



## Scope Notes

### October Houston Section Meeting

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

**When:**

Thursday, October 26, 2000

Lunch 11:30-12:00

Program 12:00-1:00

Lunch will cost:

\$10.00 - Members

\$5.00 - Students

See Page 2 for info about this months meeting!

#### IEEE WEB ADDRESS

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

## The Chairman's Message

Justo Benitez



The October meeting of the Houston Section will be held at HESS as customary but to continue with our experimental plan outlined in the previous issue of The Pocket Scope we are changing the starting time to 11:30 AM. Our goal is to be finished by 1:00 PM. The topic is brand new and we expect our members will find it interesting, educational and for some of them of practical application. .

I can not give you any feed back on the results experienced with the September meeting change to the lunch time because I am writing this message before the meeting scheduled date.

If you have not checked out the online job board and resume referral service from IEEE-USA in the near past, you are in for a pleasant surprise. The new address for the IEEE-USA Job Service is '<http://www.ieeeusa.org/jobs>'. It has a fresh, new look. Job seekers can search the database right from the first page or click to an advanced search page with full features. The resume service is also one click away and it is now easier to load your information into the database, where a significant number of potential employers will see it.

Our first trial with the electronic publication of The Pocket Scope was fairly successful. There were a few problems with the majordomo list but we believe they have been corrected. We were able to reach the majority of our members although our goal is to reach all of them by the end of this year. We intend to have our second test with the October issue.

The 2000 annual election ballots and its associated materials supposed to have been distributed to the voting members this past 1<sup>st</sup> of September. Please be sure to exercise your right and vote for the IEEE officers of your choice. The IEEE Board of Directors no to increase the members dues for the year 2001. This is the sixth straight year that the Board voted against an increase in dues. To close here is some trivia from the IEEE History Center. According to them Electrical Engineering was initiated in 1750 when Benjamin Franklin invented the lightning rod. Although before the middle of the 18<sup>th</sup> century the ancient Greeks experimented with static electricity and the compass, there were no practical electrical devices.

## October Section Meeting Speaker Info



Kevin McDonald is a Senior Consultant at Extreme Logic, a premier provider of e-Business consulting services, and the Microsoft North American Certified Solution Provider Partner of the Year. Prior to joining Extreme Logic, Kevin spent several years at Dell Computer Corporation as a Technical Architect primarily focused on enterprise e-Commerce application development, and migrating supply-chain processes to the Internet. He holds several technical certifications, as well as a BBA in Management Information Systems from Texas A&M University. Kevin and Nicki McDonald have been married for five years, and have a three-month-old son.

Extreme Logic (<http://www.extremelogic.com>) maintains the IEEE-Houston web site.

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### Enabling Business To Business e-Commerce

**Kevin McDonald** - Almost every company, brick and mortar as well as “dot com” companies are looking to the Internet to reduce barriers to entry, reduce expenses, and to gain competitive advantages. In today’s fast paced digital economy, business is being done in new and innovative ways. This presentation will start off by providing an overview of why companies are looking towards the Internet and e-Commerce to grow their businesses. Next, we will dive into some of the enabling technologies, like XML and Microsoft BizTalk Server that are making this e-Business revolution possible. Finally, we will wrap up by offering a few insights to the future of business-to-business e-Commerce. You’ll come away much more knowledgeable in how the new Internet technologies are redefining businesses, probably even your own.

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### IEEE/IAS MEETING TRANSFORMER OVERLOAD CONSIDERATIONS

Mr. Tommy Nunn of ABB's Small Power Transformer Division will present a seminar on the considerations behind the decision to overload a transformer.

Tommy has a BS degree in Electrical Engineering from Bluefield State College. He comes to us with 23 years experience in the medium voltage power equipment industry specializing in Small Power Transformers. His experience in the industry includes ITE, Gould, Brown Boveri Corporation and presently he is the Marketing Development Manager for ABB's Small Power Transformer Division. His background includes 4 years of production design and test as a Design Engineer, 4 years as Quality Assurance Manager, 2 year as Purchasing Manager, 6 years in product application and marketing, 3 years in product development and production, and 4 years in market development.

