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THE SUNCOAST SIGNAL

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

This Month's Meetings

Tuesday, April 6th: EXCOM Meeting
Meeting starts at 5:30PM At TECO Plaza
Register online at <http://time2meet.com/fwcs-excom/index.html>

Meeting is open to all FWCS Members

EMBS Seminar Biomechanics of Falls

Thursday, April 8, 2010
[Details on Page 4!](#)

Bay Pines Medical Center Standby Generation

Thursday April 8, 2010
[Details on Page 6!](#)

Robotics and Automation Society Meeting

Tuesday, April 20, 2010
[See page 6!](#)

Ninth Annual Wireless Telecommunications Symposium (WTS 2010)

April 21 – 23, 2010 -- Tampa, Florida
<http://wts2010.eng.usf.edu>
[Details on Page 7](#)

Consultants Network Meeting

Tuesday April 27, 2010
Location: CDB's Southside
[See Page 5](#)



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This Month...(Editor's Column)

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Spring is upon us and we have lots of events, news and announcements! First, is the new website that was designed by Claude Pitts. It is now online and it has all the information that the old site had but is more user friendly and has other features. Read the article on page 3. Next is the announcement that Tim Donovan is our PACE Chair. He recently returned from the conference in Nashville with enthusiasm and ideas for future events. There are meetings throughout the month so check out the calendar. The big event is the Wireless Telecommunications Symposium at the end of the month. Finally, you will find that the "See Page X" text on the cover page is now linked to the page the article appears on. This will get you to the article you are interested in without having to scroll down to it.



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Tim Donovan is New FWCS PACE Chair

A greeting to all IEEE West Coast Florida Section members, my name is Tim Donovan. I have accepted the position of Chair for our PACE group for our section. This program is to help all IEEE members to further their careers. We also get involved in the public interests, such as legislation to put more Science, Technology, Engineering and Math (STEM) in our Kindergartens through 12th Grade.

My role is to help provide you with the opportunities to grow in your engineering field by providing you with non-technical opportunities to further your career. This includes topics such as Networking (People, not technology), interviewing skills and other topics that interest you. I need to hear from you to understand what areas you are interested in.

Currently we are planning two major activities and considering new venues and activities in addition to hosting speakers. The idea is to make the events fun for families as well as FWCS members. One will be on how to enhance and grow your career regardless of the economic conditions. The topics to be presented will include:

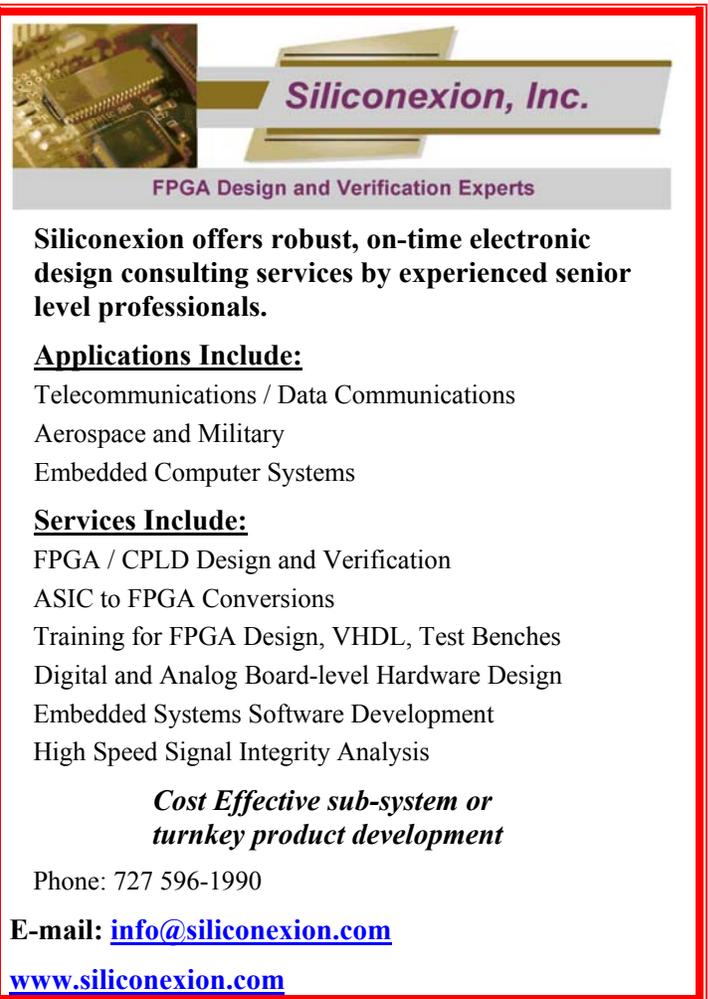
- How to build and maintain a Network
- How to sell yourself
- What are your career options as an engineer

