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FEBRUARY 1997

Institute of Electrical and Electronics Engineers

IEEE CHICAGO SECTION NEWSLETTER

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DuPage Area Program at IIT Rice Campus

Chicago Section Business Meeting- All welcome

Tuesday February 11 • 7:15 PM

DeVry DuPage Campus • 1221 N. Swift Road • Addison, IL

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SCANFAX (Publication) Number (ISSN 0018-1297), February 1997, Volume 49, No.2,
Published by the Chicago Section, Institute of Electrical and Electronics Engineers for the
information of its members. Subscription rate for IEEE members collected in dues, \$1.50.
Third class postage paid at Glen Ellyn, Illinois. Unless specified, Chicago Section IEEE
neither endorses nor sanctions any positions espoused in SCANFAX or at meetings.

IEEE CHICAGO SECTION BUSINESS OFFICE IEEE Chicago Section 2460 Wisconsin Ave. Downers Grove, IL 60515 800 898 4333 or 630 964 4333 630 963 2122 FAX ChrisRow@aol.com	EDITORIAL STAFF Judy Gemperline 847 459 9265 j.gemperline@ieee.org Jean Francois Ostiguy 630 840 2231 ostiguy@fnal.gov Jack Sherman 847 576 8222 847 885 4503 FAX j.sherman@ieee.org	CHAIRMAN Tom Jurgens 313 Raddant Rd, S Batavia, IL 60510 847 523 7915 t.jurgens@ieee.org
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**COMPUTER
SOCIETY**
with
*Fox Valley
Subsection*

Upgrading Real-Time Systems on the Fly
SPEAKERS: Paul J. Rutkowski & Stanley Golinski
Wednesday February 26, 1997

ABOUT OUR TOPIC

Will you be interested in learning more about a large, complex project that won the world's most prestigious Project Management Institute award in 1996?

You are invited to listen to Paul and Stan talk about Lucent Technologies' "1B Processor" project. The project featured Lucent's design, development, manufacturing, engineering, installation, and retrofit of the 135 central processors in AT&T's long distance switching systems across the United States. All the 1A processors in the 4ESS systems that form the backbone of the AT&T network were replaced with more powerful 1B processors. This complex, High Tech task can be compared to changing all four engines in a 747 jumbo jet while in flight without anyone other than the pilot knowing!

The project management techniques can potentially benefit other projects, small or large, in many other businesses and industries.

ABOUT OUR SPEAKERS

Paul J. Rutkowski is Manager of the project management group at Lucent Technologies in the Toll Switching R&D organization. He has over 27 years of experience in Telecommunications. Paul is a Senior Member of the IEEE, the President of the Midwest Chapter of PMI and a certified Project Management Professional (PMP). Stanley Golinski is a Manager in the Product & Offer Realization organization at Lucent Technologies. He has over 31 years of Telecommunications experience. Stan is a member of PMI and a certified Project Management Professional (PMP).

PLACE

Jerry Sharko's
 2225 Ogden Ave.
 Lisle, IL

Social
 Dinner
 Presentation

TIME

6:00 PM
 7:00 PM
 8:00 PM

RESERVATIONS

Call the IEEE Message Desk today at 1-800-898-IEEE (630-964-4333).

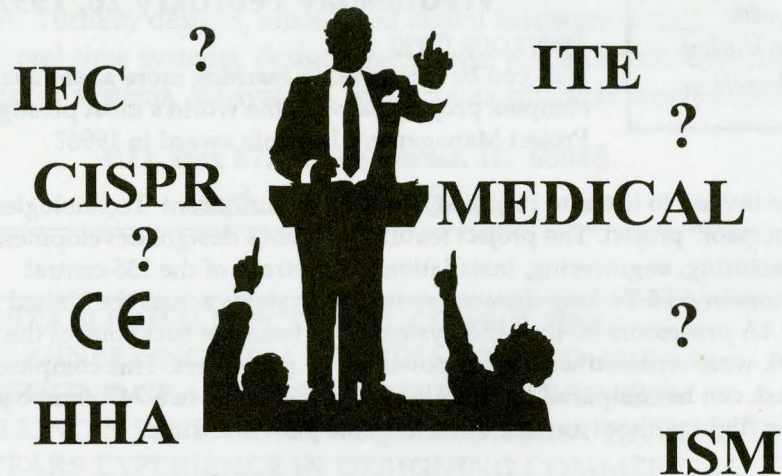
Dinner cost is \$15 per person. The presentation is FREE.

