



THE POCKET SCOPE



The Institute of Electrical and Electronics Engineers, Inc.

Volume 52, Number 4

December 2001

SCOPE NOTES

December Houston Section News

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

When:
Thursday, February 21, 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

On behalf of the Executive Committee, I want to extend our congratulations to three individuals from the Houston Section who were elected to the IEEE Grade of Fellow (**Richard G. Baraniuk, Andrew Kwokshing Chan, and John Edwin Propst**). As it stands today, the IEEE Grade of Fellow is conferred by the Board of Directors upon a person with an extraordinary record of accomplishments in any of the IEEE fields of interest. A brief citation is issued to new Fellows describing their accomplishments and the total number selected in any one year does not exceed one-tenth percent of the total voting Institute membership.

In addition, on behalf of the Executive Committee, I want to extend our congratulations to several individuals from the Houston Section who were elected to the IEEE Senior Member Grade (Hualou Liang, D. Wayne Madden, Daleep Mohla, Wissam Rabadi, Nicolaos B. Karayiannis, Jay R. Porter, and David Rice).

We had the privilege to have Mr. Ray Miller as our speaker for the December meeting. For those members that were unable to attend, I hope you have the opportunity to here Mr. Miller speak in the future. He covers diverse topics on Texas History that are very captivating and the subject covered at this months meeting was excellent.

The Houston and Galveston Bay Sections are hosting the IEEE Region 5 Conference in April 2002. We are seeking Corporate Sponsors for the upcoming event in April of 2002. 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, and hospital-ity program. We will provide acknowledgement of each sponsorship in the brochure, website and recognize them formally. 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 web link. www.ieee-houston.org/Reg5Conf/Default.htm

The Houston Section CED program will be back in swing in February 2002 with several courses that cover new and exciting topics. Please take some time and visit the web site to see what will be offered this year.

The Houston Section will be manning booths at the SWEE and OTC Conferences this year promoting the IEEE. If you are interested in participating in these events and helping us promote the IEEE contact one of the Excom members.

Mark your calendars! The First Annual IEEE Houston Section Scholarship Golf Tournament will be held at the Greatwood Country Club in April of 2002. We have a couple of individuals that have graciously offered to help plan this event, but we are looking for more. We are also seeking corporate sponsorships; if your company is interested please email Dwayne or myself.

The Executive Committee and I would like to wish you and your family a Happy Holiday and a prosperous New Year. We are always looking for 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 be lacking.

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:

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

IEEE CED SEMINARS
BEATRIZ 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.

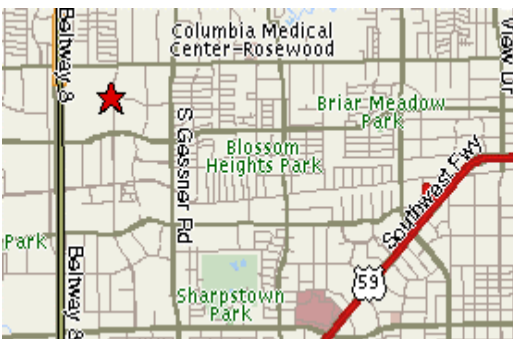
Instructors are application engineers, manufacturing specialists and expert consultants who provide a blend of diverse engineering perspectives.

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



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:			\$

Enter amount for each seminar:

IEEE member registration: \$120.00
IEEE member early signup: \$ 60.00
Non-member registration: \$200.00

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]



**IEEE
Houston
Section**

2001-2002

**Continuing
Education
On Demand**



Spring 2002 IEEE Seminar Schedule

DG Conference 2002

The IEEE Kansas City Section hosts A National Engineers Week 2002 Conference

Distributed Generation:
February 20 & 21, 2002
Double Tree Hotel
Overland Park, Kansas
913-451-6100
Benefits & Challenges

Keynote Speaker: Ron Oligney
Co-Author of the Best Selling Book "The Color of Oil"

A global political and economic view of the future of hydrocarbon fuels and a look forward towards a potential hydrogen based energy economy.

Wednesday, February 20 — DG Tutorials. Discover design pros/cons of each DG option.

- Grid Interconnection: Automation and Controls
- Reciprocating Engines
- Industrial Turbines
- Fuel Cells
- Microturbines
- National DG Electrical Installation Standards (NEIS) for DG

Wednesday Evening

Vendor displays and hosted reception. DG demonstrations.

Dinner Speaker: Edward Tirello, Wall Street Energy Analyst

The Role of DG in the Energy Marketplace.

