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This Month’s Meetings

Tuesday, September 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

Open Letter from your IEEE USF Branch
Details on page 2

Smart Grid Symposium Back By Popular Demand
Friday, September 21, 2012, Seminole Electric
Details on page 4

What You Need to Know to Find a New Position in today’s Job Market
Details on page 5

Tentatively Scheduled Members Appreciation Seminar
IEEE Std. 1547 - Tour Lakeland Sun Edison Solar Plant
Friday, October 12, 2012- Lakeland Training Center
Details on page 6

NESC 2012 Update Seminar
Friday, Nov 30, 2012 - FRCC
Details on page 7
I'm David Touvell and I'm the Chairman of the University of South Florida's Student Branch of the Institute of Electrical and Electronics Engineers (IEEE). I'm contacting you because we have an exciting offer that may benefit your company and I'd like to have an opportunity to discuss with you.

The IEEE is the world's largest professional organization with over 500,000 members worldwide. It is committed to advancing the fields of electrical and electronics engineering. The University of South Florida's Student Branch of the IEEE consists of Electrical/Computer Engineering and Computer Science undergraduate and graduate students who are in the process of working towards technical degrees.

I believe that if your company became a sponsor of the University of South Florida's IEEE Student Branch it could result in many benefits for both your firm and the Student Branch. The specific benefits for your firm would include:

1. Boosting awareness of your firm by the addition of your logo to our USF T-Shirts
2. Potential customer awareness of your firm through the addition of your company’s logo to our promotional materials
3. Community involvement credit for your firm through the addition of your company to the Sponsorship page of University of South Florida's IEEE Student Branch website
4. Free attendance by your management and employees to any of our events
5. Special mention of your firm at all our events and recognition on hand out material at our events

The opportunity to arrange volunteer services to be provided by IEEE USF students who may one day be considered to become employees of your firm.

The purpose of the University of South Florida's Student Branch of the IEEE is to focus on the technical and professional development of our student members. This includes hosting various events throughout the semester such as technical tours, professional talks, workshops, social events and many others. As an employer with engineering interests, your company will profit from the exposure and networking opportunities that associating yourself with the University of South Florida's IEEE student chapter will provide.

I look forward to having an opportunity to discuss how we could benefit both of our organizations by working together. If you'll take the time to give me a call or send me an email, we can set up a time that will work with both of our schedules to have a talk about what the correct next steps should be.

I look forward to hearing from you.

Sincerely,

David Touvell
IEEE USF Student Branch Chair
dtouvell@mail.usf.edu
(321)-652-7896

P.S.: For more information on our student branch please email us at ieee.usf.tampa@gmail.com or visit our website at sites.ieee.org/sb-usf/
Career Resources for IEEE Members

Unemployed or concerned about your future? Check out the following resources to help you with your career and employment: IEEE-USA Career Navigator, IEEE Job Site, Employment and Career Strategies Forum and the IEEE career page.

For further information contact Ed Kirchner, Chair Employment and Career Services Committee or Scott Grayson.

HSN Studio Tour

Women in Engineering (WIE) will provide a tour of HSN Studios. Come see a 24/7 National Television Production Facility with State of the Art Control Rooms, Live Stages, Robotic Cameras and other Broadcast Equipment in action.

Date: Wednesday, November 14th, 2012
Time: 6:00 – 7:45 PM. Tour will begin at 6:30 PM.
Location: 1 HSN Drive (2501 118th Ave. N.) St Petersburg

Speaker: Michelle Wilkins, VP of Broadcast Engineering and Television Technology
Cost: $10 Members, $20 Non-Members
RSVP: Online at: http://time2meet.com/fwcs-meetings/

Make checks payable to IEEE FWCS
Send checks to:
John Stankowich, IEEE Vice Chair (WIE)
2953 Forest Run Court
Clearwater, Fl. 33761-3716

Space is limited to the first 14 registrants.
Attendee Registration closes on November 11th for security registration at HSN
Registered Attendees please go to main security guard gate from 6:00 to 6:20 PM for instructions to meeting room. Driver’s License will be requested.
Questions: Valerie Tur – 813-334-2317 or VLT4@cornell.edu.
Smart Grid Symposium Back By Popular Demand

Date:        Friday, September 21, 2012
Time:        Seminar:  Registration 8:30am-9:00am, Speaker 9:00am-3:00pm
Location:    Seminole Electric, 16313 North Dale Mabry Hwy, Tampa, FL 33618
Cost:        $100 Members, $150 Non-Members, $50 Students. (Includes Breakfast & Lunch)
RSVP:        Online at:  http://time2meet.com/fwcs-pes1/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 45 registrants!!!

