



Scanfax

SCANFAX, IEEE MESSAGE CENTER — SUITE 300
820 NORTH ORLEANS STREET
CHICAGO, IL 60610

U.S. POSTAGE PAID
NON-PROFIT ORG.
Permit No. 479
Glen Ellyn, Illinois

Official Publication of the Chicago Section • Institute of Electrical & Electronics Engineers • JUNE 1989

TIME SENSITIVE MATERIAL

CALENDAR OF EVENTS

For reservations call the IEEE office 649-2800
(unless otherwise indicated)

Copy Deadline for September Scanfax is July 25, 1989

June 6	Product Safety Technical Committee	Packer Engineering North Washington St. Naperville, IL	Social 5:30 PM Buffet 6:15 PM Meeting 7:00 PM
--------	---------------------------------------	--	---

June 13	IEEE Executive Committee	Contemporary Controls 2500 Wisconsin Downers Grove, IL	Meeting 7:15 PM
---------	--------------------------------	--	-----------------

June 16	LEOS	Chapter Banquet & Awards Ceremony	To Be Announced
---------	------	--------------------------------------	-----------------

June 19	Antennas & Propagation Society and Microwave Theory and Techniques Society	Harvey's Prime Rib 331 E. Ogden Ave. Westmont, IL	Social 5:30 PM Dinner 6:30 PM Meeting 7:30 PM
---------	---	---	---

July 11	IEEE Executive Committee	Contemporary Controls 2500 Wisconsin Downers Grove, IL	Meeting 7:15 PM
---------	--------------------------------	--	-----------------

July 13/14	MBS/EMC/ CES/PES	Biophysical Mechanism of Tissue Injury	U of Chicago Chicago, IL
------------	---------------------	---	-----------------------------

Aug. 8	IEEE Executive Committee	Contemporary Controls 2500 Wisconsin Downers Grove, IL	Meeting 7:15 PM
--------	--------------------------------	--	-----------------

'EASIER TO TRAIN.'

Many employers will tell you that's why they hire DeVry graduates in Electronics. Our Bachelor's Degree graduates and Technicians become productive quickly because they have...

- Learned how to adapt to change, in programs that integrate computers, communications and control systems.
- Developed strong problem-solving skills with our integrated hardware/software approach.

Find out why so many employers call DeVry first for graduates in Electronics — and in Computer Information Systems. We can also handle interview details for you, at no charge.

DEVRY

INSTITUTE OF TECHNOLOGY

CONTACT:

Associate Directors of Graduate Placement

Jeanine Colin

Joan Herrmann

3300 N. Campbell Avenue
Chicago, IL 60618

2000 S. Finley Road
Lombard, IL 60148

(312) 929-7837 (312) 953-1300

DEVRY. We're serious about success.®

© 1987 DEVRY INC. All rights reserved.

G1

Five reasons to call an Epoxylite company:

1

The best application engineered resin systems for the electric motor industry. Call **EPOXYLITE**, 714-951-3231.

2

The most dependable heat stripping and drying/curing ovens for electrical maintenance and repair. Call **BAYCO**, 415-562-6700.

3

The highest quality precision engineered high-vacuum processing equipment for the electrical and electronic industries. Call **RED POINT**, 714-951-3231.

4

The best resins and impregnation compounds for electrical and electronic applications. Call **RIPLEY RESIN ENGINEERING**, 312-628-0272

5

The best industrial spray booths, air make-up systems. Call **VIKING SPRAY BOOTHS**, 916-927-2711.

Call them now for information and literature!

THE
EPOXYLITE®
CORPORATION

SCANFAX, (Publication) number (ISSN 0018-1297), June 1989
Volume 41, Number 10, SCANFAX is published monthly, except July and August by the Chicago Section Institute of Electrical and Electronics Engineers for the information of its members. Business Office is at IEEE Message Center—Suite 300, 820 North Orleans Street, Chicago, IL 60610, telephone number (312) 649-2800. Subscription rate for IEEE members collected in dues. \$1.50; others, \$15.00 per year. Third class postage paid at Glen Ellyn, Illinois.

Unless otherwise specified, Chicago Section IEEE neither endorses nor sanctions any positions or actions espoused in SCANFAX.