Request Dietary and vegetarian meals when you make your reservation.

FOR MORE INFORMATION

Contact Arup Bhuyan at (708) 713-7759 or bhuyan@lucent.com

D.L.S. ANNOUNCES EUROPEAN EMC SEMINAR SERIES



Introduction to European EMC
Presented by D.L.S. Electronic Systems

SEMINAR TOPICS

- EMC Directive 89/336/EEC
- How to meet the requirements
- Declaration of Conformity
- Technical Construction File
- CISPR/EN Emissions
- IEC/EN Immunity
- Everything you need to know!*
- Q&A & Facility tour, if desired

*About European EMC

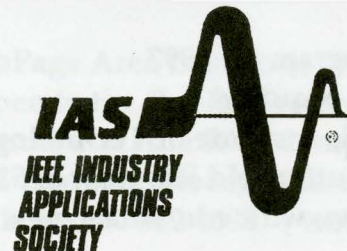
TO REGISTER

- Call today. 847-537-6400
Class size is limited.
- Where: D.L.S. Electronic Systems,
Inc., Wheeling, IL
- When: **2nd Wednesday**
each month
- Time: 1 - 3 pm plus tour
- Cost: \$55 including handout

Please advise us at the time of registration if you are physically challenged and require special accommodations.
D.L.S. reserves the right to adjust the schedule and limit the number of people attending from one company.



Call Today for EC/EU EMC Help!
• 847-537-6400 • FAX 847-537-6488 •



**MEDIUM VOLTAGE
SWITCHGEAR**
Presenter: Chand Tailor
Cutler Hammer- Westinghouse.
Wednesday, March 26, 1997

ABOUT THE TOPIC

An informative and educational overview of Medium Voltage Switchgear with concentration on application and specification.

ABOUT THE SPEAKER.

Chand Tailor has a B.S. in Electrical Engineering from the University of Baroda, India and a M.S. Degree from the University of Pittsburgh. He is a registered Professional Engineer in South Carolina and a member of IEEE-IAS. Chand brings us 18 years of well rounded experience starting with ABB as a Design Engineer in India, experience with marketing and specification work at both Westinghouse and Siemens. He currently is Principal Engineer for Medium Voltage Switchgear Division of Cutler Hammer - Westinghouse providing marketing, engineering, and application support to Field Sales and Engineering Personnel.

PLACE

Como Inn
546 N. Milwaukee Ave.
Chicago, IL

TIME

Social 5:30 PM
Dinner 6:00 PM
Presentation 7:00 PM

Dinner cost \$20. Menu choice Chicken or Pasta entree.

DIRECTIONS

The Como Inn is located on Milwaukee Ave. on the East side of 90/94..

FOR RESERVATIONS

Please call the IEEE Business Office at 630 964 4333

Please give your name, business affiliation, and choice of entree.

MARK YOUR CALENDARS

Next meeting May 24 1997 on City of Chicago Plan approval Process

Attendance at each IEEE Technical Meeting is accepted as one PDH (Professional Development Hour), where required for CE.

DuPage Area Engineers' Week Program for 1997
Open to the Public, Pre-registration is required
Daniel F & Ada Rice Campus - Illinois Institute of Technology
201 East loop Road, Wheaton IL (off Butterfield Rd, west of 53)
Phone 630 682 6008 - website http://www.iit.edu/whats_new

Thursday February 20 - Community Forum
Friday February 21 - Field Trip, Middle Schools
Saturday February 22 - Public Interactive Talks and Displays

Initiated by IIT's Rice Campus, the DuPage Area Engineers' Week Program is a joint effort among professional engineering societies, the two area national laboratories, businesses, educational institutions, schools, and community organizations. Its purpose is to communicate what engineering is and what engineers do, as well as attract young people to careers in science, technology, and engineering.

Community Forum: Science, Sanity, and Society

Thursday February 20, 7:30 p.m. Room 166

The Community Forum on Science and Technology provides an opportunity for interested persons to learn, question, and debate issues relating to technology and science which are fundamental to the well-being of DuPage and the entire country. The format of the Forum encourages input and reactions between the speaker and audience, and among members of the audience. A summary of the discussion will be forwarded to the National Engineers' Week steering committee.

Forum Leader: John McCarron, Chicago Tribune

John McCarron's weekly column on urban issues appears on the *Tribune's* op-ed page, where it earned the 1994 Peter Lisagor Award for best newspaper commentary. Earlier, he won the American Planning Association's national journalism award for a 1983 series that traced urban problems as they moved to the suburbs, and in 1988, the Heywood Broun national journalism awards for a series of *Tribune* stories on the politics of poverty in Chicago, which were among the most controversial ever published by the newspaper.

