

THE

SUNCOAST

SIGNAL

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

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IEEE USF 2013 Spring Banquet

Date: Saturday, April 13th

Cost: Spring 2013 Graduating Seniors = FREE

IEEE USF Officers = FREE

Students = \$5

Professors/Professionals/Guests = \$15

Time: 7PM

Dress: Professional

Speakers: Dr. Thomas Weller – USF Electrical Engineering Chair

Serge Beauzile - IEEE FWCS Chair

Location: USF Campus, MSC 3707

RSVP: http://sites.ieee.org/sb-usf/get-involved/

Hello Professionals!

IEEE USF is holding our Spring 2013 Banquet on Saturday, April 13th at 7PM in the Marshall Student Center room 3707.

This is a time to congratulate the Graduating Seniors, Southeast Conference Participants, Upcoming Officers, and have a couple IEEE USF awards. We hope that some FWCS professionals will join us in this evening of celebration.

For any additional questions or concerns please do not hesitate to email me at dtouvell@mail.usf.edu.

Regards,

David Touvell IEEE USF Chair



IEEE ExCom Meeting

For Planning purposes, the following dates are the planned dates for IEEE FWCS ExCom meeting for the remainder of 2013:

- April 2nd May 7th June 4th

- July 2nd August 6th September 3rd

- October 1rst November 5th December 3rd

Advertisment







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Wireless Directions for the 21st Century and Beyond

Date: Wednesday April 17th, 6 PM at USF Tampa Campus, room ENB 109

Abstract: Wireless communication has been touted as the fastest growing technology in history --- as early as 2001 the number of mobiles exceeded the number of landlines globally. Currently, new wireless applications and services continue to emerge on an almost daily basis, the number of users of these services, including machines, are growing at an exponential rate, and there is continuous progress in enabling seamless communications between wireless devices (the "Internet of Things") across many different wireless standards.. This talk will discuss 4G and beyond ("5G") wireless communications and the networking technological landscape, and recent research advances that address capacity, interworking, and reliability improvement of wireless networks. Next, we will present research on a new applications domain---in vivo wireless communications (think MIMO in vivo) that is an alternative view of "5G." Wireless technology has the potential to synergistically advance healthcare delivery solutions by creating new science and technology for in vivo wirelessly networked cyber-physical systems. Such systems of embedded and wirelessly networked devices can use real-time data to enable rapid, correct, and cost-conscious responses in chronic and emergency conditions.

RICHARD D. GITLIN is a State of Florida 21st Century World Class Scholar and Agere Chair Distinguished Professor of Electrical Engineering at USF. He was Senior VP for Communications and Networking Research at Bell Labs and later visiting professor at Columbia University, where he received his doctorate. Dr. Gitlin is a member of the National Academy of Engineering, Fellow of the IEEE, and Bell Laboratories Fellow. He is also a co-recipient of the 2005 Thomas Alva Edison Patent Award and the S.O. Rice prize, coauthored a graduate Data Communications text, published 100 papers and holds 47 patents (co-inventor of DSL). Since joining USF in 2008, he has focused on the intersection of communications with medicine and created an interdisciplinary team that is focused on wireless networking in vivo miniature wirelessly controlled devices to advance minimally invasive surgery and other cyber-physical systems.

Organizer: For more specific information or directions, please contact Chris Lambrecht (e-mail: chris.lambrecht@ieee.org, Ph: (727)458-9061

Reservations: http://time2meet.com/fwcs-mtt/index.html

PIEEE2013 Lignell Award Recipients



Born into a family of engineers and physicists Chris graduated from the University of Central Florida in 1994. After serving honorably in the United States Army Chris began teaching at Wharton High School in 2002. He currently holds teaching certifications in Physics, Earth and Space Sciences, Social Science and Exceptional Student Education. Working diligently to better himself and provide students with the best opportunity to succeed, Chris has continued his education at the Universities of South Florida and Texas. He has been the facilities chairperson for the Hillsborough Regional Science Fair for the previous 6 years, working with local leaders to provide an exciting and appropriate environment that honors the hard work of the community's youth. At Wharton High Chris works tirelessly in the classroom and has successfully increased the number of Physics classes

within Hillsborough Counties most populated school from 2 to 8, and hopes to double that number again. He currently teaches AP Physics, Physics Honors, Introduction to Engineering and Astronomy Honors. He served as the head coach to Wharton's J.V. football team and assistant varsity coach from 2003 to 2009. He continues to selflessly serve his students beyond the classroom by sponsoring the Robotics, Engineering, Hockey and Chess clubs. When not working with students Chris enjoys spending time visiting historical sites and hiking his wife Katherine and their daughter Laura.



Cindy is a 1995 graduate from the University of South Florida and has taught a variety of math courses over the last seventeen years. She has served in several roles throughout her career. She is a Pasco County District Trainer. In this role, she developed and delivered Pasco County's two day High School Geometry Strategies training. She also presented to the Pasco Council of Teachers of Mathematics on methods she uses to differentiate her instruction based on data analysis.

