

# THE SUNCOAST DEEE SIGNAL

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

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Volume 45 - No. 1

**January 2002** 

# Joint Section & PES/IAS January Meeting Distributed Generation Technology

|   | Date/Time: | Thursday, January 24, 2002, 12:00 Noon  |
|---|------------|---|
|   | Location:  | TECO Hall, 702 N. Franklin Street, Tampa  |
| PES                                     | Speakers:  | Mr. Alan Obal, Ringhaver Equipment Company<br>Mr. Joseph G. Fiorito, Caterpillar Inc. |
| ADEL MONSTRY<br>APPLICATIONS<br>Society | RSVP:      | Art Nordlinger at (727) 596-9319 or<br>Email <u>Nordlinger@hotmail.com</u>            |
|   | Cost:      | \$10 for members, \$15 for non-members and guests                                     |

Responding to members' request of distributed generation topic, IEEE-FWCS and PES/IAS Chapter will start this topic as our first meeting of the year. At this meeting, we will find out all about the equipment, installation and operation of a temporary distributed generation site.

#### Alan Obal:

Mr. Alan Obal received his Bachelor of Science in Mechanical Engineering from University of South Florida. He joined Ringhaver Equipment Company in 1993 as an engineer for the Power Systems Division. His responsibilities include Sales, project management and technical support for temporary power projects including distributed generation projects, temporary prime power projects, and standby power projects. He has also managed numerous distributed generation projects for Ringhaver Equipment totaling over 100 MW of distributed power.

#### Joseph G. Fiorito:

Mr. Joseph G. Fiorito joined Caterpillar Inc. in 2000 to the position of Distributed Generation Marketing Manager. His responsibilities are to provide technical and marketing support for temporary generation projects for Caterpillar Power Systems North America and the Caterpillar Dealer Network.

Prior to joining Caterpillar, Mr. Fiorito's career was spent in the utility sector where he worked for Commonwealth Edison in Fossil generation/support, Nuclear support, and Corporate and T&D Purchasing. At Commonwealth Edison, he initiated and developed the world's largest temporary distributed generation project of 300 MWs.

Mr. Fiorito has a BS in Mechanical Engineering from Illinois Institute of Technology and received his Certified Energy Manager's Certificate from the Association of Energy Engineers.

Make your reservations NOW !! - Seating is Limited !!

#### 2002 IEEE EXECUTIVE COMMITTEE FLORIDA WEST COAST SECTION CHAIRMAN: Quang Tang Seminole Electric (813) 739-1222 a.tang@ieee.org VICE CHAIRMAN: Jim Beall i.beall@ieee.org SECRETARY: Jules Joslow ElectroMark, Inc. (800) 274-2383 jjoslowemi@aol.com TREASURER: John Conrad Windsor Engineering, Inc. (813) 926-4004 john.conrad@ieee.org SIGNAL EDITOR: Quang Tang Seminole Electric (813) 739-1222 g.tang@ieee.org AWARDS: Vacant BYLAWS: Richard Beatie, PE Consultant 813-289-0252 r.beatie@ieee.org EDUCATION: Dr. Rudolf E. Henning, PE University of South Florida (813) 974-4782 henning@eng.usf.edu PACE: Mark D. McKeage, PE Florida Power Corp. (727) 820-4593 Mark.McKeage@pgnmail.com MEMBERSHIP: Albert D. Rosenheck Consultant (941) 395-2117 rosenheck@aol.com STUDENT BRANCH CO-ADVISORS: Dr. Paris Wiley, USF (813) 974-4743 wiley@eng.usf.edu STUDENT BRANCH MENTOR: Jim Howard Tampa Electric Co. (813) 630-6233 j.howard@ieee.org STUDENT BRANCH CHAPTERS: (813) 974-4776 Anthony Webster - apwebste@eng.usf.edu Clemente Toro - toro@eng.usf.edu PES/IAS CHAPTER: Arthur L. Nordlinger, PE (727) 596-9319 nordlinger@hotmail.com MTT/AP/ED CHAPTER: Ed Grimes Xetron ATC (727) 784-3998 x158 Edg@xetron.com COMP/AESS CHAPTER: James S. Lumia (813) 832-3501 jlumia@ieee.org SP/COMM CHAPTER: Richard D. Crowley Raytheon Systems Co. (727) 302-2299 rdca@eci.esys.com LIFE MEMBER CHAPTER: Jules Joslow ElectroMark, Inc. (800) 274-2383 jjoslowemi@aol.com GOLD: Dennis Trask d.trask@ieee.org WEB PAGE http://ewh.ieee.org/r3/floridawc WEB MASTER: Richard Beatie, PE r.beatie@ieee.org THE SUNCOAST SIGNAL is published monthly by the Florida