With undergraduate and graduate degrees from Northwestern University's Medill School of Journalism, McCarron joined the *Tribune* in 1973 and was named to its editorial board in 1992.

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Program for Saturday February 22 1997 (12:30; 1:15; 2:00; 2:45)

Room	Program	Presenter	Affiliation
103	Non Destructive Mat'ls Testing	John Way	IIT
114	Engineering with Light	Jim McShane	SPIE
118	A Safe Nuclear Reactor	Wison Luangdilok	ANS, DOE
120	Hiding Wireless Towers	Steve Susina	Tellabs
123	Engineering at Motorola	Elaine Dillon	Motorola Lighting
		Hooward Wolfman	
142	Engineering/Gender Jeopardy	Suzanne Pryga	ISBE
148	Why Wetlands Work	John Daley	DuPage Environmental
151	Energy Engineering	Steve Krstulovich	Argonne
166	Investigation TWA 800	David Boldenow	NTSB
207	Simulating Processes	Jeff Christensen	Jeff Christensen
210	New Dimensions of Internet	Ray Trygstad	IIT
236	Designing Structures to Stand	John Eglaston	Structural Engineers IL
239	Robots Rule in Manuf Engg	Mike Rybinski	Davea
242	Your Virtual Town via GIS	Bill Syverson	DuPage Development
243	Cryogenics - Cool Science	Mike Urso	Fermilab

Ongoing Career and Information Displays - 1st and 2nd floor hallways

Ongoing Interactive 'Projects' and Displays:

Atrium - SWE ScavEngineer Hunt; Helicopter Drop Contest

North Hall - Glider Contest

Room 219 - SciTech; Rube Goldberg Contest; Geiger Counter Hunt

Sponsors, Participants, Credits, Abbreviations explained:

For Example, Amer = American; Assn = Association; Soc. = Society; Engrs = Engineers

Motorola; Tellabs; ANS American Nuclear Society;; Amer. Soc.Civil Engrs.; SME Soc. Mfg. Engrs; Amer. Soc. Heating Refrigeration and Air Conditioning Engrs.; Amer. Soc. for Quality Control; Amoco Research; Dana-Victor Products; Duke Eng; Raytheon; IL Engg Council; Northern IL Gas; IEEE CPMT Components Pkg. & Manuf. Technol. Soc.; IL Transportation Engrs.; Packer Eng'g.; Daniel F & Ada L. Rice Campus, IL Inst of Technology; SAE Soc.Automotive Engrs; ISPE IL Soc. of Prof .Engrs. - DuKane, Salt Creek Chapters; IIE Inst. Industrial Engrs.; SWE Soc. Women Engrs.; WMX Waste management; IEEE Inst. Electrical & Electronics Engrs; Corridor Partnership for Excellence in Education, SPIE Soc. Photo-Optical Instrumentation; College of DuPage; NTSB Natl Transportation Safety Board; ISBE IL State Board of Education.

More than 50 people from the above and the many additional assisting organizations are listed in a Resource Boolket for teachers, students and professionals. Pick one up at the Campus. and take a moment to hand in a comment sheet. The steering committee will thank you personally.

Motor-System Management and U.S. DOE MotorMaster On-Line Training

Sponsored By: DEIS, PELS, IAS / IES
Fees Due February 24, 1997
Training Starts March 16, 1997.

ABOUT THE PROGRAM

The online training will be performed over a four week period. Electric motor-system management, the US DOE's Motor Challenge Program, and US DOE's MotorMaster+ motor management software will be covered. A certificate of completion, US DOE Motor Challenge Membership, manuals, and registered MotorMaster+ software is included with the training fee. Reading and homework assignments as well as interactive forums will be handled via e-mail and the World Wide Web.

WHAT IS ON-LINE TRAINING

This training is provided for professionals who are unable to attend IEEE meetings. The training provider will have one e-mail address and there will be a second mirror e-mail address. The mirror e-mail address will be tied to all trainees. Homework and reading assignments will be sent through the mirror site as will general forum questions and answers from trainees. Homework will be assigned each Sunday due by the following Sunday of each week. On-Line training can be thought of as "interactive correspondence" training.
Note: Autoresponders must be turned off and the instructor must be informed before changing or dropping an e-mail address.