Thursday, February 21 — Conference Presentations

- Welcome & Introductory Remarks
- Keynote: Ron Oligney, "The Color of Oil"
- Case Study: Reciprocating Engines
- Case Study: Industrial Turbine Combined Heat and Power
- Luncheon Speaker: Tom Basso "Status of IEEE DG Interconnect Standard 1547"
- Case Study: Microturbines
- Case Study: Fuel Cells
- Panel: DG From the Utilities Perspective

Conference Information site www.ieee-kc.org/dg/

Registration Information

Call Kim Good (913) 967-1865
Fax (913) 967-1898
E-mail at kgood@primediabusiness.com
Register: By January 15, 2002 After January 15, 2002
Wednesday: \$180 \$240
Thursday: \$180 \$240
Combined \$300 \$400
Register early to win a color Palm M505

New IEEE Fellows 2002

Congratulations to the recently elected Fellows for 2002 from the Houston Section. For a complete list of the Fellow Class for 2002 see the attached link. www.ieee.org/about/awards/fellows/fellows.htm

Richard G. Baraniuk

Rice University
Houston, TX

For contributions to the development of techniques for time-frequency and multiscale analysis.

Andrew Kwokshing Chan

Texas A&M University
College Station, TX

For contributions to the development of wavelet-based algorithms for scientific and engineering applications.

John Edwin Propst

Equilon Enterprises, LLC
Houston, TX

For contributions to the modeling of risk and reliability in industrial electrical systems.

New Senior Members

Congratulations to the recently elected Senior Members from the Houston Section. For a complete list of the new Senior Members see the attached link. www.ieee.org/organizations/rab/md/smupdates.html

Hualou Liang

D. Wayne Madden - Industry Applications Society

Houston Daleep Mohla - Industry Applications Society, Power Engineering Society

Wissam Rabadi - Nominated by Orlando Section, R3 Engineering Management Society, Signal Processing Society, Social Implications of Technology Society

Nicolaos B. Karayiannis - Communications Society, Signal Processing Society

Jay R. Porter - Engineering In Medicine & Biology Society, Instrumentation & Measurement Society

David Rice - Industry Applications Society

Looking for Senior Member Nominations

READ THIS SECTION TO BECOME A SENIOR MEMBER IN THE IEEE.

A goal of our Region is to sponsor as many Senior Members as possible and I am asking your help. The IEEE criteria for Senior Member status is ten years of professional practice including five years of significant performance, and references. (See the nominator letter and application form for clarification on the IEEE website.) If you know an IEEE member who qualifies for Senior Membership, I would like you to nominate him or her by forwarding their nomination to one of the Houston Section Excom members. If you qualify and are not a senior member please reply to one of the Section Excom members. If you are retired and have met the criteria at one time let's get you nominated. Section meetings are the best networking tool to achieve Senior membership.

As an alternative process, you can direct the prospective Senior Member to one of the Houston Section Excom Members. We have a list of several Fellows and Senior Members which we can use for references. The Section will nominate all those qualified who provide a resume and significant performance vita.

Senior Membership in IEEE promotes the value of membership and enhances the status of the member. This is an achievement award let's honor our deserving members.

2002 Engineer of the Year

Media Contact:
Mark Gribble, P.E.
281-340-8900

PRESS RELEASE

Release Date: December 11, 2001: 12:00pm

“The Houston Engineering Community Has Selected Mr. Arthur L. Storey, Jr., P.E. as the 2002 ENGINEER OF THE YEAR”

Mr. Arthur L. Storey, Jr., P.E., has been selected as the 2002 Houston Area “Engineer of the Year.” The selection was made by representatives of various Houston engineering organizations and is based on Mr. Storey’s outstanding educational, civic, professional, technical and humanitarian achievements and contributions. Mr. Storey will be honored during the nationwide celebration of Engineers Week and at a formal presentation banquet on Saturday, February 23, 2002.

Mr. Storey graduated from Rice University in 1959 with a Bachelor of Arts degree, and from Lamar University in 1965 with a Bachelor of Science degree in civil engineering. Before entry into county government he was an officer in three consulting engineering firms in the Houston area.

Mr. Storey was appointed Executive Director of the newly created Harris County Department of Public Infrastructure in June 1998 and served simultaneously as County Engineer and Executive Director of the Harris County Flood Control District. He is a registered professional engineer in Texas with over 35 years experience in the design and construction management of a multitude of engineering and flood control projects. Some of his notable achievements in the areas of engineering and architecture include a \$400 million road and bridge program of capital projects, a criminal justice center, a downtown jail, and a civil courts building. A major accomplishment in the flood control area includes the design and construction of the \$309 million Sims Bayou federal flood control project. Mr. Storey has worked in conjunction with the U.S. Army Corps of Engineers in accelerating federal flood control projects on Brays, Hunting, and White Oak Bayous in connection with the Water Resources Development Act of 1996. He has also implemented a locally funded flood mitigation buyout program for citizens living impossibly deep in the floodplain.