Overloading of transformers or how to more effectively use transformers is a general topic of discussion. Exceeding the rating of a transformer in previous years was normally due to an emergency situation. However, in today's environment, overloading of transformers is becoming a part of the planning process.

Transformers are designed with specific limitations that will deliver the specified load or KVA with normal loss of life. Loading beyond these limitations can shorten the insulation life of the transformer. However, under certain conditions, loading in excess of the normal rating may be possible. The purpose of this discussion is to discuss some of the issues surrounding this topic.

**WHERE: 3000, South Post Oak Blvd.**

**Bechtel Bldg. 4<sup>TH</sup> Floor, Room 4A**

**WHEN: Wednesday October 25, 2000**

**5:30 - 6:00 PM, Refreshments (sandwiches and soft drinks)**

**6:00 - 7:30 PM, Seminar**

**RESERVATIONS: Call Sunita Kulkarni @713 235 2833 or e-mail: skulkarn@bechtel.com**

### The Fall Issue of Today's Engineer Focuses on Tough Topics: Soft Skills, Retention, Managing Across Generations

Delegating work can be painful, especially for engineers who want to make sure it gets done right the first time. "Passing the Ball, Not the Buck" in the third-quarter issue of Today's Engineer helps explain why delegating is a key managerial skill that must be mastered to keep productivity high. Experts in delegation offer insights to TE readers, noting that delegation isn't a skill that engineers usually need early in their career. As time goes on, however, and engineers take on more responsibility, the ability to delegate will become critical in staying on top projects and proving your capacity for management. Author Barton Reppert has analyzed the basic steps of delegation and offers practical tips on developing or improving your delegation skills. In addition, the new issue features other articles designed to make engineers think about the soft skills that complement their technical ones. Three articles address the issue of company loyalty and employee retention. In his guest editorial, Robert W. Lucky of Telcordia Technologies and a member of the TE editorial advisory board, explores the power that employees have in a tight labor market. Try for more responsibility and better assignments from your current employer before you leave to search a greener pasture, he urges. Richard A. Baker, Jr., a software development manager with Schneider Automation Inc., argues that stable teams and low turnover don't just happen. Instead, they are the result of actively planning for a stable environment and then making it happen. Organizations will see a direct benefit to the bottom line, Baker says, and outlines the savings in saved time and increased productivity. "Newsmaker" Jeffrey Pfeffer, Ph.D., who has written extensively on interpersonal relations inside the organization, says that some companies are just toxic, killing loyalty among employees. Is your organization toxic and can it be "cleaned up?" Read his article and find out! While management issues are important, TE readers find high value in hands-on tips for the daily workplace. This issue offers plenty of them: Angela R. Tickle, engineering and construction director of the Columbus Airport Authority and 1999-2000 president of the Ohio Society of Professional Engineers, has provided a detailed explanation of the professional and personal benefits that come from membership in professional organizations. Cinda Voegtli, whose Internet firm builds Web sites for project managers, offers some advice for increasing your project influence based on first-hand experience with engineers. And Tom Briscoe, technology product manager at LSI Logic, suggests that the right choice of words can provide a flavor that messages wouldn't otherwise have.

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

**2000-2001 RE  
FORM**

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

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

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National Electric
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**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 \$100.00 for IEEE members. "Early Signup" is \$50.00 and the **check must be received the Friday before** the seminar start date. The cost for non-IEEE members is \$190.00. Signup the week of the seminar does not guarantee seminar presentation documents or meals. For IEEE membership application information, contact Jeff Glasgow at (713) 753-2507.

