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TIME SENSITIVE MATERIAL

CALENDAR OF EVENTS

For reservations please call IEEE Office at (312) 236-4333 before the stated deadline
The meeting details are stated in their relevant announcements inside

October 9 Saturday	Chicago Section	★Centennial Celebration★	Museum Science & Industry 57th & Lake Shore Drive Chicago, Il.	Call for Details (312)236-IEEE
October 12 Tuesday	Chicago Section	Executive Committee	DeVry-DuPage 1221 N. Swift Rd. Addison, Il.	Food Service: optional Meeting: 7:15 PM
October 13 Wednesday	EMC Society	Are Portable Cellular Phones Safe?	Motorola Center 1301 Algonquin Rd. Schaumburg, Il.	Social: 7:15 PM Meeting: 7:30 PM
October 13 Wednesday	Power Engineering Society	Surge Protection of Power Systems	Chicago Bar Association 321 S. Plymouth Court Chicago, Il.	Social: 11:30 AM Lunch: noon Meeting 12:30 PM
October 21 Thursday	Computer/Communications/ Engineering Management & Professional Communications Societies	Job Interviewing and Job Search Techniques	Jerry Sharko's 2225 Ogden Ave. Lisle, Il.	Social: 6:00 PM Dinner: 6:30 PM Meeting: 7:45 PM
October 27 Wednesday	Fox Valley Subsection/ Communications Society	Converting Conventional Telephones to Cellular Phones	Jerry Sharko's 2225 Ogden Ave. Lisle, Il.	Social: 6:00 PM Dinner: 7:00 PM Meeting: 8:00 PM
November 9 Tuesday	Chicago Section	Executive Committee	DeVry-DuPage 1221 N. Swift Rd. Addison, Il.	Food Service: optional Meeting: 7:15 PM
November 16 Tuesday	Electron Devices/ LEOS Societies/ NW Subsection	Electronic and Optical Packaging Applications: Technologies & Applications	Motorola Center 1301 Algonquin Rd. Schaumburg, Il.	Meeting: 7:00 PM Reservations Required

☆☆☆ Centennial Celebration ☆☆☆

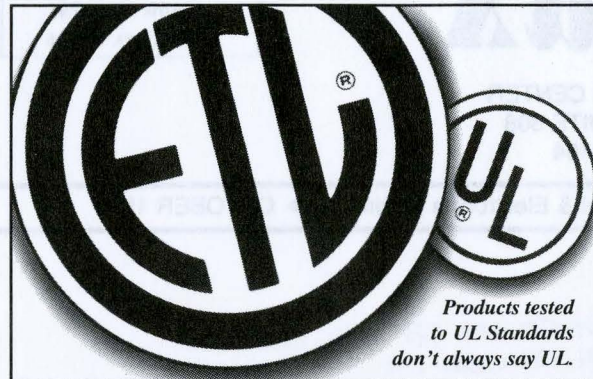
You, your family, and your friends are invited to participate in our Section's Centennial Celebration to be held on October 9 at the Museum of Science and Industry. This is indeed a rare event in our Section's history. While in attendance, you will have the opportunity to network with your professional colleagues, both old friends as well as new acquaintances, as the event unfolds - reminiscing over past achievements and speculating over new technical horizons.

The Centennial Committee has planned an interesting evening for your pleasure. Activities like viewing various exhibits, for instance the new Telecommunications exhibit, the Food for Life exhibit, etc., a cocktail reception and a dinner are some of the highlights of our Centennial Celebration. Also, IEEE dignitaries at the national level and at the Regional level are expected to participate. Your participation will help make this event a more successful and a memorable one for all in attendance. Your support will help our Section celebrate the past 100 years and set the direction for the next 100 years.

The Centennial Committee looks with great anticipation to meet you and your guests at this momentous event in our Section's history. For further details, see page 12 of this publication or the recently mailed extra edition of SCANFAX.