Throughout his career, Mr. Storey has devoted his time and energy to various engineering organizations. He has been a member of the American Society of Civil Engineers since 1977, and in 2000 was awarded the distinction of Life Member. At the time of his appointment to Flood Control Director, he served the Association of Consulting Municipal Engineers as President-elect. He received the Department Director of the Year Award in 1994-1995 for Outstanding Leadership of the Harris County Flood Control District from the American Federation of State and County Municipal Employees. Mr. Storey received the Park People’s 1994 Annual Leadership Award for efforts to reserve/enhance and increase Houston area parks and green spaces, and Harris county recognized that same leadership by naming a 250-acre county park as Arthur Storey Park in 1997.

In addition to his professional accomplishments, Mr. Storey participates in numerous civic, humanitarian and social service activities. He is a part of several organizations involved with Harris County infrastructure and mobility improvements. He has served Palmer Memorial Episcopal Church as a Vestryman, Senior Warden, and Junior Warden. Mr. Storey served four years as Chairperson of the Chamber of Commerce Drainage Committee and was a participant in the coordination of “Main Street 2000.” He serves on the Houston Transportation 2000 steering committee and is the 2001 Chairman of the Executive Committee of Houston TranStar.

The honoree lives in Houston with his wife, Jo. They have two children, Michael who practices General Surgery, and Linda who is an attorney.

The Houston Engineering Community is proud to bestow upon Mr. Storey the honor of “2002 Engineer of the Year” in recognition of his life long service and contributions to the engineering profession and his community.

IEEE USA Career Focus

CAREER FOCUS

Today's Engineer, IEEE-USA's monthly, career-oriented webzine, offers feature articles and short blurbs with career guidance, tips, strategies and solutions for all sectors of the profession.

This month's fare includes:

- * Does Your Resume Read More Like an Obituary?
- * Successful Consulting: Don't Give Away the Store Before the Job is Yours
- * Engineering Trends: Post-Mortem Project Analysis
- * Engineering Hall of Fame: Engineer-Physicist Robert Van de Graaff
- * World Bytes: The Mountains Are Greater Than All of Us
- * Mini-Poll Question: Apple Pie or Pumpkin Pie for Dessert?

To read TODAY'S ENGINEER, visit:

www.todaysengineer.org/careerfocus/

SUCCESSFUL CONSULTING: DON'T GIVE AWAY THE STORE BEFORE THE JOB IS YOURS

You poured hours of work into a detailed proposal for a potential client. You didn't get the job, but the solution they came up with sure looks a lot like what you had proposed. As a consultant, if you're not careful you might get caught in a something-for-nothing scenario, where a prospective client tries to take advantage of your trust or inexperience. Avoid falling into the trap by learning what to look for and what questions to ask.

www.todaysengineer.org/careerfocus/nov01te/nov01features/consulting3.html

Region 5 Conference Corporate Sponsors

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

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.

Electrical Safety Workshop 2002

9th Annual Electrical Safety Workshop
“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.

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.

Strategies

To accomplish our mission, we will

- Provide forums for sharing and disseminating ideas for preventing workplace injuries from electrical hazards.
- Maintain an intimate, interactive environment, as a unique feature of the annual forum.
- Engage multiple disciplines and professions.
- Create collaboration and synergies among various centers of excellence.

The Value of this Workshop

The IEEE IAS Electrical Safety Workshop provides attendees an interactive learning experience on the state of the art in electrical safety. Through multi-disciplinary presentations and cross-functional dialogue about the opportunities and challenges in general industry and construction electrical work, a first time participant can take away tools to aid in prioritizing their enterprise's compliance with US and IEC electrical codes and standards. Repeat participants know they can bring their tough questions to the 3-day program where experts and peers focus specifically on real world problems. You will be able to compare experience and practical applications with your counterparts in other companies and organizations. You will be interacting with experts who are leading change in codes, standards, regulations, and research aimed at preventing electrical accidents and injuries in the workplace. For those interested in continuing education credits, IEEE will award 2.0 CEU credits (20 PDH credits).

For More Information

See the attached website for complete details.

www.ieee-houston.org/Meetings/IAS_SafetyWorkshop.PDF



Monthly Meeting Announcement

***Illuminating Engineering Society
San Jacinto Section***

Topic:

“Nikola Tesla- Edison’s Alter Ego and Modern Prometheus”

Presented by:

Fred Oberkircher- Texas Christian University

Date:

January 15th, 2002

Time:

11:30AM-1:00PM

Location:

H.E.S.S. Club, 5430 Westheimer, Houston, TX 77056



Come join us for a very informative session on the life and times of Tesla. Tell a friend or bring a colleague!

Cost: \$25 members, \$30 non-members includes lunch.

R.S.V.P.: Please respond no later than Jan. 11th to Steve Brown at 713-462-6258, fax is 713-462-6282, or email at stevebr@FSGconnect.com

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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.

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