Cancellation must be submitted online 24 Hrs prior to the seminar at:  
http://time2meet.com/fwcs-pes1/index.html

No shows will be invoiced for the total cost of the seminar.

Questions:   Serge Beauzile at 863-834-6511 or serge.beauzile@lakelandelectric.com

PDH Credits: 4 professional development hours will be awarded. Be sure to enter your name and PE number on the signup website as it appears on your license.  IEEE Florida Provider Number is 3849.

Following a successful Smart Grid presentation last year, the FWCS will once more have Randy Dotson, Jason Flynt and Lee Collins representing Lakeland Electric, Progress Energy Florida and Tampa Electric Company. The Symposium expert speakers will present the latest information on state-of-the-art innovations in smart grid technologies and their applications in their respective company. They will provide an update on their progress implementing that vision and share intimate detail of their plans. It will be an interactive presentation affording you the opportunity to participate and ask questions. We will also have several electric vehicles at the symposium.

USF IEEE Fall 2012 Picnic

Where:  USF Riverfront Park

When:  Saturday, October 13th, 10:00am - 2:00pm

The USF IEEE Student Branch is hosting their semiannual picnic at the USF riverfront park, October 13th from 10:00am - 2:00pm. Come network with IEEE students and professors while enjoying activities and good food.

David Touvell
What You Need to Know to Find a New Position in today’s Job Market

By Debra Feldman, JobWhiz, Executive Talent Agent

Anyone, whether a recent graduate or a seasoned professional who has spent a short time searching for a job, has noticed that it is a buyer’s or an employer’s market today. If ever there was a time to approach job hunting from the perspective of very choosy hiring authorities, now is when this point of view is appropriate.

What does this mean for candidates? It is ultra-important to put themselves in the company’s shoes and pitch themselves by focusing on how they can fulfill the employer’s needs and expectations. That may be easier said than done, especially if the candidate is impaired by a lack of knowledge, experience or sheer weariness and desperation. Even seasoned professionals may have little experience as a candidate if they have been with one company a long time or have always been recruited away to a better job.

Here’s a very brief primer on how to job search more successfully in today’s very competitive environment. By following this advice, job hunters, young and old, will be better informed about overcoming the job market’s challenges to obtain better results faster.

· Employers can be as demanding as they want because there are plenty of qualified individuals available for hire. Those candidates who package their experience and present the most credible and attractive qualifications will rise to the top of the pile.

   o Therefore it is well worth the extra time and effort required to customize your verbal and written description of credentials if you are seriously interested. Boiler plate cover letters and standard resume submissions are almost guaranteed to be ignored.

· The job market is highly competitive. Candidates who have a direct inside contact known and respected by the hiring decision have an advantage over strangers interested in a position.

   o Referrals have an edge over cold contacts. Whenever possible, have a mutual contact initiate an introduction on behalf of the candidate. The best outcome stems from getting to know the hiring authority before a job is advertised; the role might be tailored to a particular individual’s unique skills making them the top choice.

· More, if not most, new hires are made based on personal referrals, i.e. networking, than via resume submissions and online applications. Networking is the most effective job search method.

   o Devote almost all job hunting time and efforts to sourcing new job leads through direct connections, not job postings, social media mentions, recruiters, etc. While it is definitely easier to avoid networking, it is a lot harder, if not near impossible, to land without networking.

· Until recently, the first step routinely recommended to launch a job search was updating a resume. Nowadays, a resume may not be how an employer learns about a candidate’s background and decides to then pursue an interview. First impressions are very likely to originate based on an online search for a “name” that is recommended by a networking contact.

   o It is time to create a strongly positive online presence. At the minimum, this means establishing a complete LinkedIn profile as a resume replacement. A resume, especially tailored to an individual job description or distinct potential positions, continues to be relied on as a marketing document, and must clearly and compellingly demonstrate relevant experience and necessary competencies. It will be ignored if it fails to promote unique potential value, signal trustworthiness (read: no hiring risk) and ability to contribute immediately to the employer’s revenues, improved process or decreased costs. The online profile should lead with a strong, niched headline/title, describe major skills and career highlights, list employment history in reverse chronological order, report education statistics, and include genuine recommendations that illustrate both professional and personal strengths.
Tentatively Scheduled Members Appreciation Seminar

IEEE Std. 1547 – Interconnection Guidelines and Future of Electric Power Industry and Applications Problems and Tour Lakeland SunEdison Solar Plant,