Chicago Section Centennial Committee

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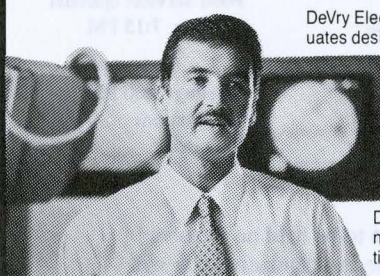
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SCANFAX DEADLINES

ISSUE	COPY DUE	MAILED ON
NOV	SEPT 24	OCT 15
DEC	OCT 27	NOV 15
JAN 94	NOV 25	DEC 15
FEB	DEC 21	JAN 15
MAR	JAN 26	FEB 15
APR	FEB 25	MAR 15
MAY	MAR 25	APR 15
JUNE	APR 28	MAY 15

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IEEE ELECTRON DEVICES SOCIETY

Northwest Subsection

LEOS SOCIETY

JOINT MEETING OF THE ELECTRON DEVICES SOCIETY, THE NORTHWEST SUBSECTION AND LEOS SOCIETY

Tuesday, November 16, 1993

"ELECTRONIC and OPTICAL PACKAGING APPLICATIONS: TECHNOLOGIES and APPLICATIONS"

by Dr. Herbert J. Neuhaus
Amoco Chemical Company

Advances in electronic packaging are driven by the need for higher functionality and frequency performance, and reduced size, weight, and cost. Two related approaches to these goals are multichip modules (MCM) and optoelectronic interconnects. MCMs allow the use of mixed semiconductor technologies in a single module. Optical MCM designs have been proposed which incorporate chip-to-chip optical interconnects and electro-optic waveguides. These technologies and their associated material needs will be reviewed.

Herbert J. Neuhaus is Product Development Manager for Multichip Module Materials at Amoco Chemical Company in Naperville, IL. In 1980 he received his BS in Physics from Clemson University, and the PhD in Physics from the Massachusetts Institute of Technology in 1989 where his research focused on electrical conduction mechanisms in polyimides.

Register by calling the IEEE Office by November 12, (312) 236-4333, Reservations are required. Your attendance will be confirmed.

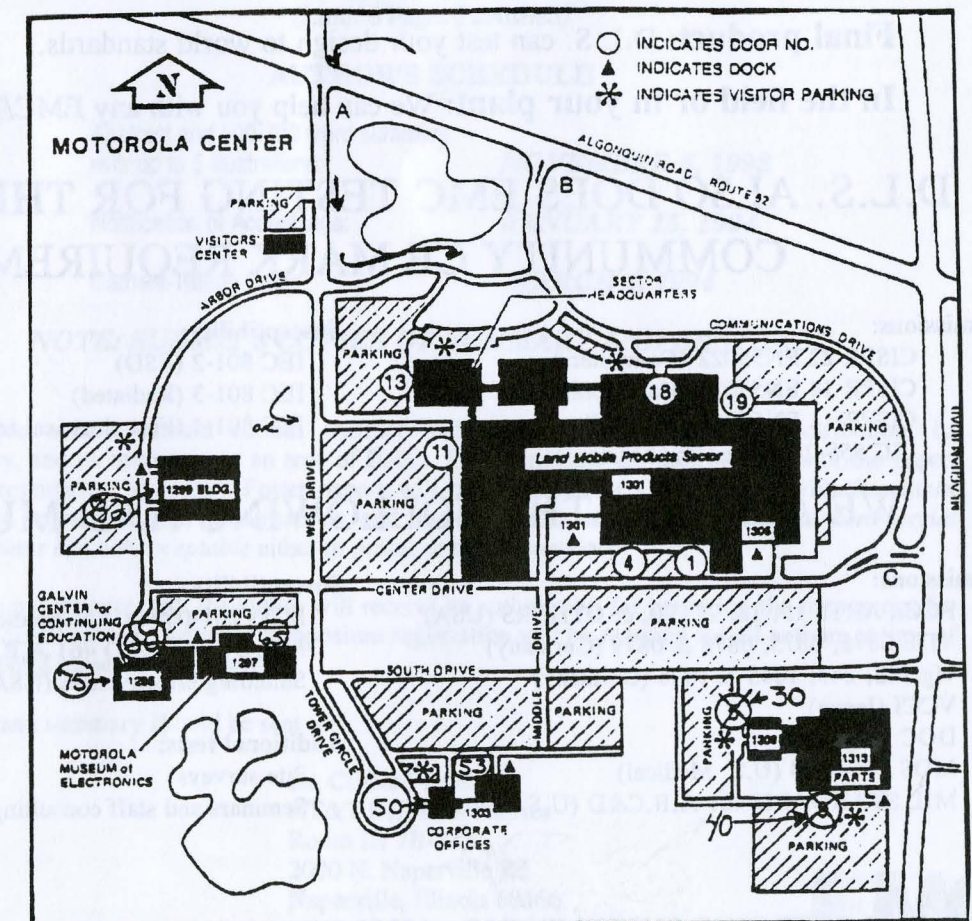
Meeting Location:

The Motorola Center,
Algonquin Rd (Route 62),
Schaumburg, IL

Time:

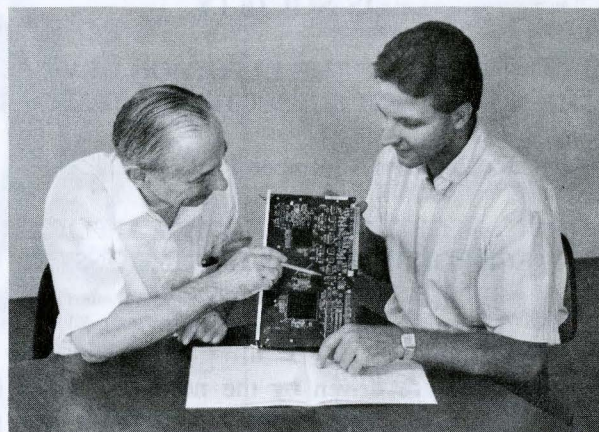
7:00 p.m.
(Coffee and rolls will be available).

Enter at Gate A, park in lot close to Number 13, enter door at the location of Number 13.



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IEEE 1994 INTERNATIONAL SYMPOSIUM ON ELECTROMAGNETIC COMPATIBILITY

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Chicago 1994
Compatibility In The Loop

1994 CALL FOR PAPERS

The IEEE EMC Society seeks original, unpublished papers on all aspects of EMC including, but not limited to the following technical areas:

EM Environment
Military Applications
Test Facilities / OATS
Filters
EMC Modeling
Reverb. and Anechoic Chambers
EMC Standards & Regulations
New EMC Technology

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Coupling
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Formal Paper with 20 Minute Presentation
or
Poster Paper with Informal Presentation
(Limit 6 Pages Published)

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Abstract and 500-700 word summary
with up to 5 illustrations: **NOVEMBER 5, 1993**

Notification of Acceptance: **JANUARY 15, 1994**

Camera-Ready Copy: **MARCH 1, 1994**

NOTE: SUBMIT 3 COPIES OF SUMMARY AND ABSTRACT

Prospective authors should submit abstract and summary outlining their contribution, its originality, and its relevance to an area of EMC. Please indicate the desired format of the paper, formal presentation or poster. Poster papers will be displayed for several hours with the author present to make informal presentations and answer questions. *Promotional and commercial presentations are not acceptable* either in poster or regular sessions.

For those papers accepted, the author will receive an author's kit for preparing the manuscript for the symposium record. Advance symposium registration will be required for all authors at time of submission of camera-ready copy.

Abstract and summary should be sent to:

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James A. Watson, Editor—Georgia C. Stelluto, Associate Editor

CCIP Forum Explores Development of National Information Infrastructure

Approximately 200 representatives of industry, government, academia, and associations gathered in Arlington, Virginia, for a forum hosted by IEEE-USA's Communications and Information Policy Committee (CCIP). With the theme, "Telecommunications as Part of the National Information Infrastructure," attendees explored the development of a national information system.

