



# THE POCKET SCOPE



*The Institute of Electrical and Electronics Engineers, Inc.*

Volume 52, Number 7

March 2002

## SCOPE NOTES

### February Houston Section News

**Where:**  
HESS (Houston Engineering and Scientific Society)  
5430 Westheimer @ Yorktown

**When:**  
Thursday, April 25, 2002  
6:00 - 6:30 p.m. Social  
6:30 - 7:30 p.m. Dinner  
7:30 - 8:30 p.m. Speaker

**Cost:**  
\$FREE - IEEE Members with 48-hour advance reservations.  
\$20.00 - non-members  
\$5.00 - students  
Call (713) 207-IEEE to make your reservations.

See Page 2 for the Continuing Education Schedule!

IEEE WEB ADDRESS  
[http://  
\(www.ieee-houston.org\)](http://www.ieee-houston.org)

IEEE Houston Section  
P.O. Box 460014  
Houston, Texas  
77056-8014



## The Chairman's Message

### Donald Dunn

Our next section meeting for 2002 will be Thursday, April 25<sup>th</sup>, and we are currently working on confirming the speaker. At our February Section Meeting we had J.R. Seiver, Senior Principle Engineer, Bechtel Corporation speak about "ELECTRICAL CALCULATIONS - THE EASY WAY" which he developed.

The First Annual IEEE Houston Section Scholarship Golf Tournament will be held at the Greatwood Country Club on April 26, 2002. The tournament will be held on a Friday with the tee time at 8am, so hurry and sign up. We are also seeking corporate sponsorships; if your company is interested please contact Dwayne Lowry <mailto:dclowry@nspof.net>, myself <mailto:donald.dunn@ieee.org>, or see or website at: <http://www.ieee-houston.org/IEEEgolf2002.pdf>

The registration at the Houston Section CED program has continued to increase. I would like to thank all of the individuals that have attended this years CED program and in addition, I would like to thank the volunteers and presenters who help make this program the benchmark within the IEEE on continuing education programs. This programs content is focused at the members of the Industrial Applications Society and the Power Engineering Society. The Houston Section is currently working with the Communication and Computer Societies to develop continuing education programs for their disciplines for the fall of 2002 and spring of 2003. If you are a member of one of these societies and are interested in helping get these programs off and running, please contact one of the Excom members or myself.

On behalf of the Executive Committee, I want to extend our congratulations to three individuals from the Houston Section who were elected in February to the IEEE Senior Member Grade (**Michael E. Brandt PhD., Professor Bruce L. Freeman, Weiping Shi**). The Houston Section currently has several members that we have submitted and/or are working on the paper work for their upgraded to Senior Member. Contact one of the Excom members for more information on upgrading your membership.

The Region 5 conference will be held in Clear Lake in April of 2002. We are looking for Corporate Sponsors that may be interested in helping defer the cost of the conference. The Galveston Bay and Houston Sections of the IEEE are hosting it this year. It will have four technical tracks (Design & Architecture, Internet and the WWW, Communication, Engineering Management, and Signal Processing) with many distinguished speakers from the Houston area. Visit the Houston section Website <http://www.ieee-houston.org/> for the latest information on this conference. If your company is interested in sponsoring a portion of the event, contact Zafar Taqvi <mailto:Zafar.Taqvi@SW.Boeing.com> or myself <mailto:donald.dunn@ieee.org> for more information.

The Houston Section will be manning booths at the SWEE-May 2002 and OTC-May 2002 Conferences this year promoting the IEEE. We have had a couple of people volunteer to help us man these booths and promote the IEEE. It is a great way to meet engineers from other companies and network. If you are interested contact one of the Excom members.

As always the Executive Committee and I look forward to your feedback and comments. If you have suggestions and/or are interested in becoming active within the section or a local society chapter, contact one of us. Without the active participation and feedback from you the members, the programs and content of the IEEE would diminish.

