



Scanfax

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

SCANFAX, IEEE MESSAGE CENTER
2460 WISCONSIN AVENUE
DOWNERS GROVE, IL 60515

Official Publication of the Chicago Section • Institute of Electrical & Electronics Engineers • FEBRUARY 1991



TIME SENSITIVE MATERIAL

CALENDAR OF EVENTS

For reservations please call IEEE Office at (708) 963-3828 before the stated deadline

Copy Deadline for March SCANFAX is January 25, 1991

Feb 6 Wednesday	Electro-Magnetic Compatibility	Surface Mount Filters for EMI/RFI Applications	AT&T Bell Labs 2000 N Naperville Rd Naperville, IL	Social: 7:15 PM Meeting: 7:30 PM
Feb 12 Tuesday	LEOS; Fox Valley Subsection	Design, Performance & Photonic Integration of Tunable Semiconductor Lasers	Wilton Manor Schmale Road Wheaton, IL	Social: 6:00 PM Dinner: 7:00 PM Meeting: 8:00 PM
Feb 12 Tuesday	Chicago Section	Executive Committee	Contemporary Controls 2500 Wisconsin Downers Grove, IL	Meeting: 7:15 PM
Feb 13 Wednesday	Power Engineering	Nuclear Power Plant Security Systems – The Need for Upgrades	Carson Pirie Scott Monroe & Wabash Chicago (Corporate Level)	Social: 11:30 AM Lunch: 12:00 noon Meeting: 12:30 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

Judy Bowie

Doug Fauth

3300 N. Campbell Avenue
Chicago, IL 60618

2000 S. Finley Road
Lombard, IL 60148

(312) 929-7837 (708) 953-1300

DEVRY. We're serious about success.®

© 1990 DEVRY INC.

G1

SCANFAX DEADLINES

ISSUE	COPY DUE	MAILED ON
MAR	JAN 25	FEB 15
APR	FEB 26	MAR 15
MAY	MAR 26	APR 15
JUNE	APR 30	MAY 15

THESE ARE FIRM DEADLINES
FOR ADS AND COPY!!!

SCANFAX, (Publication) number (ISSN 0018-1297), February, 1991 Volume 43, Number 6, 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—2460 Wisconsin Ave., Downers Grove, IL, 60515 (708) 963-3828. 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.

James Carroll, Editor
Room 2H 211
AT&T Bell Labs
2000 N. Naperville Rd.
Naperville, IL 60566
(708) 979-8820 FAX (708) 979-8823

Bob Hofmann, Assoc. Editor
(708) 979-3627

Steven Hofmann, Copy Editor
(708) 979-4247

Ed Barrett, Advertising Director
171 Warwick Drive
Glendale Heights, IL 60139
(708) 517-1890

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 or phone direct to: 1-800-678-4333. We cannot forward this information for you, so please do not send it to the local office.

OBITUARY

On December 8, 1990 the Chicago Section lost a valuable member. Frank Voltaggio died suddenly at the age of 67. He had served on the Recognition Dinner Committee for many years. Frank in his early years had been in the Air Force where he rose to the rank of Colonel. His specialty was electronic countermeasures equipment, and he was an original member of the "Old Crows", an organization of specialists in that field. Frank was employed at Northrop where he continued working as a consultant after he retired. He set a high standard of dedication and accomplishment for others to follow.

IEEE MEETING NOTICE

CHICAGO CHAPTER - IEEE EMC SOCIETY

DATE: WEDNESDAY - FEBRUARY 6, 1991 7:30 P.M.

LOCATION: AT&T BELL LABORATORIES
2000 N. NAPERVILLE ROAD
NAPERVILLE, ILLINOIS

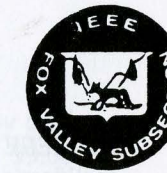
SPEAKER: ROBIN WILSON - MURATA ERIE NORTH AMERICA

TOPIC: SURFACE MOUNT FILTERS FOR EMI/RFI APPLICATIONS

FOR RESERVATIONS CALL IEEE OFFICE 708-963-3828



THE INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS, INC.