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All material for THE SUNCOAST SIGNAL is due by the Friday following the 1st Thursday of the month preceding the issue month. Address all correspondence to:

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### Chair's Comment By Quang Tang

Congratulations to the Student Branch Officers for an outstanding job at the Senior Banquet last month. I would also like to congratulate and wish the best of luck to all graduating seniors.

Mr. James Wallace, an IEEE member of FWCS, has recently passed away and made a significant monetary contribution to the Section in the form of a bequest. On behalf of the FWCS, I am sorry to hear about Mr. Wallace's passing and sincerely thank Mr. Wallace's surviving family members for the contribution. This contribution will help the FWCS continue to provide the type of services our local members have come to expect from this very active Section and its Chapters.

The Nominating Committee of the FWCS has recommended a slate of Section Officers for the 2002 program year. The membership unanimously agreed with the Nominating Committee and the following members will join me as officers next year.

Chair – Quang Tang Secretary – Jules Joslow Vice Chair – Jim Beall Treasurer – John Conrad

Congratulations to the new officers, who will step into their duties beginning this month, and please offer them your continued support!



January 16-17, 2002 Orange County Convention Center Orlando, Florida

One Forum for Electronics Design, Manufacturing, Test & Purchasing Professionals

Register at our web site! <u>http://www.southcon.org/</u> Email: <u>southcon@ieee.org</u> Sponsored by Florida Council and Region 3, IEEE and Florida Sunshine Chapter of ERA



- Exhibits featuring hundreds of new products by leading electronics manufacturers serving the OEM & Systems-Level marketplace
- Plus, an IEEE sponsored Conference Program featuring a series of courses for design, manufacturing, and test engineers

# **Southcon <sup>â</sup>/2002 Announces Steve Drehobl** Microchip Technology VP As Keynote Speaker For 2002

Southcon, the exhibition and conference for the electronics OEM design, test, manufacturing engineering and procurement community in the southeastern United States, features Steve Drehobl, VP of Microchip Technology Inc.'s Security, Microcontroller and Technology Division, as its keynote speaker for 2002. The 2002 event will be held January 16<sup>th</sup> and 17<sup>th</sup> at the Orange County (FL) Convention Center, co-located with AMCON, American Contract Manufacturing Show.

Drehobl's speech, "The Embedded Control Universe: From the Mechatronic Evolution to the Connectivity Revolution," will address increased demands on embedded system designers to deliver affordable innovation in a compressed time-to-market window. Drehobl will review and demonstrate various design examples that are fueling relentless growth in 8/16-bit embedded control mechanisms in applications ranging from mechatronics and sensor processing to internet connectivity. He will also explore technology building blocks that fuel innovative embedded system design and reusable engineering techniques that reduce time to market. Drehobl will speak at noon on Wednesday, January 16<sup>th</sup>.

Drehobl has been active in the semiconductor industry for more than twenty years and has worked for Microchip Technology, National Semiconductor and Fairchild Semiconductor in product development, engineering management and senior management positions. Employing 2,950 people through out Asia, Europe, Japan and the Americas, Microchip Technology focuses on delivering innovative semiconductor products to the global embedded control marketplace from its headquarters in Chandler, Arizona; design facilities in Mountain View, California and Bangalore, India; semiconductor fabrication facilities in Tempe and Chandler, Arizona and Puyallup, Washington; and assembly and test operations near Bangkok, Thailand.

Southcon focuses on the technology, components, and tools needed to design and manufacture electronics equipment and systems for the industry's major markets; aerospace, defense electronics, entertainment, information technology, medical technology, microelectronics, modeling, simulation, optics and phonics, and telecommunications. This is the only event of its type serving the electronics communities of Florida, Georgia, Alabama, Mississippi and the Carolinas.