This is being planned for the June/July 2010 timeframe. The second activity will be in the September 2010 timeframe and will focus on:

- What the IEEE is doing at the US government level to support the STEM efforts
- The current impact to the US workforce

I need your feedback on these activities and need to hear what else would be of interest to you so we can setup additional programs. Details will be forthcoming on the two events outlined above. My e-mail is tim.donovan@aim4best.com.

Tim Donovan, PACE Chair



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FWCS Website Has New Look!

In February, the FWCS site URL changed to <http://ewh.ieee.org/r3/floridawc/cms/>. The new site is based on WordPress, which is touted as “a state-of-the-art publishing platform with a focus on aesthetics, web standards, and usability.” This new content management system will provide an improved interactive experience enabling you to post comments and participate in discussion on various articles of interest. Please visit and provide me your suggestions, as the new site is a work in progress. Do not forget to update your favorites to take you directly to the new FWCS site, <http://ewh.ieee.org/r3/floridawc/cms/>.

The new website was developed by Claude Pitts, the Section Webmaster and has been running in parallel with the old site for a while during the testing phase. It was officially launched at the last EXCOM meeting after some last minute tweaking.





SEMINAR

IEEE FWCS - EMBS Chapter

IEEE Engineering in Medicine and Biology Society

Biomechanics of Falls

(The presentation will include a lab tour and demonstration)

John Lloyd, PhD, CPE

Associate Director, VA Research Center of Excellence

Date/Time: April 08, 2010 (Thursday); **6:00 pm**

Place: Veterans Administration Patient Safety Research Center
8900 Grand Oak Circle, Tampa, FL 33637.

Register: <http://time2meet.com/fwcs-emb/index.html>

SPACE IS LIMITED TO THE FIRST 20 REGISTRANTS !!!

PIZZA AND REFRESHMENTS WILL BE SERVED

IEEE Student Members \$3, IEEE Members \$5, Non-IEEE Members \$8

(Please bring exact amount or a check payable to "IEEE FWC")

Abstract:

Patient falls are a significant problem, detracting from quality of life and increasing the burden of chronic illness, injury, and disability. Fall-related injuries can result in disability or death, particularly in two vulnerable populations: frail elderly and persons with disabilities. Protective devices are available to minimize risk of fall-related injuries in these populations, including medical helmets, hip protectors, bedside mats / flooring, and protective edging. However the effectiveness of these devices is sub-optimal due to (i) absence of appropriate protection standards on the basis of which to select and test appropriate materials, and (ii) patient / resident non-compliance.

The VA Research Center of Excellence is conducting a study to develop and evaluate protective medical helmets using new advanced materials to minimize fall-related injuries in vulnerable persons. Specifically, we perform an engineering evaluation of the energy-attenuation properties of various advanced materials and use that knowledge to develop a new generation of medical helmets. The new devices are first tested in the Biomechanics laboratory at the Tampa VA Research Center, with comparison to commercially-available devices. Following refinement of the designs, we will conduct a multi-site clinical evaluation to examine real-world outcomes.