FOX VALLEY SUBSECTION in a joint meeting with

LASERS AND ELECTRO-OPTICS SOCIETY

TOPIC: Design, Performance and Photonic Integration of Tunable Semiconductor Lasers

DATE: Tuesday, February 12th, 1991

SPEAKER: Thomas L. Koch

PLACE: Wilton Manor, Schmale Rd., Wheaton

TIME/COST:

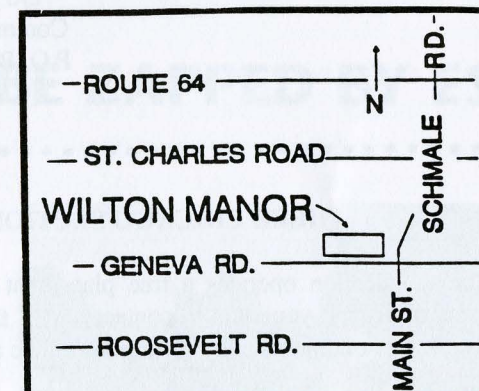
Social:	6:00 p.m.	Cash Bar
Dinner:	7:00 p.m.	\$12.00
Speaker:	8:00 p.m.	Free

RESERVATIONS: Call (708) 963-3828 to make reservations for Dinner and/or Meeting, by Friday, February 8th 1991.

TECHNICAL QUESTIONS: Direct questions about our topic or speaker to Jan Hessler at (708) 972-3717.

ABSTRACT: Tunable semiconductor lasers will be essential components to fully exploit the enormous bandwidth potential of a mature optical communications technology. This talk will explore the operating principles, performance and applications of current research prototype devices.

ABOUT OUR SPEAKER: Thomas L. Koch received the A.B. degree in physics from Princeton University in 1977 and the Ph.D. degree in applied physics from the California Institute of Technology in 1982. There, his research focussed on ultrafast laser physics and semiconductor optoelectronics. He is current Head of the Optoelectronics Research Department at AT&T Bell Laboratories, and his recent work has focussed on tunable semiconductor lasers and the integration of guide-wave optical devices to form photonic integrated circuits (PICs).



APPLICATION FORM

not published during July and August).
elsewhere in this issue of SCANFAX.

_____ Expir. Date _____

IEEE Grade _____

IEEE Grade _____

Phone (____) _____

mining the credibility, accuracy, or

mining the credibility, accuracy, or

[illegible]

* * * * *

IENT SERVICE

ed members currently at the Member

and members currently at the Member
about a potential opening, you can get
business hours.

pective employer's inquiry. * *

Jack Record, Seeks V.P. Position
ing Management

10 Years of Experience including Consulting

POWER ENGINEERING SOCIETY



Mr. Mark P. Murskyj, Senior Electrical Project Engineer
Sargent & Lundy Engineers

Nuclear Power Plant Security Systems - The Need for Upgrades

Most perimeter security systems for nuclear power plants were designed and installed in the late 1970s or early 1980s. This presentation explores the need to regularly evaluate and possibly upgrade a security system in the area of perimeter intrusion detection and surveillance. U.S. Nuclear Regulatory Commission audits have raised issues regarding the performance of perimeter security systems.

Mr. Murskyj received his M.S.E.E. degree from Illinois Institute of Technology. He has fifteen years experience in the design, engineering and licensing of electric generating stations.