Keynote speaker Arno Penzias, vice president of research at AT&T Bell Laboratories, highlighted the need for interoperability as a primary design criterion for the information infrastructure. He urged policymakers and designers to keep infrastructure applications clearly in mind.

Other speakers included Representative Edward Markey (D-Massachusetts), House Telecommunications Subcommittee chairman, and CCIP Chairman Will Stackhouse. Markey told forum attendees that digital communications services must be universal and affordable. He specified the integrated services digital networks as an interim step in developing an infrastructure.

Stackhouse asked participants to strike a balance between consensus and creativity in developing a blueprint for a 21st century national telecommunications system. He emphasized the conference goal of including broadcast, computer, and other industries in investigating technology trends, perspectives of telecommunications providers and users, and infrastructure projects and policy.

A summary report of the proceedings, including presentations of more than 30 other speakers in six panel sessions, will be available soon from the IEEE-USA Office in Washington, D.C.

IEEE-USA Releases New Federal Legislative Agenda

IEEE-USA's new Federal Legislative Agenda was presented to Members of the 103rd U.S. Congress in May, as they began to address the new technology and competitiveness proposals of the Clinton Administration.

The most recent in the biennial series, the Agenda highlights positions taken by IEEE-USA on public policy issues of concern to IEEE's U.S. members. The topics covered are industrial competitiveness, retirement income policy, defense conversion, career issues, intellectual property, research and development, civilian space program, computers and communications, energy, and engineering in health care. Serving as an executive summary and ready reference for Members of Congress and their staffs, the Agenda also provides a comprehensive list of IEEE-USA positions for the information of IEEE members and outside organizations.

Copies of the Agenda and related position statements are available free of charge on request to the IEEE-USA Office in Washington, D.C.

Manpower Committee Continues To Challenge the U.S. Department of Labor's LMI Project

On behalf of IEEE's U.S. members, USAB Chairman Charles K. Alexander wrote to Members of the House and Senate Judiciary Committees, on July 1. Alexander's letter supported Labor Secretary Robert Reich's request to the House and Senate Judiciary Committees that a statutory requirement for a Labor Market Information (LMI) Pilot Program be removed from the **Immigration Act of 1990**.

"It should be clear from the adverse comments received by the Labor Department that the LMI Pilot Program ought to be terminated," Alexander said. The proposed program could seriously damage the careers of U.S. scientific and engineering professionals by allowing foreign nationals in certain occupations to receive expedited permanent resident status in the United States.

IEEE-USA also urged the Department of Labor to delay further implementation of related rulemaking until Congress can thoroughly review the matter at hearings and develop appropriate legislative recommendations.

The Manpower Committee sent a Legislative Alert to volunteers and contacts in other concerned organizations with an update on recent developments, asking them to communicate their support for Congressional action to terminate the LMI Pilot Program by writing to one or more members of the Judiciary Subcommittees that handle immigration issues. Changed economic circumstances, including increased unemployment in scientific and engineering fields is the primary justification for recommending that the program be repealed or amended.

USAB Chairman Supports Budget Deficit Reduction

In a letter sent to all Members of Congress, IEEE's United States Activities Board Chairman Charles K. Alexander noted IEEE-USA's strong support of President Clinton's efforts to reduce the Federal budget deficit. In addition, the letter endorsed related efforts to encourage economic growth and productive investment, create jobs, and promote U.S. economic and technological competitiveness.

According to Alexander's letter, President Clinton's budget initiatives, as contained in the **Omnibus Budget Reconciliation Act of 1993**, H.R. 2141, includes many provisions of particular importance to IEEE's U.S. members. H.R. 2141 would authorize a permanent extension of the \$5,250 tax exclusion for employer-provided educational assistance and a permanent extension of the research and experimentation tax credit.

IEEE-USA also supports the package's targeted capital gains incentives for investment in small businesses and a major revenue raising provision that would permit the Federal Communications Commission to use auctions to assign portions of the public radio spectrum to commercial users.