Speaker Bio:

Dr. Lloyd is Director over all Research Laboratories for the Tampa Veterans Administration Health Services Research and Development Service/RR&D Center of Excellence on Maximizing Rehabilitation Outcomes as well as an Associate Director of the Technology Division for the VISN8 Patient Safety Center of Inquiry. He is also an Assistant Research Professor in the Department of Biomedical Engineering at the University of South Florida. John has authored more than 70 book chapters, publications, open-literature articles and technical reports. He serves on the VA National Ergonomics Committee as well as Chairs a task force at the Patient Safety Center. Dr. Lloyd has served on a variety of exciting research projects, focusing on the prevention of musculoskeletal disorders through biomechanical evaluation and development of engineering solutions. His research foci include: biomechanics of falls and preservation of upper extremity function in persons with spinal cord injury.

Directions: Seminar will be hosted at the Veterans Administration Patient Safety Research Center, which is located at 8900 Grand Oak Circle, Tampa, FL 33637.

Contact: For further information, contact John Lloyd at DrJohnLloyd@Tampabay.RR.com or John West at john.west@ieee.org



Consultants Network Meeting!

The Consultants Network Affinity Group will hold its **April 27th** meeting at CDB's Southside at 6:30 pm with a short mingle session beginning at 6:00 pm. This session will prove very interesting to all because we shall attempt to answer any questions pertaining to Engineering Professional Registration, a topic that is of extreme interest to all of us in the Consultants group. In order to do this, I have invited Mr. Henn Rebane under the personal suggestion of Ms. Carrie Ann Flynn, Executive Director, Florida Board of Professional Engineers, so he comes highly recommended.

Mr. Rebane experience spans fifty years in providing consulting engineering services for light-industrial, institutional and commercial facilities. Responsibilities and job titles have included Chief Electrical Engineer, Project Manager, Principal Engineer and Managing Engineer. Current assignments are primarily in writing electrical construction specifications. Henn is a licensed engineer in Florida, and is registered with National Council of Examiners for Engineering and Surveying.

From 2000 to 2009 he served on the Florida Board of Professional Engineers. His service with the Board included two years as Chairman. At this time he is a member of the Board's Probable Cause Panel.

Currently he is on the Board of Directors of the National Council of Examiners for Engineering and Surveying, having served as the president of that organization in 2009.

Rebane is a member of IEEE, International Code Council, National Fire Protection Association, and is a fellow of the Florida Engineering Society and the National Society of Professional Engineers.

We will avail ourselves of his expertise as Chairman of the Florida Board of Professional Engineers to listen to his explanation and ideas about Professional Registration, how does this apply to Electrical Engineers and how to attain it while looking into the benefits of Registration. Please make it a point to attend this very interesting meeting.

Hermann Amaya, Consultants Network Chair



Second Annual Energy Fly-In

IEEE-USA invites any IEEE member with an interest in Energy Policy to come to Washington on 17 and 18 May for our Second Annual Energy Fly-In. This unique event will give IEEE members an unparalleled opportunity to directly influence the direction of Energy Policy in Washington.



Energy underlies and connects three converging challenges that face the United States in the early 21st century: security, prosperity, and the environment. To address these issues, President Barack Obama and Congress have vowed to make energy issues a priority this year. This is your opportunity to have a direct impact on this critical process.

As a background document for this event, members will be briefed on and will deliver to their Congressional Representatives IEEE-USA's [National Energy Policy Recommendations](#). These principles represent the consensus of IEEE-USA's Energy Policy Committee, which is comprised of experts from industry, academia, and the government who share a common expertise in the field of energy, but represent a wide range of viewpoints.