Furthermore, she has served as the team leader of the Science and Engineering Learning Community. Through this work, she has developed many project based Geometry lessons that

have been implemented throughout various schools in the county. Her students truly flourish when exposed to a hands-on approach to mathematics and have the opportunity to see it in action.

As a mathematics leader in Pasco County, Cindy has strived to ensure the mastery of the Next Generation Sunshine Mathematics Standards. In her classroom, she challenges students to achieve at 100% mastery of the standards. Through self-monitoring and perseverance, her students consistently perform at a high level. Her teaching methods incorporate the Common Core State Standards Mathematical Practices perfectly. She is presently working as the Math Department chair to assist others in the implementation on the Common Core State Standards.



Kevin has been an Access Biology and Earth and Space Science teacher for the past 4 years at Gaither High School in Hillsborough County. He graduated from Florida State University with a Graduate and Masters degree in Sports Administration and for the next 10 years pursued a sports related career with the Orlando Magic, the Orlando Predators and the Alonso High School football team.

Then came his big switch to teaching science and to teachers and students at Gaither, he as well known as any sports hero. Mr. Diez has been able to find a unique talent to teach mentally

handicapped students science concepts that others have not been able to teach them. Mr. Diez method is to use a variety of unique games, that he has created, to capture his students' full attention despite their varying learning disabilities.



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IEEE PES Scholarship Plus

The IEEE PES Scholarship Plus Initiative provides multi-year scholarships and career experience opportunities to qualifying U.S. electrical engineering undergraduate students. As long as the scholar continues to meet renewal standards, he or she will receive up to three years of funding — US\$2,000 the first year, \$2,000 the second year and \$3,000 the third year — interspersed with up to two years of valuable, hands-on career experience.

IEEE PES Scholarship Plus Initiative Application is OPEN

We are now accepting applications from undergraduate students in the US & Canada for the PES Scholarship Plus Initiative. Over the last two years, we have distributed over US\$642,000 to 265 students from over 100 schools. Our goal is to get 700 applications and distribute 400 scholarships in 2013. The application (https://ieee.communityforce.com/Default.aspx) has been open for one week and during this time; over 600 undergraduate students have created an account to start the application process. The deadline to submit an application is June 30, 2013.

In their own words....

The following are statements that have been made by PES Scholarship Plus Initiative student recipients in response to the question — "How has receiving this scholarship impacted you?" More testimonials are available on the PES Scholarship Plus Initiative website (http://www.ee-scholarship.org/sponsorship/testimonials/).

- A Power engineering is a field with exponentially growing opportunities. Being part of the PES Scholar program has allowed me to integrate myself to this field and have a great sense of pride. The support from IEEE PES provides the momentum to achieve anything in this field. I highly recommend this scholarly program to all power engineering students.
- A The absolute best part about receiving the PES Scholarship for me is the access to the PES Careers resource. I have found many exciting opportunities using this resource that would have otherwise gone unnoticed. I currently have multiple job offers at various companies in the power sector, most of which are a direct result of the PES Scholarship.

Career Experience/Internships

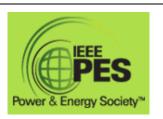
Getting students to participate in career experience opportunities is fundamental to the success of the Initiative. The objective of the career experience program is to expand the number of available career experience opportunities for students, particularly by companies that may not have been offering them in the past, to provide an efficient way for companies to supplement their own career experience programs, and to encourage companies to increase their efforts to build the pipeline of students interested in power engineering careers. PES Scholars have reported getting internships in the following industries:

Electric Services: Distribution Utilities, Electric Services: General, Electric Services: Gen/Trans/Distr. Utilities, Electric Services: Generation Providers, Electric Services: Transmission Provider, Manufacturing: Electric Transmission and Distribution Equip.: Transformers, Switchgear, Manufacturing: Electronic And Other Electrical Equip., Components, Except Computer Equip., Research: Academic Institution, Services: Engineering Services in Energy and Power Systems

If your company, has an internship program, please visit PES Careers (http://www.ieee-pes.org/professional-development/pes-careers). PES Careers is uniquely designed to help students find a power engineering job after graduation (or career experiences while a student), and to help employers efficiently find the best candidates for those positions. IEEE PES offers PES Careers without charge as a service to students and their future employers, and to help address emerging engineering workforce challenges.







FWCS PES UTILTY USERS GROUP MEETING GENERATOR PROJECTS

Open only to IEEE Members in Good Standing



Date: Friday, April 12, 2013

Time: 9:00AM - 1:00PM

Speaker: Thomas Blair, P.E., Senior Consulting Engineer, TECO

Location: 13031 Wyandotte Road, Apollo Beach, FL 33572

Cost: FREE (lunch will be provided by Tampa Electric)

RSVP: Online at: http://www.ewh.ieee.org/r3/floridawc/ (Select Reservations)

Questions: Tom Blair at 813-228-1111, ext 48179 or tom blair@ieee.org

Your IEEE PES West Coast Chapter is hosting the next <u>local utility users group</u> meeting on Wednesday, March 27, 2013 at the Tampa Electric Big Bend Power Station where TECO will present their work on Generator projects that restore the capabilities of the existing generators. Tampa Electric Engineers will present information on past projects preformed at various stations to recover the performance of existing generators and auxiliary systems. This meeting will also cover a current project at Big Bend Station where a 35 year old, 495MVA, hydrogen and water cooled generator is being modernized. The stator is being rewound, the excitation control system is being replaced, and the generator protection system is being updated to modern available technology. Additionally, we will present information on other generator projects that have been completed in the past few years. The meeting will conclude with a plant tour covering aspects of the current project underway at the station for those that are interested.

