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TIME SENSITIVE MATERIAL

CALENDAR OF EVENTS

Call IEEE Chicago Section Office at 1-800-898-IEEE to make your reservations.

September 13 Tuesday	Chicago Section	Executive Committee	DeVry - DuPage 1221 N. Swift Rd Addison	Meeting: 7:15 PM
September 24 Saturday	Fox Valley Subsection	Tour of the DuPage County Intermediate Processing Facility	Gary & Schmale Rd Carol Stream	Tour: 9:30 AM
September 28 Wednesday	Chicago Section	Polishing Your Professional Image and Communication Engineering Aspects of the England to France Tunnel	DeVry - DuPage 1221 N. Swift Rd Addison	Dinner: 7:00 PM Meeting: 7:30 PM
September 29 Thursday	Chicago Section	Polishing Your Professional Image and Communication Engineering Aspects of the England to France Tunnel	Chicago Bar Assoc 321 S. Plymouth Ct Chicago - Near Jackson and Dearborn	Lunch: 11:30 AM Meeting: 12:00 PM
October 11 Tuesday	Chicago Section	Executive Committee	DeVry - DuPage 1221 N. Swift Rd Addison	Meeting: 7:15 PM
October 12 Wednesday	Chicago Consultants Corner	What Consultants and Students Need to Know About Intellectual Property Law	DeVry - DuPage Room 254 1221 N. Swift Rd Addison	Meeting: 7:00 PM
October 20 Thursday	IAS/IES and PEL Chapters	Overview of O'Hare Airport Airfield Lighting and Power Systems	Como Inn 546 N. Milwaukee Ave Chicago	Social: 5:30 PM Dinner: 6:15 PM Meeting: 7:15 PM

Dear Fellow Member,

Well here we are starting our second century of service to the Electrical Engineering community through the Chicago Section. I would like to first thank George Thomas and Dennis Lamont for their fine leadership efforts in organizing our centennial celebration last fall. In addition much credit and thanks go to all those that helped towards the success of the centennial celebration, including the outstanding commemorative booklet on our first 100 years.

Jobs, or the lack of them, appear to be a major concern for many. Unemployment, underutilization, continuing education, technical literacy, communication skills and professional development are also concerns of the electrical engineer in today's business environment. As engineers we must each take control of our own situations in life. The first step is to make our membership in IEEE work for us. This means getting involved wherever or whenever we can. Get involved in the societies that most closely match your interests and work experience — network with others. Reach the contact people posted in this issue's telephone directory to get started in becoming

more active. These activities are educational and the friendships you develop can be of great benefit when one is in need of employment. If a society is not presently active, help get it started; the Section will help. A new activity within the Section is a group of people getting together to form a consultant's network. Find out more in this issue. Take advantage of IEEE standards, self education materials, insurance and wealth building financial programs.

I would like some feedback from you on activities you would like the Section to focus on in 1994-1995. Tell us how to improve what we are doing, or propose any ideas for activities you may have. It is important that the Chicago Section respond to your needs. Without comments, we have no way of knowing whether we are properly addressing member's concerns. Give me your comments at 312-269-6532.

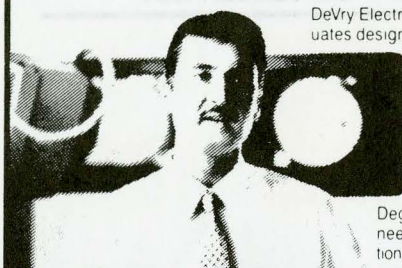
I look forward to meeting you at the Chicago Section Kickoff!

Ed Capouch, Chair — Chicago Section IEEE

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CHICAGO CAMPUS CONTACT Myra Starks Associate Director of Career Services Center 3300 N. Campbell Ave. • Chicago, IL 60618 (312) 929-7837	DUPAGE CAMPUS CONTACT John Petrik Dean of Graduate Placement & Student Affairs 1221 N. Swift Road • Addison, IL 60101 (708) 953-1300
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IEEE Chicago Consultants Corner

The Consultants Corner is the Chicago Section's response to an initiative described by the Professional Practitioners Task Force, Member Activities Council, of the USAB. We have joined with several Sections across the country with established Consultant Networks. We need to consider the support of as many groups as your collected diversities want.

We have an e-mail alias, consultants.chicago@ieee.org, which may be used as a transfer agent for notices and comments, to ask questions, and announce meetings. You can access it from the internet connected resources such as America On Line.

Suggestions for topics and locations also may be given to the Section Business Office (see contact information below). They will take your message or refer you further upstream. Queries will be handled personally by a Section executive officer.

A Steering Committee meeting was held August 9.

Three groups are identified:

- those who have been established consultants,
- those who have just entered, perhaps as a result of downsizing, and
- those who wish to prepare for a future career.