Date:  Friday, October 12, 2012
Time:  Seminar:  Registration 08:30am-9:00am, Speaker 9:00am-2:00pm, Tour to follow
Speaker:  Dr. P.K. Sen, P.E., Professor of Engineering Site Director, Power Systems Eng. Research Center Colorado School of Mines.
          Keith Malmedal, P.E President NEI Electric Power Engineering, Inc. Arvada, CO
Location:  Lakeland Training Center
Cost:  No cost for IEEE Members, $125 Non-Members. (Includes Lunch)
RSVP:  Online at:  http://time2meet.com/fwcs-pes1/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 50 registrants!!!
Cancellation must be submitted online 24 Hrs prior to the seminar at:
http://time2meet.com/fwcs-pes1/index.html
Questions:  Serge Beaulzile at 863-834-6511 or serge.beaulzile@lakelandedlectric.com

The proposed tutorial and workshop will provide a comprehensive review of the state-of-the-art status of all renewable energy sources, and describe the impact of renewable will make and provide application guidelines for the Electric Power Industry. The proposed tutorial will also address the effects of renewables and the government regulations, effect on the electricity market, national electrical grid, smart metering, and perhaps the future of how electricity will be delivered in the U.S. A tour of the Lakeland Sun Edison Solar Plant will take place in the afternoon.

Dr. P.K. Sen, P.E. has over 46 years of combined teaching, research, and consulting engineering experience. He received his Ph.D. degree at the Technical University of Nova Scotia (Dalhousie University), Halifax, Nova Scotia, Canada in 1974. Prior to joining Colorado School of Mines, Dr. Sen taught for 21 years at the University of Colorado. His industrial experience includes power plants and substation engineering design, system & feasibility studies, protection and relaying and various aspects of power systems engineering applications. He is a Registered Professional Engineer in Colorado. Dr. Sen is a Professor and the Site Director for the Power Systems Engineering Research Center at Colorado School of Mines, Golden, Colorado. His current research interests include application problems in power systems engineering, electrical safety, renewable energy and distributed generation, energy policy and economics, power system engineering and engineering education. He has published over 130 technical papers and has supervised over 120 graduate students.

Keith Malmedal, P.E. received his MSEE (Electric Power) and MSCE degree (Structures), 1998 and 2002, respectively. He has a combined fifteen years of experience in power systems and structural engineering design, testing and commissioning that includes 500kV switching station, EHV large substations, 350 MW combined cycle unit, 500kV transmission line and industrial power systems. He is presently the President of NEI Electric Power Eng., Arvada, Colorado, specializing in all aspects of power system design. Mr. Malmedal is a Registered Professional Engineer (multiple states in both EE and CE) in 14 states. He is a very active member of the Denver section of IEEE PES/IAS Chapter. Keith has co-authored a number of papers presented and published in IEEE sponsored conferences, archival journals and magazines. Keith finished his PhD degree at Colorado School of Mines (May 2008) under the direction of Dr. Sen. His doctoral dissertation title is, “Distributed Generation and Renewable Energy Resources Connected to Existing U.S. Distribution Systems: Impact on System Design, Energy Policy Protection and Operation”
NESC 2012 Update Seminar

Date: Friday, Nov 30, 2012
Time: Registration: 8:00am to 8:30am
Seminar: 8:30am to 1pm
Speaker: Thomas Blair, P.E., Senior Consulting Engineer, Tampa Electric
Location: FRCC, Towers of West Shore, 1408 N. West Shore - Suite 1002, Tampa
Cost: $100 Members, $200 Non-Members

PDH Credits: 4 professional development hours will be awarded. Be sure to enter your name and PE number on the signup website as it appears on your license. IEEE Florida Provider Number is 3849.

RSVP: Online at: TBD (Select Reservations)
Make checks payable to: IEEE FWCS, and send to John Stankowich
2953 Forest Run Court, Clearwater, FL 33761-3716

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

PES West Coast Chapter invites you to the opportunity to attend a seminar on an update to National Electrical Safety Code (NESC-2012) on Friday, Nov 30, 2012. This standard became effective in January, 2012. This revision of the NESC provides updates to installation requirements for generation, transmission, and distribution installations and also provides updates to safe work practices at facilities covered by the NESC. While NESC is not law, it is one of the industry standards that OSHA may use to determine compliance with OSHA 1910.269 which is law, so it is critical that anyone who either designs or is involved in the maintenance of facilities covered by NESC learn about the updates provided by the NESC-2012 revision. The seminar is appropriate for degreed professionals, including engineers and engineering technicians, as well as non-degreed personnel with general knowledge of the NESC and experience in the electric utility industry. The standard is NOT included in the seminar but can be ordered online from IEEE. The website for more information on the code is at http://standards.ieee.org/about/nesc/2012.html.