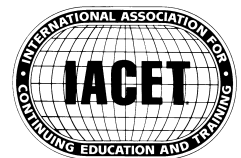
IEEE CONTINUING EDUCATION ON DEMAND

2001-2002 REGISTRATION FORM

Name:  
 Company:  
 Mailing Address: (where certificate will be delivered)  
 City/State:  
 Zip:  
 Email:  
 Telephone Voice:  
 Telephone Fax:  
 IEEE Membership Number:

Seminar Title	Code	Date	Amount
Factory & Field	911	Oct. 2/3	\$
Standby Pwr Systems	115	Oct. 16/17	\$
Induction Motors	601	Oct. 30/ 31	\$
MV & LV Mtr Control	702	Nov. 13/14	\$
Safety by Design	114	Feb. 5/6	\$
Syn Generators	602	Feb. 19/20	\$
Governor Control	607	Mar. 5/6	\$
Excitation Systems	608	Mar. 19/20	\$
MV & HV Cable	113	Apr. 2/3	\$
MV Fuse & Interrupter Switches	315	Apr. 16/17	\$
Applying IEC Standards	801	Apr. 30 / May 1	\$
Total Paid:			\$

**IEEE  
 Houston  
 Section**  
**2001-2002**  
**Continuing  
 Education  
 On Demand**



Spring 2002 IEEE Seminar Schedule

Mail a copy of your completed registration form along with your check payable to **IEEE CED SEMINARS** at the following address:

IEEE CED SEMINARS  
 BEARTIZ REY  
 ABB Power T&D Company  
 P.O. BOX #42802  
 HOUSTON, TX. 77242

Registration receipts will be distributed **at the seminar**.

For a cancellation refund, telephone by the Friday before the seminar:  
 Contact Beatriz Rey at (713) 821-4027

IEEE Continuing Education On Demand Completion Certificate with Continuing Education Units (CEUs) is provided after receipt of both nightly questionnaires.

Please check the IEEE Houston Section website for the latest schedule and course information.

[http://\(www.ieee-houston.org\)](http://www.ieee-houston.org)

IEEE CONTINUING EDUCATION ON DEMAND

The purpose of IEEE Houston Section Continuing Education On Demand is to provide a two-year repeating program sequence of practical industrial power application topics that supplement the daily work activities of the practicing graduate electrical engineer.

The seminars are intended to stimulate further study and discussion for learning continuance throughout the working career. Topics apply to heavy industries: oil and gas, petro-chem, cogen, pulp and paper, etc.

Instructors are application engineers, manufacturing specialists and expert consultants who provide a blend of diverse engineering perspectives.

The cost of each seminar is \$120.00 for IEEE members. "Early Signup" is \$60.00 and the **check must be received the Friday before** the seminar start date. The cost for non-IEEE members is \$200.00. Signup the week of the seminar does not guarantee seminar presentation documents or meals. For IEEE membership application information, contact Beatriz Rey at (713) 821-4027.

The following 2001-2002 seminar schedule defines the topics, dates and times. A course syllabus is available on request. Minimum class size is twenty for each seminar. Seating is limited and filled on an as received basis. Presentation documents are provided. A buffet is served from 5:00PM-6:00PM.

Seminar location:  
 ABB Power T&D Company  
 P.O. BOX #42802  
 HOUSTON, TX. 77242  
 Contact Beatriz Rey  
 (713) 821-4027



Enter amount for each seminar:

IEEE member registration:  
 IEEE member early signup:  
 Non-member registration:



2001-2002 IEEE CED Seminar Schedule

**Factory & Field Transformer Testing (911)**  
**Waldemar Ziomek, Pauwels Transformers, Inc.**  
 Reviews Techniques and Industry Standards  
 Oct. 2/3, 2001 6:00-8:50PM  
**[0.5 CEU]**

**Standby Power Systems (115)**  
**Brad Roberts, S&C Electric Company**  
 Reviews Theory and Practical Applications  
 Oct. 16/17, 2001 6:00-8:50PM  
**[0.5 CEU]**

**Induction Motors (601)**  
**Charlie Pounds, LBS Engineers**  
 Reviews Practical Applications  
 Oct. 30/31, 2001 6:00-8:50PM  
**[0.5 CEU]**

**Medium & Low Voltage Motor Control (702)**  
**James Bowen, Powell Electrical Mfg. Co.**  
 Reviews Applications and Design  
 Nov. 13/14, 2001 6:00-8:50PM  
**[0.5 CEU]**