The primary service area of Southcon in the Florida High Tech Corridor includes more than 5,200 high technology companies. With a workforce over 160,000, this area is one of the primary and fastest-growing hubs of electronics manufacturing. Southcon expects to reclaim its position as the primary gathering place for engineers, technical, R&D and corporate managers, and procurement professionals in the region, especially because of the synergy between its audience and that of the adjacent AMCON event.

Southcon is sponsored by IEEE Region 3, Florida Council, and the Electronics Representatives Association Florida Sunshine Chapter. The sponsors have again chosen Electronics Conventions, Inc. to operate the 2002 event. ECI also manages California-based Wescon, the premier EOEM gathering in North America, and Northcon, serving the Pacific northwest.

For information about Southcon/2002, call Sue Kingston, Show Director, at 800-877-2668 x242, write to Electronics Conventions, Inc., 1230 Rosecrans Avenue #100, Manhattan Beach, CA 90266, email <u>s.Kingston@ecmshows.com</u> or visit <u>www.southcon.org</u>.







# "Old Hazards...New Solutions!" Beau Rivage Hotel Biloxi, Mississippi January 16-18, 2002

Founded and organized by Petroleum and Chemical Industry Committee Co-organized by Power Systems Engineering Committee and Pulp and Paper Industry Committee

## Industry Applications Society Institute of Electrical and Electronics Engineers, Inc. The IAS Electrical Safety Workshop

*This is the best kept secret in the field of electrical safety!*" exclaimed a first time attendee at the 8<sup>th</sup> Annual IAS Electrical Safety Workshop held in Toronto in January 2001. The IEEE Industry Applications Society Petroleum and Chemical Industry Committee created the Workshop in 1991 to provide a forum for people to meet and exchange ideas for preventing electrical accidents and injuries in the workplace. The Workshops have served to advance technology, establish best work practices and accelerate improvement in standards and regulations to reduce electrical incidents, prevent injuries, and reduce the economic impact of electrical accidents. They have linked professionals and centers of excellence in industry, engineering, government, and medicine. Participation has continued to grow and the technical program and exhibits have evolved to stay at the forefront of change impacting electrical safety. As a participant, you will be sharing experiences with engineers, electricians, scientists, safety professionals, risk managers, physicians, training professionals, and others – all interested in accelerating progress in preventing electrical accidents and injuries. For up to date information on the 9<sup>th</sup> Annual IAS Electrical Safety/esw.htm

## Workshop Mission

The mission of the IAS Electrical Safety Workshop is to:

- Accelerate application of breakthrough improvements in human factors, technology, and managing systems that reduce risk of electrical injuries,
- Stimulate innovation in overcoming barriers,
- Change and advance the electrical safety culture to enable sustainable improvements in prevention of electrical accidents and injuries.

## Fort Myers Joint Section & Life Member Luncheon Meeting E-learning Technologies and Management Strategies An update to Distance Learning at FGCU

| Date Time: | Tuesday, January 22, 2002 at noon   |
|------------|---|
| Location:  | Florida Gulf Coast University (FGCU), near I-75 & Exit 20 (Alico Road) in Fort Myers. The meeting will be in Griffin Hall Room 215. |
| RSVP:      | Please reserve by Friday, January 18 with Al Rosenheck at a.rosenheck@ieee.org or (941) 395-2117. Spouses and guests are welcome.   |
| Cost:      | \$12 per person for an all-inclusive box lunch.   |

**Abstract:** For many traditional institutions of higher education, the initial wave of web-based distance learning has often consisted of taking existing correspondence courses and simply posting the materials on the web. In contrast, some newer institutions, such as FGCU, began with an emphasis on web-based learning. This presentation will provide an overview of the latest developments and technology for distance learning. Dr. Rodriguez will also introduce Coursewell, a strategic partnership between FGCU and prestigious executive-education organizations in Europe.

**Biography:** Dr. Walter Rodriguez, PE, is Professor and Chair-Director of the Department of Computer Science, Computer Information Systems and Decision Science for the FGCU. He also directs the Institute for Technologies, Innovation and Florida Engineering Education Delivery System(FEEDS). Dr. Rodriguez received his Ph.D. in engineering project management from the Univ. of Florida in 1982. For the last 15 years he has obtained continuous NSF sponsored grants for systems development and distributed learning technologies. Dr. Rodriguez has published over 100 research articles and four McGraw-Hill books.