The core aspects of the current threats linked to energy are: the addiction to oil and the threat of climate change to the health of the planet and the prosperity of humanity. The addiction to oil threatens jobs, the economy, national security and the environment. Managing or mitigating the threat of climate change requires action to transform our energy systems and our economy to one that is carbon free, carbon neutral or which successfully captures and stores carbon emissions on a geological time scale.

Many of the necessary steps are well understood but have not yet been taken. Established technologies must be applied at unprecedented scale and on an accelerated schedule. Emerging technologies require further research and development. Innovation is still needed. Bold actions and substantial investments will be required to meet the challenges.

For more information or to register, go to <http://www.ieeeusa.org/policy/energy-flyin/default.asp>.





VA Bay Pines Medical Center Standby Generation

- Date:** Thursday, April 8, 2010
Time: Site Visit: 10:00am-11:30am
Host: Bruce Campbell, Electric Shop Supervisor, Veterans Administration Bay Pines Medical Center
Location: VA Bay Pines Medical Center, 10000 Bay Pines Blvd, Bay Pines FL., 33744
[Google Map](#)
Cost: Free site visit
RSVP: Online at: <http://time2meet.com/fwcs-pes4/index.html>
 Space limited to the first 20 registrants!!!
Questions: Serge Beuzile at 863-834-6511 or Serge.Beuzile@ieee.org

After a very active 2004 Hurricane season the Veterans Administration embarked on a program to provide their Medical Centers with upgraded campus level standby generation. This campus level generation would augment the existing critical emergency circuit only power allowing each Medical Center Campus to continue operations with the loss of utility power. The VA Bay Pines Medical Center installed an additional 8 MW of standby generation resulting in the ability to isolate from utility power and provides power to the Medical Campus for 10 days before requiring additional fuel.

This site visit will be a walking tour of the installed generation and discussion of the operations of this site and interconnection with the local utility. "IEEE" signs will be placed to guide you to parking as well as meeting location



Robotics and Automation Society Meeting April 20, 2010 (Third Tuesday of the Month)

We had a great first general meeting in February! Ken Fiallos, our vice chairman, gave a presentation on the Cell phone operated security system he has developed for his home. Ken Fiallos, our vice chairman, gave a presentation on the Cell phone operated security system he has developed for his home. It also provides him with the ability to remotely control household system such as his air-conditioning, etc... from his cell phone. He went into quite a bit of detail and what he has been able to achieve was very impressive. April's meeting is shaping up to be really exciting. It will be on Tuesday April 20 at the following location: Whiskey Joe's, 7720 W. Courtney Campbell Causeway, Tampa, FL. It will be a dinner meeting starting at 6:30pm. But come early to socialize.

The entrees are:

- Chopped Salad \$19.25
- Chicken Sandwich \$16.70
- Signature Burger \$16.70
- Fish & Chips \$19.25

The entree price includes meal, non-alcoholic drink, tip and tax. If you elect not to eat, there will be a minimum \$2.00 charge. You will need to pay by check or cash at the meeting. Make your check payable to IEEE FWCS. RSVP by email to george@imbedded.com and provide the names and food selection for each person in your group. Bring some friends; this meeting is open to everyone that is interested.

Our guest for our April meeting will be Team Duct Tape of the First Robotics competition who are currently the state champs and by our April meeting may be the world champs. Here is a little bit about them. FIRST Tech Challenge Team Duct Tape is a community-based high school level robotics team comprised of ten students attending a variety of public, private and home schools in the NW Hillsborough and western Pasco county areas, and sharing a common interest in robotics, engineering, and programming.

Team Duct Tape recently earned the distinction of becoming one of two teams representing Florida at the FIRST World Championship, held at the Georgia Dome in Atlanta, April 14-17. Team members will share with RAS members their FIRST World Championship experience through photos and video, talk about FIRST robotics, and demonstrate their robot for members.