Bob Hofmann, Editor
Room 2B 220
AT&T Bell Labs
2000 N. Naperville Rd.
Naperville, IL 60566
(312) 979-3627

James Carroll, Assoc. Editor
(312) 416-7277

Steven Hofmann, Copy Editor
(312) 979-4247

Ed Barrett, Advertising Director
171 Warwick Drive
Glendale Heights, IL 60139
(312) 297-5540

Change of Address

Send change of address to Roseann Schulz, Member Services, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854-4150. Include your SCANFAX mailing label if possible. We cannot forward this information for you, so please do not send it to the local office or phone direct to: 1-800-678-4333.

SCANFAX DEADLINES

ISSUE	COPY DUE	MAILED ON
-----	VACATION	-----
SEPT	JULY 25	AUG 15
OCT	AUG 29	SEPT 15
NOV	SEPT 26	OCT 15
DEC	OCT 31	NOV 15

THESE ARE FIRM DEADLINES!!!!

JOINT CHICAGO CHAPTER OF IEEE ANTENNAS & PROPAGATION SOCIETY AND MICROWAVE THEORY & TECHNIQUES SOCIETY JUNE 1989 MEETING NOTICE

SERVICE AWARD to PROFESSOR MORRIS E. BRODWIN

and

STUDENT PAPER COMPETITION WINNERS

(Up To Three \$300.00 Prizes Awarded)

Date: June 19, 1989

Place: Harvey's Prime Rib
331 E. Ogden Avenue
Westmont, IL

Time: Social - 5:30 P.M.
Dinner - 6:30 P.M.
Meeting - 7:30 P.M.

(Harvey's Prime Rib is located about 2 miles west of Rt. 83 on the South side of Ogden Avenue. Ample parking is available.)

Professor Morris Brodwin of Northwestern University will be honored for his 30 years of distinguished service to the Chicago Joint Chapter of the AP/MTT-S.

The winners of our student paper contest will present their papers. Up to three papers will be presented. Papers will cover technical, engineering management or societal aspects of antennas, propagation, and microwave theory or techniques.

There are three \$300.00 prizes available for award. Come and see who won and watch them give their winning papers.

The dinner is optional. A reservation is helpful even if you plan to attend the talk only. Reservations may be made by calling 649-2800 before noon on March 24. Student members are encouraged to attend meetings. Dinner for student members is available for the nominal charge of \$1.00. Non-IEEE members are also welcome.

ELECTION RESULTS

The Chicago Section has elected the slate of officers prepared by the nominating committee. Less than 100 out of more than 6000 ballots were returned. SHAME!

Chairman	Robert Schrage
Vice-Chairman	George Stout
Treasurer	John Truitt
Secretary	Barry Brusso
Member Services	Robert Tervin
Publication	Bob Hofmann
Professional Activities	John Waters
Conference	Howard Wolfman
Program	Art Eagen
Student Activities	Cara Lindell
Finance	Len Cohen
Special Events	Henry Korman
Awards	Carl Kannewurf

A REPORT FROM YOUR OUTGOING SECTION CHAIRMAN

This message is the final one describing the efforts for the current slate of Section Officers and Committees for 1988-9. We have managed to maintain our "financial sanity" during this period by stressing the predominant use of our SCANFAX newsletter for meeting announcements instead of individual Chapter/Subsection mailings, by providing many interesting meetings, and by encouraging numerous joint meetings.

We have started receiving Section membership information in diskette format from IEEE Hq, but are still working on converting these files into a form suitable for preparing mailing lists on a PC, an nontrivial task not covered by currently available software from Hq.

Our Section Bylaws are being revised to make our SCANFAX election ballots conform and to offer normal Section voting privileges to members outside of our normal boundaries who have opted explicitly to be in our Section.

Our job descriptions for the various Section/Subsection/Chapter Officers and standing Section Committee Chairpeople are still in the draft stage.

The Section's telephone answering service is being monitored continuously to serve our members well and efficiently on a cost-effective basis.

Our Section Seminar on Electronic Mail, a new event within the past several years, proved successful professionally and financially; the participation and assistance from three local companies and the *usr/group/chicago* (the local UNIX user group chapter) are deeply appreciated.

Therefore we hope that our Section will continue to prosper, gain many more interested members, and serve our membership well under the stewardship of these new Officers.

Joe Feitler

BUSSMANN OVERCURRENT PROTECTION SEMINARS

Includes a Copy of the TRON® Software for Power Systems Analysis Program

S C O P E

WHO

The Bussmann Overcurrent Protection Seminar is designed for Consulting Electrical Engineers, Plant Engineers, Electrical Contractors and Electrical Designers.