TRAINING FEES

There will be a fee of \$50 which must be received by the IEEE Business Office by February 21, 1997, for a March 16, 1997, start date. Training materials will be sent first class mail during the week of February 24, 1997. There will be a minimum of ten and maximum of 50 trainees.
Address: IEEE Business Office, Attn: Online Training
2460 Wisconsin Ave., Downers Grove, IL 60515. Checks only. Make payable to IEEE Chicago Section.

ABOUT THE INSTRUCTOR

Howard W. Penrose is the Director, Field Service / R&D for Dreisilker Electric Motors, Inc. He is the Vice Chair of the US DOE Sponsored Midwest Motor Systems Consortium, Chair of DEIS and PELS, and a US DOE Certified MotorMaster+ Trainer. Dreisilker is an ISO 9002 certified electric motor system repair, distribution, and field service solution company. Dreisilker is donating the e-mail sites, web space, and materials for this training.

SYSTEM REQUIREMENTS

IBM Compatible computer, Windows 3.1, Windows for Workgroups, or Windows 95. A 386 or higher microprocessor, at least 8 MB RAM, and a hard disk with at least 15 MB of free disk space for MotorMaster+ and data alone. Internet Access and a valid e-mail address is required.

FOR FURTHER INFORMATION

Contact Howard W. Penrose at h.penrose@ieee.org.

WASHINGTON AWARDS DINNER

Dr. Frank Kreith To Receive Washington Award

Dr. Frank Kreith, Professor Emeritus of Engineering at the University of Colorado, Boulder, and ASME Legislative Fellow for Natural Resources, National Conference of State Legislators, has been elected to receive the **1997 WASHINGTON AWARD**, one of engineering's prized national honors. Dr. Kreith has published over 60 technical articles and books in his field of specialty - Heat Transfer and Thermodynamics.

The honor is conferred upon an engineer by fellow engineers for accomplishments which preeminently promote the happiness, comfort, and well-being of humanity. The award will be presented during National Engineers Week at a banquet to be held Tuesday evening February 18, 1997 at the Union League Club of Chicago, 65 W. Jackson Boulevard.

The IEEE is a sponsoring society of this annual event, along with the American Society of Civil Engineers; Western Society of Engineers; American Institute of Mining, Metallurgical and Petroleum Engineers; American Society of Mechanical Engineers; American Nuclear Society; and National Society of Professional Engineers.

The Chicago Section, cordially inviting its members in showing support of this prestigious award, is arranging for tables for our members so we can be seated together.

For reservations please phone Dennis Lamont at 847 398 4510

DATE:	Tuesday February 18, 1997
TIME:	Reception: 5:30 p.m.
	Dinner: 7:00 p.m.

Introduction.....Cordell Reed, Chairman, Washington Award Commission
Award Conferment.....George P. Wagner, President, Western Society of Engineers

TICKETS:	\$60.00 each
LOCATION:	Union League Club
	65 West Jackson Boulevard
	Chicago, IL 60604

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You'll join a highly skilled team responsible for developing ATM Switch Software. A broad array of challenges is available, including real-time firmware development, high-reliability maintenance software, ATM routing and connection processing, and network management. You should have experience in large-system software development, preferably in a telecom or real-time environment. Experience with ATM Forum standards, routing protocols, and/or SNMP is desirable.

System Integration and Test

Become a part of a team that's carrying on our tradition of producing the most reliable switches in the industry. These challenging positions are responsible for planning hardware/software integration as well as designing and executing a complex system test program using state-of-the-art test tools. You should have experience in large-system software development, integration, or test, preferably in a telecom or real-time environment. Thorough familiarity with UNIX is a must, and experience with protocol analysis (e.g., TCP/IP, SS7) is desirable.

Hardware Developers

You'll join the team that designed one of the highest-performance ATM switches in the industry. Leading-edge opportunities are available at both the chip and board design levels. Experience with VHDL, Mentor Graphics, Synopsys, IKOS, SONET/SDH, or ATM standards is extremely desirable.

Most positions require a BS, MS, or PhD in CS, EE, or closely related fields. A limited number of positions are available for recent graduates.

Please send your resume to R.W. Johnson, Lucent Technologies, Room 1H 4C-402, P.O. Box 3033, Naperville, IL 60566-7033, or FAX resume to: (630) 713-6123. Visit us on the World Wide Web: <http://www.lucent.com>
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For information about advertising in SCANFAX, contact the Chicago Section Business Office at (800) 898-4333 or (630) 964-4333

