, PROCESSES, &amp; PRODUCTS</p> <p>Dr. Jim Anderson                      P.O. Box 341734 President                                      Tampa, Florida 33694-1734</p> <p>Phone: 813.418.6970 jim@blueelephantconsulting.com www.blueelephantconsulting.com</p>
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## IEEE-USA Unemployment Survey

The IEEE-USA Employment Assistance Committee has continued its interest in developing a better understanding of the problem of unemployment among older engineers by conducting a survey of unemployed engineers. This report of results is organized into four sections. The first section reports the percentage distribution or means response for each of the questions in the survey. The second section reports the results of selected cross tabulations that focus on age and various aspects of employment status. The third section reports the results of a multivariate analysis that focuses on the impact of age on the duration of unemployment, when other factors are held constant. The final section compares some of the current results to those in 1995, 1996, 1998, 2002, 2004, 2006 and 2008. Price is 19.95. <http://www.ieeeusa.org/>





Florida West Coast Section, Tampa

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

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 <i>EXCOM at TECO Plaza, see page 1</i>	4	5	6	7
8 <i>Mothers Day!</i>	9	10	11	12	13	14
15	16	17 <i>RAS Meeting, see page 1</i>	18	19	20 <i>Landfill Gas Seminar, See page 5</i>	21
22	23	24	25	26	27	28
29	30 	31	1	2	3	4