WHAT

The seminar emphasizes short circuit current calculations, interrupting ratings, coordination, current limitation, component protection, motor protection, ground fault protection, pertinent NEC articles and actual "hands on" practice using TRON Software for Power Systems Analysis.

WHY

A thorough understanding of the concepts of modern overcurrent protection is necessary for proper system design and is mandatory for compliance with the requirements of the National Electrical Code.

MATERIALS PROVIDED

Engineering and application book, including technical data, bulletins, articles, and course materials, is provided for the presentation portion of the seminar. An additional comprehensive package is provided for TRON Software documentation and diskettes.

COST

The seminar fee is \$79 for each participant. This *includes* continental breakfasts, lunches, and a complete copy of the TRON Software for Power Systems Analysis program.

S C H E D U L E

Day 1

- 7/11-8/15-10/17-12/5
- Types of Overcurrents
 - Types of Overcurrent Protective Devices
 - Calculation of Short Circuit Currents
 - Interrupting Ratings NEC 110-9 & 230-65
 - Intro to TRON Computer Software-BUSSPOWER
 - Short Circuit Demo
 - Current Limitation-NEC 240-11
 - Homework Assignment
 - Reception

Day 2

- 7/12-8/16-10/18-12/6
- Component Protection NEC 110-10 & 240-1
 - Coordination of Overcurrent Protective Devices-DEC 240-12
 - Intro to TRON Computer Software-BUSSPLOT
 - Equipment Grounding and Grounding Conductor Protection NEC 250-1, 250-51, 250-70
 - Equipment Protection, NEC 110-3b
 - Motor Protection NEC 430
 - Ground Fault Protection NEC 230-95
 - GFP Coordination NEC 517-14
 - Cable Limiters NEC 230-82
 - Homework Assignment

Day 3

- 7/13-8/17-10/19-12/7
- TRON Computer Software for Power Systems Analysis
 - BUSSPower-Three Phase Fault Analysis
 - BUSSPLOT-Computer Aided Plotting of Time Current Relationships
 - Seminar Evaluation
 - Graduation

WHERE

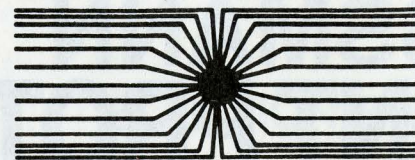
Sessions to be held in New York, Dallas, Chicago, and Los Angeles. Hotels to be announced.

WHEN

Seminars are scheduled for—
New York City—
July 11-13
Dallas, TX—
August 15-17
Chicago, IL—
October 17-19
Los Angeles, CA—
December 5-7

For further information on the seminar, please contact James Paul of Bussmann, at 800-322-1577, Ext. 8707.

In addition there will be an Overcurrent Protection seminar offered at the Bussmann facility (St. Louis, MO). Dates are Sept. 18-20.



IEEE Holm Conference on Electrical Contacts

DATE: September 18-20, 1989

PLACE: The Chicago Marriott Downtown, Chicago, Illinois (Special Rates for Attendees)

TECHNICAL PROGRAM:

Over 35 Technical Papers on the latest in electrical contact phenomena. **Plus** Two Special In-depth Workshop Sessions. **Plus** a Special Interest Paper.

I. SESSION TOPICS

Contact Properties and Performance: Effects of Mechanical Design Parameters, Conduction Through Corrosion Films, Mechanochemical Reaction, Degeneration Mechanism, Current Carrying Limits, Surface Deactivation Treatment

Connector Contacts: Laser Modification, Dust Effects, Diffusion, New Material Concepts, Environmental Corrosion, Flowing Gas Effects.

Arcing Contacts: Vacuum Arcs, Peeling Failure, Erosion, Dielectric Recovery, Reignition, Phase Transition

Sliding Contacts: Lubrication, Wear, Dust Factor, Surface Segregation, Thermoelastic Behavior, Holographic Observation.

Aluminum Contacts: Conducting Spots, Fretting, Contact-Aid Compounds.

Silver Metal Oxide Contacts: Film Formation, Switching Performance, Doping Effects, Erosion Behavior, H₂S Corrosion.