We will discuss topics such as stator winding replacement, water clip design, core loss testing methods, retaining ring issues, rotor coil replacement, brush and brushless exciter reconditioning methods, excitation control system improvements, and generator protection relay improvements to protect the investment in the generator.

To ensure everyone's safety, we ask that attendees wear casual clothing. No shorts are allowed onsite. We also request that attendees wear closed toed shoes (steel toed shoes are preferred). Hard hats, hearing protection, and safety glasses will be provided to attendees, but if you have this PPE, you are welcome to bring it and use it at the meeting. Please have a government issued photo ID when arriving.

IEEE-USA Supports Senate Legislation to Reform H-1B and L-1 Visa Programs

NEWS from IEEE-USA 2001 L Street, N.W., Suite 700 Washington, DC 20036-4928

IEEE-USA Supports Senate Legislation to Reform H-1B and L-1 Visa Programs

WASHINGTON (22 March 2013) -- IEEE-USA supports the "H-1B and L-1 Visa Reform Act of 2013," legislation introduced this week by Sens. Sherrod Brown (D-Ohio) and Chuck Grassley (R-Iowa).

"We commend Sens. Brown and Grassley for introducing this important legislation," IEEE-USA President Marc Apter said. "This, along with increasing the number of green cards available to high-skill workers, would strengthen job retention and creation in the United States."

The bill "aims to close loopholes in the H-1B and L-1 visa programs, reduce fraud and abuse, provide protections for American workers and for visa holders, and require more transparency in the recruitment of foreign workers." Among other things, it would:

- * Require all companies to make a good-faith effort to hire Americans first
- * Prohibit employers from advertising only to H-1B visa holders
- * Require that wages paid to H-1B holders and U.S. citizens be essentially the same
- * Prohibit companies from outsourcing visa holders to other companies

http://www.grassley.senate.gov/news/Article.cfm?customel_dataPageID_1502=45141

Including exemptions to the 65,000 annual H-1B cap, the United States issued 134,780 H-1B visas in FY 2012. If legislation pending before the Senate passes, it will significantly increase this number. One of the drivers for the reform bill, as profiled in a recent Computerworld story, is the strong connection between H-1B visas and offshoring. The publication found that the top 10 companies using the visas specialize in offshoring U.S. jobs.

Computerworld concluded that "... the major beneficiaries of the proposed increase in the cap would be pure offshore outsourcing firms."

http://www.computerworld.com/s/article/9236732/The_data_shows_Top_H_1B_users_are_offshore_outsourcers

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Managing Your Career as a Business

Presenters: Peggy Hutcheson and Edward Kirchner

Date: 11 April 2013 (See http://www.ieeeusa.org/careers/webinars/2013/webinar-04-11-13.html to register)

Time: 4-5 PM ET

Overview

Who's the CEO of You, Inc.? You are, of course! In this ever-changing career and employment environment, it's never been more important to take charge of your career. The goal of the webinar is to help engineers and technology professionals to achieve lifelong employability by focusing on their own professional and career development. The webinar will provide information and tools to help engineers and technology professionals:

Develop networking and job-seeking skills

Achieve career satisfaction

Take responsibility for personal career and professional development

Recognize the importance of both technical and non-technical skills to career and professional development

Learn how to make organizations more productive

The webinar will highlight the unique resources that the IEEE makes available to help engineers and technology professional manage their careers, including the wealth of online tools and the power of the IEEE network.

About the Presenters

Peggy Hutcheson, Ph.D, is the founding partner of the Odyssey Group, a firm specializing in products and services for organizations and individuals to connect people to changing work roles. She was a founder of the IEEE's Innovation Institute, and she is past chair of its Employment and Career Services group. Peggy is a speaker and author, having co-authored Helping Employees Manage Careers, published more than a dozen articles, presented a half dozen invited webinar, and contributed to five books. Her contributions have been recognized with leadership awards from ASTD, the IEEE-USA, and Georgia State University.

Edward L. Kirchner is the 2013 chair of the IEEE-USA Employment and Career Services committee, on which he also represents IEEE Region 3. His engineering career spans nearly 30 years.

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April 2013 Calendar of Events (For more information see P. 1) Inside this Signal...

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1	2 IEEE EXCOM TECO Plaza 5:30pm	3	4	5	6
7	8	9	10	11 "Managing Your Career as a Business" Webinar 4pm	12 IEEE FWCS Utility User's Group "Generator Projects"9:00am	13 IEEE USF 2013 Spring Banquet USF 7pm
14	15	16	17 Wireless Directions for the 21 st Century and Beyond, 6 pm	18	19	20
21	22	23	24	25	26	27
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