**Directions to FGCU:** From I-75 take exit 20, which is Alico Road. Drive east on Alico Road to Ben Hill Griffin Parkway. Turn right and drive south on Ben Hill Griffin Parkway to the signal at the entrance to FGCU. Turn left and follow the FGCU Entrance Road to the Information Building on the right and identify yourself as IEEE members. Park in Lot #7. Walk on the boardwalk to Whitaker Hall. Go through Whitaker Hall to the quadrangle on the north side. Griffin Hall, room 215, is located to the right and diagonally across the quadrangle.

## 2002 Review Seminars For PE Electrical and EIT/FE April Examinations

Review seminars for the <u>new format</u> PE (Electrical) and Engineer In Training Fundamentals of Engineering (EIT)/ (FE) exams will begin:

Monday, Jan 28 for the EIT/FE Exam & Thursday, Jan 31 for the EE Exam. Seminars are conducted from 7-10 P.M. (Monday or Thursday) for ten weeks. The registration fee is \$300 and includes a new text which covers the new "depth and breadth" exam format. The seminars will be held on the main USF campus in Tampa.

To register, contact: Alan M. Keith, P.E., PO Box 14042, (EC37), St Pete, FL 33733. <u>Alan.M.Keith@pgnmail.com</u> Phone (727) 384-7937, FAX (727) 384-7994 Pinellas Chapter, Florida Engineering Society

## Job Opportunity

### **Electrical - Marketing Engineer**

Local growing company is seeking an Electrical – Marketing Engineer with BSEE degree. Account management or tech support experience desired with excellent verbal & written skills. Knowledge of electronics or electrical power systems helpful. Will support multiple sales forces and handle special projects. Salaried position, bonus program, 401k, plus benefits. Mid Pinellas, excellent opportunity in a growing company. Send resume to:

Advanced Protection Technologies Louis Farquhar Fax (727) 524-6178 or Email <u>lfarquhar@apttvss.com</u>.



NATIONAL ENGINEERS WEEK\* 2002 FEBRUARY 17-23











# CELEBRATE ENGINEERING 2002 BANQUET

| Date/Time:          | Saturday, February 23, 2002<br>6:00PM Social, 7:00PM Dinner, 8:15PM Program  |
|---------------------|--|
| Location:           | Holiday Inn City Centre (813) 223-1351<br>111 West Fortune Street, Tampa, FL 33602   |
| Speakers:<br>Topic: | Distinguished Lecturer, William L. Dean<br>"How to Enjoy and Profit from an Engineering Career in<br>the Twenty First Century" |
| Emcee:              | Mr. Dick Fletcher, Chief Meteorologist of Channel 10   |
| Entertainment:      | A local Caricaturist & Magician<br>Music through out the evening   |
| Door Prize:         | Given through out the evening  |

Each February, National Engineers Week unites engineers and the public in a celebration of innovation and technology, National Engineers Week increases public awareness of engineering's contributions to our quality of life.

The Florida West Coast Engineering Societies are pleased to announce the annual Engineers Week Banquet. This year, the banquet will be held on Saturday, February 23, 2002, at the Holiday Inn City Centre in Tampa. This event brings engineers of various disciplines together to share an evening of fellowship, fine dining, entertainment, and recognition of individual achievement. Local engineering societies will bestow student Engineer of the Year Awards in their respective disciplines. Each society's Engineer of the Year Award will be presented. Teacher of the Year from Pinellas, Hillsborough, and Pasco Counties will also be presented. This event will be moderated by Mr. Dick Fletcher, Chief Meteorologist of TV Channel 10 and entertained by a local magician. Participating Societies are Association for Facility Engineers (AFE), American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE), American Society of Mechanical Engineers (ASME), Institute of Electrical and Electronics Engineers (IEEE), and Society of Logistic Engineers (SOLE).

Tickets are \$20.00 per person, and must be purchased in advance. Eight seat tables are available for corporate reservations. Please use the mail-in reservation form below, or call Quang Tang at (813) 739-1222 or email <u>q.tang@ieee.org</u> for more information.