**Safety By Design (114)**  
**James Bowen, Powell Electrical Mfg. Co.**  
 Discusses Various Safety Issues  
 Feb. 5/6, 2002 6:00-8:50PM  
**[0.5 CEU]**

**Synchronous Generators (602)**  
**Charlie Pounds, LBS Engineers**  
 Reviews Theory and Techniques  
 Feb. 19/20, 2002 6:00-8:50PM  
**[0.5 CEU]**

**Governor Control (607)**  
**Peter Evjen, Solar Turbines, Inc.**  
 Reviews Theory and Applications  
 Mar. 5/6, 2002 6:00-8:50PM  
**[0.5 CEU]**

**Excitation Systems (608)**  
**Fred Wolf, Basler Electric**  
 Reviews Applications  
 Mar. 19/20, 2002 6:00-8:50PM  
**[0.5 CEU]**

**Medium and High Voltage Cable (113)**  
**Wayne Madden, Okonite Co.**  
 Theory, Applications, Field and Factory Testing  
 Apr. 2/3, 2002 6:00-8:50PM  
**[0.5 CEU]**

**Medium Voltage Fuse & Interrupter Switches (315)**  
**Neville Parry, Cutler Hammer**  
 Reviews Applications and Design  
 Apr. 16/17, 2002 6:00-8:50PM  
**[0.5 CEU]**

## Protective Relay Engineers Conference

CONFERENCE FOR PROTECTIVE RELAY ENGINEERS  
TEXAS A&M UNIVERSITY  
College Station, Texas  
April 9-11, 2002

The Planning Committee of the 55th Annual Conference for Protective Relay Engineers invites you to attend the conference at Texas A&M University on April 9-11, 2002. The Protective Relay Conference provides a forum for engineers to discuss protection technology and related subjects. Both tutorial presentations on fundamental concepts and papers on new technology are included. The program will include the following:

- ◆ New protection equipment descriptions
- ◆ Relay application ideas and new concepts
- ◆ Case Studies and "Horror Stories"  
(When the relays worked - and when they didn't!)

Registration Information: Pre-Registration: \$185 (begins January 2, 2002)  
After March 19, 2002 \$210

Manufacturers: For hospitality suites, please contact Lydia Godfrey at the College Station Hilton and Conference Center at (979) 694-4903

*This conference offers Continuing Education Credits*

Web site: [engineering.tamu.edu/prorelay/](http://engineering.tamu.edu/prorelay/)

For Information: Dr. B. Don Russell  
Associate Vice Chancellor  
College of Engineering  
Texas A&M University  
College Station, TX 77843-3126  
(979) 845-8912

For Registration: Ms. Jacque Hand  
Conference Registration  
2nd Floor Rudder Tower  
Texas A&M University  
College Station, TX 77843-1232  
(979) 845-7692

In Conjunction with the 55<sup>th</sup> Conference for Protective Relay Engineers

A

PRE-CONFERENCE SPECIAL OFFERING

### **"Tutorial on Application and Protection of Shunt Capacitor Banks"**

In Cooperation with the Power System Relay Committee of PES

Monday, April 8, 2002.....1:30 - 5:00 p.m.....College Station Hilton – Brazos Amphitheater

Presenters: Simon Chano, Hydor Quebec; Roger Hedding, ABB Automation; Pratap Mysore, Xcel Energy

Tutorial, based on recently revised IEEE guides, is intended to provide basic understanding of various capacitor bank designs such as externally fused, internally fused and fuseless banks. Since the protection is influenced by the bank design, commonly used protection methods associated with each design, will be presented. System consideration and transients due to capacitor switching and its effect on other power system equipment will also be discussed.

## APRIL 25 SECTION MEETING

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### Tentative Topic Electrical Switchgear/Motor Starters

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#### *Freeport Subsection*

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#### *Freeport Subsection Meeting*

Freeport subsection meeting April 9, 2002 at 6:00 PM, at the Warren Electric Facility in Clute, TX (303 Commerce).