The areas that received the most changes include the following;

Section 1 - Purpose and Scope, General Rules, and Application
Section 9 - Grounding

Part 1 – Generation Stations - Part 2 – Overhead T&D
Part 3 - Underground Lines
Part 4 - Work Rules

Attendance of a seminar on the latest code changes is a great way to ensure you comply with the latest technical advances in recommended electrical safe installation requirements and electrical safe work practices. Reserve a space for yourself today. (Continued Next Page)
(Continued from Page 7)

Speaker Biography

**Thomas Blair** is a Senior Consulting Engineer with Tampa Electric Company for over 10 years. Prior to his term at Tampa Electric, he was an engineer at Phasetronics/Motortronics for 10 years and prior to this served in the US Navy in the nuclear power area. Over his past 20 years’ experience, Tom has designed and performed startup services for motor and drive applications. Tom has instructed “Energy Production Systems Engineering” and “Electric Machines and Drives” courses as an adjunct professor at the University of South Florida, Polytechnic. Tom received his B.S.E.E. and M.S.E.E. (Power Engineering) degrees from University of South Florida in 1991 and 2001 respectively and is a licensed Professional Engineer in the State of Florida (PE# 53239). Tom is also a Senior Member of IEEE.

**TISP Update**

**August 15th Professional Study Day Tampa Bay Technical High, Tampa**

Twenty seven (27) High School Science Teachers attended an all-day "Introducing the Arduino Microcontroller into the STEM Classroom" Workshop. This Hands-On Workshop had the Teachers building an Arduino based DIY Scientific Apparatus called a Kinematic Tube. The Tube is essentially an inclined guideway with a laser and a phototransistor circuit at each end of the tube for detecting when a metal bearing rolling by interrupts the beam. By time stamping each beam interruption event the transit time of the bearing can be determined. The Kinematic Tube allows for duplication of the mathematical reasoning and experimental measurements that led Galileo to determine that Gravitational Acceleration was constant and that Mass played no "Roll". The Tube allows for the study of Gravity, Acceleration, Velocity, and the Law of the Conservation of Energy as it relates to Potential, Translational Kinetic and Rotational Kinetic Energy. The Workshop will eventually form the basis of a fielded tested "Teacher In Service Lesson Plan(s)". Special Thanks to the RAS Mentoring Partners, IEEE@USF Student Chapter, HCC Engineering Society and SPCC Student Drew Davis and RAS Members Dr Jim Anderson and Ken Fiallos.

**August 16th Professional Study Day Morgan Fitzgerald Middle, Largo**

Ken Fiallos P.E. the RAS Chair presented the Powerpoint portion of the KT Workshop from the Day before to (28) High School and Middle School Science Teachers. He also talked about RAS Chapter's Mission Initiatives:

1. Expanding Robotics Education through BEST Robotics since less 1% of the High School Students in TBART + Polk have access to Robotics Educational Opportunities,

2. RAS's Current Arduino Projects and lastly

3. How Teachers could work with RAS on their Arduino Projects (hint Join the IEEE).
IEEE-USA's Free E-Books to Members in August and September Help Engineers Position, Strategize and Prepare for Career Survival

WASHINGTON (3 August 2012) — As a special benefit to IEEE members in August, IEEE-USA is offering a free e-book, "Technical Presentations, Book 1: Strategy, Preparation and Planning." In September, the free e-book for members will be, "The Best of IEEE-USA Today's Engineer on Career Survival."

Engineers and scientists are frequently required to present technical information to a broad spectrum of individuals, including co-workers, executives and potential clients, in a variety of formats, such as conference papers, training materials and funding proposals. Even if you do not present conference papers, or make other formal presentations, you must present your ideas and opinions daily, in a clear and concise manner. Without a strategy and appropriate preparation, a presentation will be unfocused, not apply or fail completely.


The articles in this e-book will help to increase your situational awareness of the marketplace and can assist you in career planning and skills development. The publication also explores how to assess the market and yourself, and what steps to take to survive and remain competitive in the marketplace.

"The Best of Today's Engineer on Career Survival, Volume 1" will be available for members to download in September.

To purchase IEEE member-only products and to receive the member discount on eligible products, members must log in with their IEEE Web Account.
### Calendar of Events

#### September 2012

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