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
FOX VALLEY SUBSECTION

OCTOBER MEETING ANNOUNCEMENT
Joint with Communications Society



CONVERTING CONVENTIONAL TELEPHONES TO CELLULAR PHONES

Presented by George Claudio, Jr. of Telular Company

Wednesday, October 27, 1993

Since the beginning of time man has been seeking solutions to his communication problems. Technology has progressed yet we are once again seeking that vital solution —

How do we provide reliable telephone service to all corners of the globe?

Standard copper wires provide the features we demand but it can be a slow and costly process to string wires wherever we need telephone service. Portable cellular phones allow freedom, but forfeit features.

Fixed cellular is the missing link, the next generation of telecommunications.

If you're interested in a real answer to our global communication problem, come join us in a discussion about the technology that provides that solution.

Topics discussed will include:

- The Wireless Advantage
- Fixed Cellular Station Overview
- Fixed Cellular Applications



GEORGE CLAUDIO, JR.

Mr. Claudio is Vice President of Technology at Telular and has been with the company since its inception. He has been integrally involved in the design and evolution of the company's patented technology and products. Mr. Claudio is recognized internationally for his leadership in developing cellular technologies. He has sixteen years experience in various segments of the electronics and radio telecommunications industries. Mr. Claudio has worked with several companies in technical management and engineering.

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Call IEEE Message Desk at
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6:00 PM Social Hour

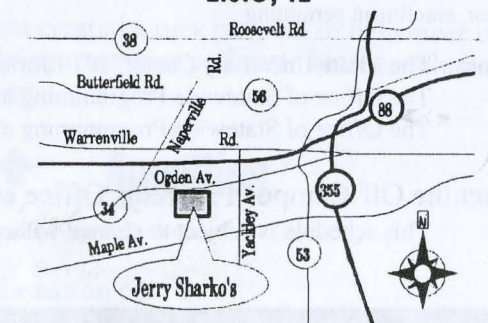
7:00 PM Dinner / \$15.00*

Stir Fry Beef Entree with Salad, Rolls, Coffee, and Dessert
Dietary and vegetarian meals can be requested at the time of making your reservation

* Includes Complimentary Cocktails 6:30 to 7:00 PM

8:00 PM Presentation / Free

Jerry Sharko's
2225 Ogden Ave.
Lisle, IL



ADVERTISE IN THE CENTENNIAL BOOK

As part of our Centennial Celebration the IEEE Chicago Section will be publishing a special centennial book commemorating the event to be held at the Museum of Science and Industry on Saturday, October 9, 1993. At this celebration, we will be recognizing 100 years of electrical engineering contributions by Chicago area engineers and companies. There will be exhibits and displays from our members and special recognition for Chicago area companies that have supported our local organization.

During the reception, guests will have after-hours access to the museum's World's Columbian Exposition display entitled "Building MSI: 1893 to the 21st Century." Pictures from the celebration, as well as reprints of articles of historical significance, will be included in the centennial book. Area companies are encouraged to participate by purchasing event tickets, loaning artifacts or by purchasing advertisements in the centennial book.

An advertising application is available from the IEEE office at 312/236-IEEE. We welcome your standard advertisements or, if you wish, a congratulatory message to the Chicago Section. Our publisher, Graphix Products (Marsha Watt, 708/231-2425), is available to assist you in developing your message. You may wish to run an ad of an older product of historical significance to your company.

For those who purchase full or half-page ads there is the opportunity to submit editorial copy equivalent to the ad size. A copy of the editorial guidelines is included with the advertisement application. We would like to hear about your company's story regarding growth, technology contributions or your vision of the future. Consider honoring your own engineers by relating their story.