Title: Lubrication of Electric Motors

Summary: Industry Expert will cover the topic of Electric Motor Lubrication.

For questions call [Greg Slingerland](mailto:Greg.Slingerland@warren.com) at 979-244-7161.

#### *IAS Chapter Meeting*

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##### *VARIABLE FREQUENCY DRIVE*

Mr John Liuzzi of the Warren Electric Group will conduct a decision on “Variable Frequency Drives”. John graduated from ETI with an Associated Degree in Electronic Engineering in 1976. After graduation, he spent 13 years in the power distribution field. In 1988, John had his first encounter with a VFD. And shortly after, John went to work for Toshiba. Spending 6 years in Field Service and 3 years in Quality Control and Manufacturing, he left Toshiba and accepted a position at the Warren Electric Group as their Drive Specialist. Warren Electric is the largest independent distributor covering the Gulf Coast area with 300 million dollars in sales and 30 branches.

**WHERE:** Foster Wheeler Building  
2020 Dairy Ashford Road  
Houston, TX 77077

**WHEN:** Wednesday, April 3, 2002  
5:30 - 6:00 PM, Refreshments  
6:00 - 7:30 PM, Seminar

**RESERVATIONS:** Sunita Kulkarni @ 713 235 2833  
Email: [skulkarn@bechtel.com](mailto:skulkarn@bechtel.com)  
or  
Julia Dang@ 281-752-3505  
Email: [Julia\\_dang@fwc.com](mailto:Julia_dang@fwc.com)

## **MAY 2002 OTC SHOW**

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# **CALL FOR VOLUNTEERS**

**The Houston Section will be manning a booth at the Offshore Technology Conference (OTC) May 6-10, 2002 at the Reliant Arena. We need volunteers to help us man this booth, promote the IEEE, and sign-up new members.**

**If you are interested contact John Lucey at 713-945-5923 or Donald Dunn 281-452-8809.**

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## **MAY 2002 SWEE SHOW**

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# **CALL FOR VOLUNTEERS**

**The Houston Section will be manning a booth (527) at the Southwest Electrical Exposition (SWEE) May 7-8, 2002. We need volunteers to help us man this booth, promote the IEEE, and sign-up new members. The Houston Section will also be presenting a seminar on "Grounding" at the show.**

**If you are interested contact Donald Dunn 281-452-8809.**

## EMBS Chapter Meeting

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### *Engineering Medicine and Biology Society Meetings*

**March 15 Terahertz Imaging and Spectroscopy for Biomedical Applications** (Daniel Mittleman, PhD; Rice University)

**March 22 Optical Biomedical Sensing** (Gerard Cote, PhD; Texas A&M University)

**April 5 Computational Biomedicine** (Michael Brandt, PhD; University of Texas Health Science Center)

**April 12 High-Resolution Ultrasonic Blood Flow Sensing** (Craig Hartley, PhD; Baylor College of Medicine)

**April 19 Central Nervous System Magnetic Resonance Imaging** (Ponnada Narayana, PhD; University of Texas Health Science Center)

All seminars take place in Room 102D, Engineering Building, University of Houston at 3:00pm.

For more information, please contact [Periklis Ktonas](#) at (713) 743-4429.

## *IEEE Houston Section 1<sup>st</sup> Annual Scholarship Golf Tournament*

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### **Tournament Details**

**Date:** Friday, April 26, 2002

**Time:** 8:00 AM Shotgun Start

**Place:** Greatwood Golf Course

**Type:** Fourman Best-ball, shotgun start

**Entry Fees:** \$110/person or \$400/team (registered at the same time as a foursome)

**Tournament limited to first 36 teams (144 players)**

**Fair market value for an individual entry is \$80.00 (for tax purposes)**

**➤➤➤➤ Sponsorships Available <<<<<<**

**Includes: Green Fee, Cart, Range Balls, Prizes, Refreshments & Awards Lunch**

**Prizes Awarded: 1st, 2nd & 3rd Gross & Net, Longest Drive,**

**Closest to the Pin, Hole In One & Door Prizes**

**Special Events**

**Door Prize/Mulligan tickets (\$5.00 per)**

(No limit on the number purchased for door prizes. Only two can be used per person during the round of golf.)