WIRELESS TELECOMMUNICATIONS SYMPOSIUM

(WTS 2010), APRIL 21-23, 2010 TAMPA, FLORIDA

WTS is unique in striking a harmonious balance between technical and business sessions targeting wide spectrum of emerging topics in wireless communications and networks. The theme for this year is “**Global Wireless Communications - The Next Generation**”. Authors are invited to submit original applied research papers to one of the following tracks:

- Wireless Algorithms, Methods, Simulations, and Software
- Wireless Communications and Network Technologies
- Wireless Network Security
- Wireless Standards and Platforms
- Wireless Communications: Military Aspects and Satellite Applications
- Wireless Communications in Latin America
- Wireless Networks and Emerging Technologies
- Wireless Telecommunications Services, Policy, and Business Applications

All regular papers will go through strict double-blind peer-review process for acceptance. The proceedings will be published by the IEEE and be available on its Xplore online publication system. Some selected high quality papers from WTS 2010 will be considered for publication in a special issue of the International Journal of Interdisciplinary Telecommunications & Networking, IGI Global publisher, pending their successful extension and an expedited review process.

The planned highlights of WTS 2010 include:

- Executive presentations and featured addresses
 - Dr. Robert Kahn** (Internet Pioneer and Co-Inventor of TCP/IP), Chairman/CEO, **CNRI**
 - Dr. Richard Gitlin** (Wireless Network Pioneer and Co-Inventor of DSL), State of FL 21st Century World Class Scholar, **USF**
 - Dr. Richard Lynch**, Executive Vice President and CTO of **Verizon Communications**
 - Dr. Francois Cosquer**, CTO Security and Technology Strategist, **Alcatel-Lucent**
- Invited Speaker presentations including **Dr. H. Riazi** of Clearwire WiMAX Lab, **Dr. Z. Haas** of Cornell University and **Dr. S. Das** of UT Arlington and NSF
- Presentations of accepted academic and practitioner research papers
- Panel discussions, including future directions in wireless communications industry, academia, and government perspectives, vehicular communications, 4G wireless technologies, services and applications
- Tutorials / Workshops (Wireless Networks Security, Cognitive Radio)
- Poster sessions
- Student workshop/forum
- Exhibits

WTS has rich history of bringing top executives and scientists and organizations to participate. Past WTS participants include Dr. Irwin Jacobs, Chairman and Co-Founder of QUALCOMM; Mike Lazaridis, Founder, President, and Co-CEO, Research In Motion; Dr. Charles Elachi, Director, NASA's Jet Propulsion Laboratory; and Dr. Vinton Cerf and Dr. Leonard Kleinrock, Internet pioneers. Organizations represented have included Bell Laboratories, Vodafone, Verizon Wireless, AT&T, Sprint Nextel, IBM, Ericsson, Nokia, Alcatel-Lucent, NTT DoCoMo, T-Mobile, Motorola, Cisco, QUALCOMM, RIM, Palm, Intel, Gartner, Forrester Research, The Carlyle Group, Arthur D. Little, Jupiter Research, PwC, MITRE Corporation, Aerospace Corporation, Nortel, BBN Technologies, KBS, KDDI, Broadcom Corporation, RBC Capital Markets, Ernst & Young, JPL, the FCC, the NTIA, DARPA, the FBI, and Ofcom.

Important Date:

Early Registration: **April 1, 2010**

For further information, visit <http://wts2010.eng.usf.edu/> (or) www.csupomona.edu/wtsi

Technical Co-Sponsor: IEEE Communications Society





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

April 2010 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 <i>Easter</i> 	5	6 <i>EXCOM Meeting at TECO Plaza</i>	7	8 <i>EMBS Meeting, See page 4, PE/IA Tour of VA, See page 6</i>	9	10
11	12	13	14	15	16	17
18	19	20 <i>RAS Chapter Meeting</i>	21 <i>Wireless Telecommunications Symposium, see page 7</i>	22	23	24
25	26	27 <i>Consultants Network Meeting see page 5</i>	28	29	30	1