The following 2000-2001 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:

*Powell Electrical Mfg. Co.  
8550 Mosley  
Houston, TX 77075  
Contact Ida Aguilar  
(713) 948-4929*

## 2000-2001 IEEE CED Seminar Schedule

### Battery/Battery Chargers (930)

**Roy Gates, ALCAD**

Oct. 3/4, 2000 6:00-8:50PM

Reviews battery and battery charger technologies, application and sizing. **[0.5 CEU]**

### **Power System Operation and Control (110)**

**Peter Evjen, Solar Turbines, Inc.**

Oct. 17/18, 2000 6:00-8:50PM

Reviews steady-state and dynamic operation of power systems, emphasizes governor and voltage regulator control. **[0.5 CEU]**

### **Harmonics Theory and Application (502)**

**David Rice, General Electric Company**

Oct. 31/Nov. 1, 2000 6:00-8:50PM

Reviews harmonics theory and application. **[0.5 CEU]**

### **AFD Theory and Application (501)**

**Charles Spiller, Siemens Energy and Automation, Inc.**

Nov. 14/15, 2000 6:00-8:50PM

Reviews theory and application of LV and MV adjustable frequency drives. **[0.5 CEU]**

### **Harmonic Filters (503)**

David Rice, General Electric Company and

Dick Harlow, Phaseco, Inc.

Feb. 6/7, 2001 6:00-8:50PM

Reviews theory and application of harmonic filter design. **[0.5 CEU]**

### **Unit Substation Transfer Control Strategies (111)**

Jim Bowen, Powell Electrical Mfg. Co.

Feb. 20/21, 2001 6:00-8:50PM

Reviews secondary selective and spot network switchgear transfer control strategies. **[0.5 CEU]**

### **National Electric Code (920)**

**John Paschal, Bechtel Corporation**

Mar. 6/7, 2001 6:00-8:50PM

1999 NEC discussions on hazardous area classification, cable sizing, and switchgear room design issues with reference to ROP changes for the 2001 Code. **[0.5 CEU]**

### **Substation Automation and Telecommunications (112)**

**Charles Davis and Dirk Unglaube,**

**Siemens Energy and Automation, Inc.**

Mar. 20/21, 2001 6:00-8:50PM

### **National Electric Code (920)**

**John Paschal, Bechtel Corporation**

Mar. 6/7, 2001 6:00-8:50PM

1999 NEC discussions on hazardous area classification, cable sizing, and switchgear room design issues with reference to ROP changes for the 2001 Code. **[0.5 CEU]**

### **Substation Automation and Telecommunications (112)**

**Charles Davis and Dirk Unglaube,**

**Siemens Energy and Automation, Inc.**

Mar. 20/21, 2001 6:00-8:50PM

Design architecture of industrial substation automation and communication. **[0.5 CEU]**

### **Substation Shielding, Ground Grid Design and Cathodic Protection (312)**

**Al Roach, HL&P**

Apr. 3/4, 2001 6:00-8:50PM

Introduces new IEEE shielding standard, discusses basic practices and tools of ground grid design, transfer potential and procedure for cathodic protection implementation. **[0.5 CEU]**

### **Surge Protection Theory and Application (320)**

**William Nichols, Siemens Westinghouse Technical Services**

Apr. 17/18, 2001 6:00-8:50PM

Reviews theory and application of surge protection. Lightning arrester selection and application. **[0.5 CEU]**

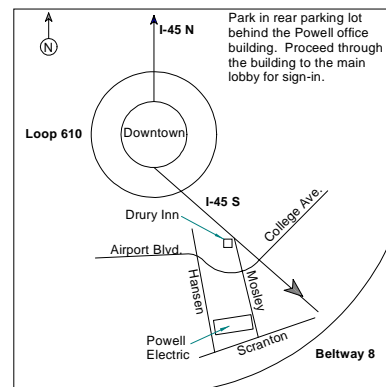
### **Induction Motor Testing, Failures, Post-mortem Diagnosis and Repair (610)**

**Edgar Merrill, Edgar F. Merrill PE and Dave Scherer,**

**Rockwell LaPorte Motor Repair**

Apr. 31/May 1, 2001 6:00-8:50PM

Factory and field testing, followed by shop repair techniques and procedures. **[0.5 CEU]**



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