Carson Pirie Scott - Chicago (Monroe and Wabash) - Corporate (lower) Level

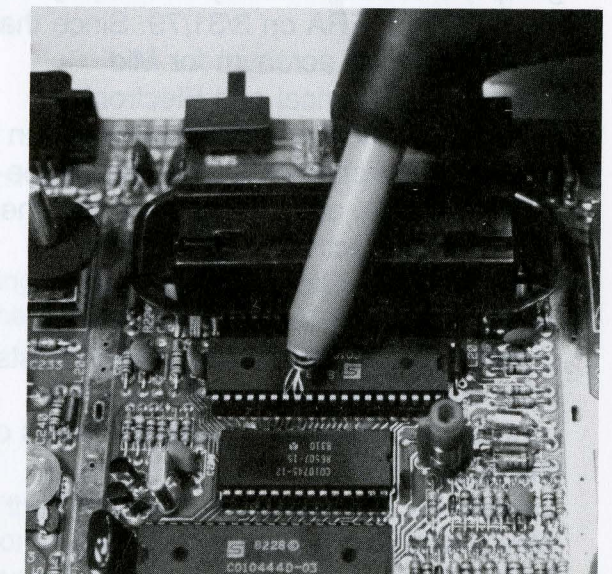
February 13, 1991

11:30 Social 12:00 Lunch 12:30 Presentation
Reservations must be made by noon Monday, February 11, 1991, by calling 708-963-3828. Please leave name(s) and company name. Lunch is \$9.00.

YOU CAN'T AFFORD TO BE ZAPPED BY ESD!

Electrostatic Discharge can and does...

- Reach potentials of 25,000 volts!
- Wipe out CMOS chips halting electrical operation
- Alter your input data
- Damage critical components
- "Lock-up" your equipment necessitating extended downtime to rectify the situation



Call DLS today at 708/699-9060 to schedule a quick, conclusive test...we can solve your ESD problems.

DLS 
ELECTRONIC SYSTEMS, INC.

10350 Dearlove Road, Glenview, IL 60025 • 708/699-9060

**What is the Mid-Continental Electrical and Electronics Conference and Exposition and what does it mean to you?
Look in the March issue of SCANFAX for more information.**

MIDCON BACKGROUND

One warm evening in 1977 at a Chicago Section meeting as the executive board members sat with rolled up shirt sleeves and loosened ties, pondering how to fund programs, a proposal was made by Paul Carroll and Dave Pivan that the Chicago Section endorse a technical conference and exhibition similar to Wescon. The details had already been worked out with IEEE headquarters and the Chicago Section approved. This conference which was named Midcon was jointly funded by the IEEE, and the Electronic Representatives Association (ERA). Due to the enthusiastic efforts of both of these groups, the "seed" money was refunded to the IEEE and ERA on 3/31/79. Since that time Midcon, an acronym for Mid Continental Electrical and Electronics Conference and Exposition has been an autonomous operation sponsored by the IEEE and ERA, and uses the management expertise of Electronic Conventions Management (ECM), who manages Wescon. Wescon and Electro hold conferences on the east and west coasts. ECM was developed by several IEEE councils in California to manage shows of this type.

Why is Midcon so important to the Chicago Section? It is the principal source of funding for our local activities. It

provides us with the money for student activity programs, for participation in the recent Job Fair, for support of the Chapter and Society meetings, and Technical Programs.

Even more important than this, Midcon gives IEEE members an opportunity to upgrade their skills and knowledge in the Technical programs and tutorials presented during the conference. Midcon provides a "hands-on" opportunity to examine new products and techniques to keep up to date on the State of the Art in our profession.

The thawing of the Cold War and subsequent reductions in defense spending with less requirement for engineers to develop sophisticated weapon systems, has made us aware of the need to use our expertise to meet the changing needs of society. The rapidly evolving electronics industry requires our constant attention so that we do not yield our leadership to those more motivated than us. The Midcon conference is one small step in this direction. Specific information on the tutorials will be presented in future issues of Scanfax.

John Waters

WASHINGTON AWARDS DINNER

Frank Borman To Receive Washington Award

Frank Borman, Commander of the Apollo 8 Mission and former CEO Of Eastern Airlines, has been elected to receive the 1991 "WASHINGTON AWARD", one of engineering's prized national honors.