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- working engineers seeking advanced degrees through evening study
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The deadline for degree applications and credentials is October 29, 1993. The graduate-level courses listed on the right are scheduled for the spring semester 1994:

UIC The University of Illinois at Chicago

Spring 1994: January 10 to May 6, 1994

ME 417	Intermediate Fluid Mechanics
ME 524	Thermal Radiation*
ME 535	Theory of Vibrations
ME 547	Advanced Computer-Aided Design*
EECS 417	Digital Signal Processing*
EECS 460	Computer Algorithms
EECS 520	Electromagnetic Field Theory
EECS 572	Distributed Software Engineering

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The Office of Statewide Programming at Mount Prospect, 300 West Golf Road, Suite 207, Mount Prospect, Illinois
The Office of Statewide Programming at Rockford, 1601 Parkview Avenue, Rockford, Illinois

Contact the Off-Campus Programs Office at (312) 996-2311 for further details.
This schedule is subject to change without notice.

IEEE EMC SOCIETY MEETING

DATE: WEDNESDAY - OCTOBER 13, 1993
TIME: 7:15 p.m. SOCIAL 7:30 p.m. MEETING
LOCATION: MOTOROLA, SCHAUMBURG
SPEAKER: ALLEN DAVIDSON, MOTOROLA LMPS RESEARCH
TOPIC: ARE PORTABLE CELLULAR PHONES SAFE?

The next meeting of the Chicago Area IEEE EMC Society will be held on Wednesday, October 13, 1993 at Motorola in Schaumburg at 7:30 pm.

A presentation will be given by Allen Davidson, Member of the Technical Staff of Motorola LMPS Research. This topic will be addressed from the standpoint of the ANSI/IEEE Standard for Safety Levels With Respect to Human Exposure to RF Electromagnetic Fields, as well as other national and international standards. Computed and measured levels for base, mobile and portable land mobile and cellular radios will be presented.

ADDRESS: Motorola Center
1301 Algonquin Road
Schaumburg, IL

DIRECTIONS: From the north or south on Rt. 53, exit west to Rt. 62 (Algonquin Rd.) Follow the exit ramp around to the stoplight and turn west onto Algonquin Rd. Go past Meacham Road. The visitors entrance is the west entrance to the Motorola campus on Algonquin Road labeled entrance A on the map. Turn left onto West Drive and take this to Center Drive and make a right to parking lot. Meeting is located in the Galvin Center for Continuing Education. Meeting room number will be posted on monitor inside the building.

Those wishing to attend may make their reservations by calling:

312-236-4333, The Chicago Message Center.

Refreshments will be served at 7:15 p.m.

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THE ENGINEERING MANAGEMENT & PROFESSIONAL COMMUNICATIONS SOCIETIES,
AND CHICAGO'S PROFESSIONAL ACTIVITIES COMMITTEE FOR ENGINEERS (PACE)
INVITE AND YOUR FRIENDS TO OUR JOINT MEETING**

DATE: October 21, 1993
PLACE: Jerry Sharko's, 2225 Ogden Ave., Lisle, IL
TIME: 6:00 PM — Social Hour (Cash Bar)
 6:30 PM — Dinner — \$14 per person (*Reservations to (312) 236-IEEE REQUIRED by 10/18/93*)
 7:45 PM — Talk (**FREE**)
SPEAKER: Joseph Feitler, SHL Systemhouse, Inc.
TOPIC: **JOB INTERVIEWING AND JOB SEARCH TECHNIQUES**

ABSTRACT

IEEE's September 1993 issue of *The Institute* announced several additional techniques to help our unemployed (and underemployed) members in their job search. For example, they listed several of the Internet's netnews groups for finding current job openings and for displaying your personal resume periodically to potential employers as "contract" (usually short-term and highly specialized), or as permanent hires. There are advantages and drawbacks to these search techniques, in addition to being able to communicate via the Internet, a comprehensive nation-wide and international information exchange medium:

- o Due to the huge number of listed openings and resumes any item usually disappears within a few days
- o If you are qualified, interested, and don't respond properly or quickly, someone else may become a candidate ahead of you and fill this position
- o A position in your preferred location may be announced which will never appear in a local or national newspaper
- o An prospective employer may try to contact you via electronic mail so that you have to be ready to answer quickly and properly by phone or mail

Of course, be sure to have an eye-catching and meaningful resume to submit to a prospective employer.