Fees & donations benefit the IEEE Houston Section Scholarship Fund.

For information, please contact one of the individuals listed below or see our website at:

<http://www.ieee-houston.org/IEEEgolf2002.pdf>

[Dwayne Lowry](#) @ 281-565-2316

Walter Bartel @ 713-945-6126

[Donald Dunn](#) @ 281-452-8809

[Gil Dolor](#) @ 713-309-2023

[P.J. Donner](#) @ 713-945-7771

[Scott Ballew](#) @ 713-309-7721

[Bill Whipkey](#) @ 281-335-4665

## IEEE USA Career Focus

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### WHAT'S NEW @ IEEE FOR GOLD (Graduates Of the Last Decade)

VOLUME 3 NUMBER 3 MARCH 2002

An HTML version of this newsletter can be viewed on our online archive at <http://www.ieee.org/products/whats-new/wngold0302.htm>

#### CONTENTS:

1. The Interview: Tips for Getting the Job and the Right Compensation
2. Browse 750,000 Articles Through IEEE Xplore
3. MBA - Waste of Time or Key to Success?
4. Top 15 "Technologies To Watch" Forecasted
5. UK's Master's and Ph.D. Programs Have Global Popularity
6. Bestselling Author Offers Surprising Job-Seeking Strategies
7. IEEE Computer Society Announces Free Online Training Courses
8. MELECON 2002 Aspires to Improve Quality of Life
9. Entry-Level Guide to Telecommunications and Lightwave Systems Available
10. Military Training Virtually a Game: An IEEE Spectrum Special Feature
11. A-C-T-N-O-W: A Strategy for Effective Crisis Communication

### WHAT'S NEW @ IEEE IN POWER

VOLUME 3 NUMBER 3 MARCH 2002

An html version of this newsletter can be viewed on our online archive at <http://www.ieee.org/products/whats-new/wnpower0302.htm>

#### CONTENTS:

1. Security Top Priority In U.S. Dept. of Energy 2003 Budget Request
2. 2001 Buff Book Now Available
3. A-C-T-N-O-W: A Strategy For Effective Crisis Communication (Part II)
4. Low-Cost Zigbee Devices Could Expand Wireless Marketplace
5. Browse 750,000 Articles Through IEEE Xplore
6. PESCON Conference Set For Australia In June
7. London Police Get Green Light For Green Patrol Cars
8. New Title Offers the Facts on F.A.C.T.S.
9. PES Summer Meeting Proceedings Published
10. Military Training Virtually A Game: IEEE Spectrum Special Feature
11. New On Fatbrain: Building Energy Efficient PCs

## Region 5 Conference Corporate Sponsors

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The IEEE Region 5 Conference is seeking Corporate Sponsors for the upcoming event in April of 2002. If your company may be interested in financially supporting this technical conference please contact Zafar Taqvi, Ph.D. or Donald G. Dunn. For more information see the attached weblink.

[www.ieee-houston.org/Reg5Conf/Default.htm](http://www.ieee-houston.org/Reg5Conf/Default.htm)

We are seeking Corporate Sponsors as follows: Bronze (\$1000), Silver (\$2000) or Gold(\$3000) sponsors.

We are also seeking sponsors of certain events breakfast, lunch, banquet, hospitality program. We will provide acknowledgement of each sponsorship in the brochure, website and recognize them formally.

# EXECUTIVE COMMITTEE HOUSTON SECTION IEEE

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The **Pocket Scope** is the newsletter of the Houston Section of the Institute of Electrical and Electronics Engineer (IEEE). The Houston Section address is: IEEE Houston Section, P.O. Box 460014, Houston, Texas 77056-8014.

The **Pocket Scope** is published eight times a year (monthly, September to May, except December). It is distributed to over 3000 professionals in the electrical engineering field in the greater Houston area.

Advertising rates are listed on the IEEE Houston Section website and include publishing in The Pocket Scope, ad on the website, and within the monthly e-mail update.

IEEE members make change of address notices via the IEEE website: [www.ieee.org](http://www.ieee.org).

## Newsletter Staff

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