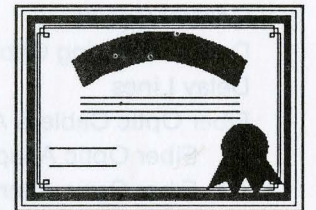
The award will be presented to Mr. Borman at a banquet, Thursday evening, February 21, 1991 at the Union League Club of Chicago during National Engineers Week.

The IEEE is a sponsoring society of this annual event. The Chicago section is trying to arrange tables for our members so we can be seated together. For reservations please phone Dennis Lamont at (708) 398-4510.

DATE: Thursday, February 21, 1991

TIME: Social: 5:30 pm
Dinner: 7:00 pm
Tickets: \$48.00 each

LOCATION: Union League Club
65 W. Jackson Blvd.
Chicago, IL 60604



MEMBERSHIP SERVICES NOTES:

The Piscataway supplied membership database will be upgraded by February. Our first use was to generate membership profiles — some call them demographics. Here are two other forthcoming uses:

FELLOW AWARDS

The awards committee welcomes input from membership — names of members to recommend for Fellow election, for example.

If you notice a name missing, like that of a deserving person, please call the IEEE Chicago Section message center — 708-963-3828 and leave the name of the person, your name, and say "Fellow Award". We will do the rest.

SENIOR MEMBER UPGRADES

All members of the Executive Committee have a list of the Section's Senior Members. A sampling of present Member and Associate grade members of long service will be receiving an upgrade kit in their mail. If you receive an upgrade kit, you may contact one of the Executive Committee members or leave your name at the business office so that three members who know you can act as references. If you know a reference and want the address of a current SM not of the Chicago Section, please leave a message at 708-576-8222. We want to make our Senior Member tally 700 by this October.

ADVANCED TECHNOLOGY IN ELECTRONICS, MICROWAVE, FIBER OPTICS

□ PRODUCTS CAPABILITY

Air Duct & Plenum Cable
Audio Cables (Shielded & Unshielded)
Back Panel Wire
Coaxial Cable & Triaxial Cable
Communication Cables
Computer Cables (Shielded & Unshielded)
Connectors (Microwave, Fiber Optic & IDC)
Control Cables
Data Processing Cable (High Speed)
Delay Lines
Fiber Optic Cable & Assemblies:
 Fiber Optic Adaptors
 Fiber Optic Attenuators
 Fiber Optic Coil Cords
Flexible Cord - SJT, ST, STO, SJTO
 (UL/CSA) Hospital & Export Cords
High & Low Temperature Cables
Instrumentation Cables
Intercom Cables
Insulated Wire (UL/CSA)
Local Area Network (LAN) Cables
Low Capacitance Cables

Low Inductance Cables
Medical Electronic Cables
Microwave Cables (Flexible & Semi Rigid)
Microwave Cable Assemblies (2 to 40 GHz)
Molded Cable Assemblies
Multi Conductor Cables (Shielded & Unshielded)
MIL-Spec Insulated Wire
Phase Matched Cable Assemblies
Point of Sale Cable
Power Limited Circuit Cable Class 2 or 3
Power Limited Fire Alarm Cable
Power Limited Fire Protective Signaling Cable
Process Control Cables
Pulse Cables
Improved RF Cable & Assemblies
Robotic Cables
RS-232 Interconnect Cables
Special Impedance Cable (10 to 150 OHMS)
Thermoplastic Rubber Cable (TPR)
Twinaxial Cable
Twisted Pairs (US/CSA)

□ MANUFACTURING & ENGINEERING SERVICES

Color Coding Insulated Wire
Custom Molding
Cut & Strip Insulated Wire
Engineering Assistance

Product Development Assistance
Terminating
Testing (DC to 40 GHz)
Tinning Wire

Fiber Optic Field Service (Including Fusion Splicing and System Testing)

□ EXPERIENCED SALES & ENGINEERING STAFF

□ MODERN MANUFACTURING FACILITY



Advanced Technology Group

116 SHORE DRIVE □ HINSDALE, ILLINOIS 60521

□ PHONE (708) 323-9121 □ TWX 910-651-0850 □ FAX 708-323-9398