Joe will also try to cover other job search methods cited by recent IEEE publications, as well as some of his private resources.

ABOUT OUR SPEAKER

Joe Feitler has been IEEE Region 4's E-Mail Coordinator for several years and has worked with the Internet for about 8 years. He has been keeping an eye on the Internet newsgroups of interest to IEEE members, as well as on those dealing with job searches when he was looking for prospective employees for his firm. He'll also show some actual resumes as good and bad examples.

In his position at Systemhouse he focuses on preparing corporate style resumes to accompany proposals. With over 40 years of varied Computer Science experience, Joe is a Life Senior Member of IEEE and also very active at the Section and Region levels.

 Please call your dinner reservations to our IEEE office at (312) 236-IEEE no later than October 18, 1993
 For more information about this event or meeting location, please call Joe at (708) 505-9100, X277.



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POWER ENGINEERING SOCIETY

SPEAKER: Mr. Joseph. L. Koepfinger
 Director of Systems Studies and Research
 Duquesne Light Co.

TOPIC: Surge Protection of Power Systems

ABSTRACT: Surge protection is a dynamic technology. It has expanded from the protection of equipment from lightning damage to protection of equipment from all types of transient overvoltage. The main goal in the application of arresters to the high voltage area is guided by insulation coordination. In applying surge protection to low voltage equipment, a new vocabulary has developed. Protection of electronic equipment consists of more than just insulation coordination. There is concern about upset of the operation of the equipment, damage to electronic components, and the effect of the surge protective device on the operation of the power system. The understanding of Standards is important to surge protective device application.

BACKGROUND: Joseph L. Koepfinger is currently the Director of Systems Studies and Research at Duquesne Light Company. He has been employed by Duquesne Light Co. for forty four years. He is currently Chairman of American Standards Committee C62, U.S. Technical Advisor for IEC Technical Committees 37, 37A and 37B. He is a past chairman of the IEEE Surge Protective Devices Committee. He has B.S. and M.S. degrees in electrical engineering.

PLACE: Chicago Bar Association
 321 S. Plymouth Court

DATE: October 13, 1993

TIME: 11:30 Social 12:00 Lunch 12:30 Presentation

Reservation must be made by noon Monday October 11, 1993 by calling 312-236-4333. Please leave name(s) and company name. Lunch is \$7.50.

Join in the Celebration!

Chicago Section Centennial

1893

The International Electrical Congress convened at the 1893 World's Columbian Exposition. Chicago area engineers of the American Institute of Electrical Engineers (AIEE) petitioned the AIEE to allow the holding of local technical meetings resulting in Chicago becoming the first Institute section outside New York. At the Exposition, the Palace of Fine Arts held priceless works of art. It was only one of many imposing structures.

1993

The Chicago Section remains active with 50-plus technical meetings each year and with over 7000 members. The Palace of Fine Arts, the only surviving structure from the 1893 Fair, became the Museum of Science and Industry, and it will be the setting for the centennial celebration of the IEEE Chicago Section.

October 9, 1993 at 6:30 p.m. join us as we celebrate 100 years of engineering contributions by the IEEE and a walk into history at the **Museum of Science and Industry**, 57th Street and Lake Shore Drive, Chicago, Illinois.

IEEE members and guests will enjoy after hours access to selected exhibits and the seven galleries commemorating the 1893 World's Columbian Exposition "Building MSI: 1893 to the 21st Century." Dine amid the historical banners in the Rotunda at the Museum and enjoy listening to the keynote speaker and awards presentation. Continue your after hours access to the Museum until 11:00 p.m.

To participate in this centennial celebration submit your check payable to the IEEE Chicago Section (30 N. Michigan Avenue, Suite 508, Chicago, IL 60602) with the attached form. Please contact the IEEE office with any questions regarding this celebration at **312•236•IEEE**.

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