#### Return this Reservation Form to Quang Tang, P.O. Box 270756, Tampa, FL 33688-0756 CELEBRATE ENGINEERING 2002 BANQUET – Saturday, February 23, 2002

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|--------------------|------------|-------|--------------------|--|------------------------------|--|
| Name E             |            | Email |                    |  |                              |  |
| Address            |            |       |                    |  |                              |  |
| City               | State      |       | Zip Code           |  | ode                          |  |
| Work Phone (       | )          |       | Home Phone ( )     |  |                              |  |
| No. Tickets @ \$20 | each       |       | Amount Enclosed \$ |  | (Check payable to IEEE-FWCS) |  |
| Dinner Choice      | Vegetarian |       | Prime Rib          |  | Grouper Chardonnay           |  |

## **Brain Teaser Challenge Column**

By Butch Shadwell

### **December BTC Solution**

My relationship with the slide rule began in the late 50's, when I my dad started using one while in the U.S. Navy's nuclear power training program. Can you remember slide rule races. When I was in high school, we used to have competitions to see who could get the answer to some math problem first using the slide rule. I even had a specially modified quick draw holster for mine. Those were the days. Of course the answer to last months BTC was that slide rules use a logarithmic scale. We know that adding logs is equivalent to multiplication while subtracting them is equal to division. So when you properly set the origin of the C scale on the first multiplicand along the D scale, and then slide your hair line down to the second multiplicand on the C scale, the hair line intersects the product on the D scale. The big challenge was to be able to read more significant digits in the answer by interpolating the exact value under the hair line between the little marks on the scale. May be that's why so many of us wore glasses.

#### **January BTC**

I'm sure the whole world is giddy with anticipation of the next Star Wars sequel, "Attack of the Clones" due out soon. The last one showed the infamous light saber doing some rather remarkable things. They had Qui-Gon Jinn melting through a metal "blast door", that had to be at least three feet thick, with his. I had to ask myself, what is generating all of that energy and how can he be holding it in his bare hands? You've got to admit that being a Jedi Knight would be so cool. Directing the power of "the force" with the wave of a hand or even a furrowed brow. I have a cousin who is convinced that Master Yoda lives in a dumpster behind a drug store in St. Petersburg, Florida. He has been studying under this Yoda's tutelage for the last ten years. I have to admit the fellow has been very reasonable. In return for all of that personal attention my cousin has only had to supply a few hundred gallons of Boone's Farm apple wine. Besides learning how to whistle from his nose, my cousin hasn't progressed that much in the secret arts. His teacher just keeps telling him to give in to the force.

Speaking of invisible forces, have you ever seen a rotating radiometer? I'm talking about those glass envelopes that contain a pin pointing upward and a structure of four black and white vanes rotating on top. It always seemed a little miraculous how it would spin when a light source was directed toward it. Actually in physics and microwave work, many broadband power meters use a similar technology, but maybe without the rotating flags. Who can tell me how these entertaining radiometers work and how this same principle is used in high tech applications?

Questions or comments to the Brain Teaser Challenge, please contact Butch Shadwell at 904-223-4465 (voice), 904-223-4510 (fax), <u>b.shadwell@ieee.org</u> (email), 3308 Queen Palm Dr., Jacksonville, FL 32250-2328. <u>http://www.se.mediaone.net/~butchs/</u>



### **January 2002 Calendar of Events**

| Sunday | Monday | Tuesday   | Wednesday   | Thursday  | Friday                               | Saturday |
|--------|--------|---|---|---|--------------------------------------|----------|
|        |        | 1<br>Happy New Year!  | 2   | 3   | 4                                    | 5        |
| 6      | 7      | 8<br>EXCOM at<br>TECO Center<br>Guest are always<br>Welcome!    | 9   | 10  | 11<br>Material Due<br>For the Signal | 12       |
| 13     | 14     | 15  | 16 Southcon<br>2002 at Orange<br>County<br>Convention Ctr<br>In Orlando | 17 Southcon<br>2002 at Orange<br>County<br>Convention Ctr<br>In Orlando | 18                                   | 19       |
| 20     | 21     | 22<br>Joint Section<br>& Life Member<br>Chapter<br>FGCU At Noon | 23  | 24<br>Joint Section<br>& PES/IAS<br>TECO Hall<br>At Noon                | 25                                   | 26       |
| 27     | 28     | 29  | 30  | 31  |                                      |          |

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