II. SPECIAL INTEREST PAPER HIGHLIGHTING

- Lasers for Cleaning Contacts

III. TWO SPECIAL WORKSHOP SESSIONS

Disaster Recovery: A four-member panel presentation of recovery procedures following hazards such as fire, flooding, toxicity, particularly concerning microelectronic equipment cleaning.

How To Achieve Quality in the Manufacturing of Connector Contacts: The processes of manufacturing and controlling the quality of electronic connectors will be the main thrust of this seminar.

PURPOSE: To provide a forum for the presentation and discussion of the latest findings and developments in the field of electric contacts.

FOR WHOM: Practicing designers, engineers, physicists and research scientists - those new to the field and those experienced.

COMPLETE PROGRAM: This summer, a second announcement including the complete technical program, will be distributed. If you would like additional information or want your name placed on the mailing list, contact the IEEE Holm Registrar at (212) 705-7259 or write to the address below.

REGISTRATION:	Advance Registration	IEEE Members	\$250
	(before September 1, 1989)	non-IEEE Members	\$285
	Registration at Conference	IEEE Members	\$275
		non-IEEE Members	\$310



Product Safety Technical Committee

The Chicago Chapter of the Product Safety Technical Committee, will hold their second meeting on June 6, 1989, at Packer Engineering, Inc. (Warrenville Road and Washington Street, Naperville, IL).

This location is between the East-West Tollway and Warrenville Road, with the entrance on Washington.

The meeting will revolve around a tour of the research and forensic laboratories and facilities of Packer Engineering, Inc., highlighting electronic and electrical products that have experienced dramatic safety problems.

Wine and cheese will be served during Registration, which will begin at 5:30 p.m. This is to be followed by an informal Chicken Buffet, served between 6:15 -7:00 p.m.

For reservations or travel directions, please contact Mr. John Allen ([312] 699-4414), or Mr. Dick Hagedorn ([312] 355-5722.)

IEEE RELIABILITY SOCIETY CHICAGO CHAPTER

The past year ending April 1989 has been rewarding for our active membership. We expanded the range of activities available to our membership through joint meetings with Fox Valley Section, and Institute of Environmental Sciences. The plan for the society this year will involve a mix of cooperative joint programs with other societies and a core of programs developed by the chapter.

We recognize a need for reliability science and expertise in the greater Chicago area. Our investigations show a need to develop increased expertise in component selection and reliability, system availability and maintainability, product warranty and product safety, logistics, etc. By involving our membership in these activities we hope to help our local manufacturers improve the reliability of their component parts or final product while also achieving a reputation for quality and low cost.

This year, we are planning to stage seminars in these topics; we invite other societies in the area to join us in bringing this program about. Above all, we encourage our local membership to become active and help us flesh out a broad program. We like to solicit input from our chapter members and other local chapters that would like to cosponsor our programs. If you have any questions please call me at 312-416-4126 or write to Mike Ero, Chapter Chairman (AT&T Bell Labs, 200 Park Plaza, Naperville, IL 60540), and look out for announcements of oncoming events.

PROTECT YOUR EQUIPMENT FROM ELECTRICAL DISTURBANCES

Are you concerned about what CB's, AM/FM radio, and VHF & UHF TV are doing to your product? Are cellular phones, taxi cabs, service vehicles and power line transients interfering with your product?

Did you know you may have a 5 million watt UHF television station operating near your equipment?

Call D.L.S. ELECTRONIC SYSTEMS, INC. today for susceptibility testing and trouble shooting to make your equipment immune to susceptibility.



10350 Dearlove Rd, Glenview, IL 60025
312 699-9060

As of 11/89 our new phone number will
be 708 699-9060

PLACEMENT SERVICE

The Chicago Section is now offering a Placement Service for its members free of charge. The program is intended for those who are Member Grade and above and is a positive step to help our members who are unemployed. If interested in any of the applicants listed below, call the IEEE office 649-2800 for their name and phone number. If marked "confidential," the applicant will be contacted by the IEEE office so that he/she may contact the prospective employer.

- 177 BSEE-UIC - Seeking entry level position with emphasis on processor-based systems and related software.
- 178 Seeking electromechanical - design drafting - familiar with AutoCad, IBM5080, CADAM, Computervision.
- 179 Project Manager - MS in Physics specializing in Laboratory Instrumentation, Fortran-77, DEC.
- 180 BSEE w/Computer Eng. Specialization - Seeking Entry Level Position, Prog. Exp. (ASM., C, Basic, Fort.)