Five of the key needs identified are:

- keyboard and mouse literacy,
- new technology teach-ins,
- personal image polishing, accounting and accountability,
- networking to find clients and joint projects, and
- contract administration, finance and negotiation skills.

We want to assure that our members will have all the exposure and facilities available to them by the IEEE- USAB, RAB, Regional and Local, without the shadow of a possible personal encounter.

The Steering Committee will be represented to the Section by a present executive officer of the IEEE Chicago Section. The activity is important to our members and will have high visibility. We also assure USAB that our participation with their Member Activities Council will be in keeping with the highest traditions of the Institute, our own Chicago Century of responsibility to our members, and without question or qualification, the IEEE Code of Ethics.

— Jack Sherman, Vice-Chair, Chicago Section

SGAC Report Available

If you would like a copy of the latest State Governor's Activities Center (SGAC) Report, please call the IEEE Chicago Section Office at 1-800-898-4333 and ask for the *Legislative Report Package*. Be sure to leave your name and full address with the office to guarantee you receive a copy.

— Norbert R. Orszula, SGAC Chairman

SECOND WIRELESS/PCS SYMPOSIUM

Chicago Chapter of the IEEE Communications Society

in cooperation with

Chinese Academic and Professional Association in Mid-America

University of Illinois, Chicago, Illinois, October 12, 1994

(Room 605, Chicago Circle Center, 750 S. Halsted St., Chicago)



Symposium Agenda:

- Keynote Speaker
Ira Brodsky, President, DataComm Research
- PCS Service Issues
Applications: Kris Peters, Director, Ameritech
Privacy/Authentication: Dan Brown, Principal Staff Engineer, Motorola
- PCS Standards and Regulatory
Industry Standards: Ken Felix, Member of Technical Staff, Motorola
Regulatory Issues: Ruth Kretschmer, Commissioner Illinois Commerce Commission
- Technologies for PCS
AIN: Debbie McCann, Network Service Engineer, Ameritech
Air Interface: John Haug, Principal Staff Engineer, Motorola
Systems: Bo Pickarski, Vice President-PCS, Ericsson
- Wireless Data Applications and Technologies
Applications: Dave Robbins, Director, ARDIS
CDPD: Jim Peterson, AT&T Corp
- Personal Satellite Systems
Iridium: Patrick Reilly, Motorola
- Tour of UIC Research Labs

Send Completed Form and Payment to:
Wireless/PCS Symposium Registration
c/o Mr. Janusz Hyziak
Motorola Wireless Data Group
50 E. Commerce Dr., Suite M1
Schaumburg, IL 60173
Telephone: (708)576-8426
FAX: (708)576-0892

Registration Fees are \$99 (\$124, after 09/30) for IEEE/CAPAMA members, and students and \$139 (\$164, after 09/30) for non-members. This charge includes admission for the one-day seminar (Registration: 8:00 A.M., Program: 8:30 A.M. - 5:00 P.M.), proceedings, and lunch. No refunds for cancellations after September 30.

From the Editor's Desk:

FOR YOUR ARTICLE TO APPEAR IN THE SCANFAX ISSUE FOR —		YOU MUST GET IT IN TO THE HANDS OF THE EDITOR BY —
1994	OCTOBER NOVEMBER DECEMBER	AUGUST 25 SEPTEMBER 29 OCTOBER 27
1995	JANUARY FEBRUARY MARCH APRIL MAY JUNE	NOVEMBER 22 DECEMBER 15 JANUARY 26 FEBRUARY 23 MARCH 30 APRIL 27

The next mailing of Scanfax will be the October Issue.

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Subscription rate for IEEE members collected in dues, \$1.50. 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.

Editor Martin Lake AT&T Dept. NA63B1200 2600 Warrentonville Rd. Lisle, IL 60532 708/224-6626 708/224-3405 FAX mel@hellas.att.com	Advertising Director Len Cohen 817 Parkside Ave. Morton Grove, IL 60053 708/272-8800 x42692 708/559-1849 FAX	Assistant Editor James Carroll 708/979-8820 j.carroll@ieee.org Associate Editor Joe Feitler 708/383-8773	Business Office IEEE Message Center 2460 Wisconsin Ave. Downers Grove, IL 60515 1-800-898-4333 708/963-2122 FAX	Change of Address Send change of address to Roseann Schultz Member Services IEEE Service Center 445 Hoes Lane Piscataway, NJ 08854-4150 Include your SCANFAX mailing label if possible or phone direct to 800/878-4333. We cannot forward this information for you, so please do not send it to the local office.
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Name	Business Telephone Number
Company/Organization	Room Number/ Mail Stop
Street Address	City/State/ZIP
IEEE Membership Number	Registration Fee

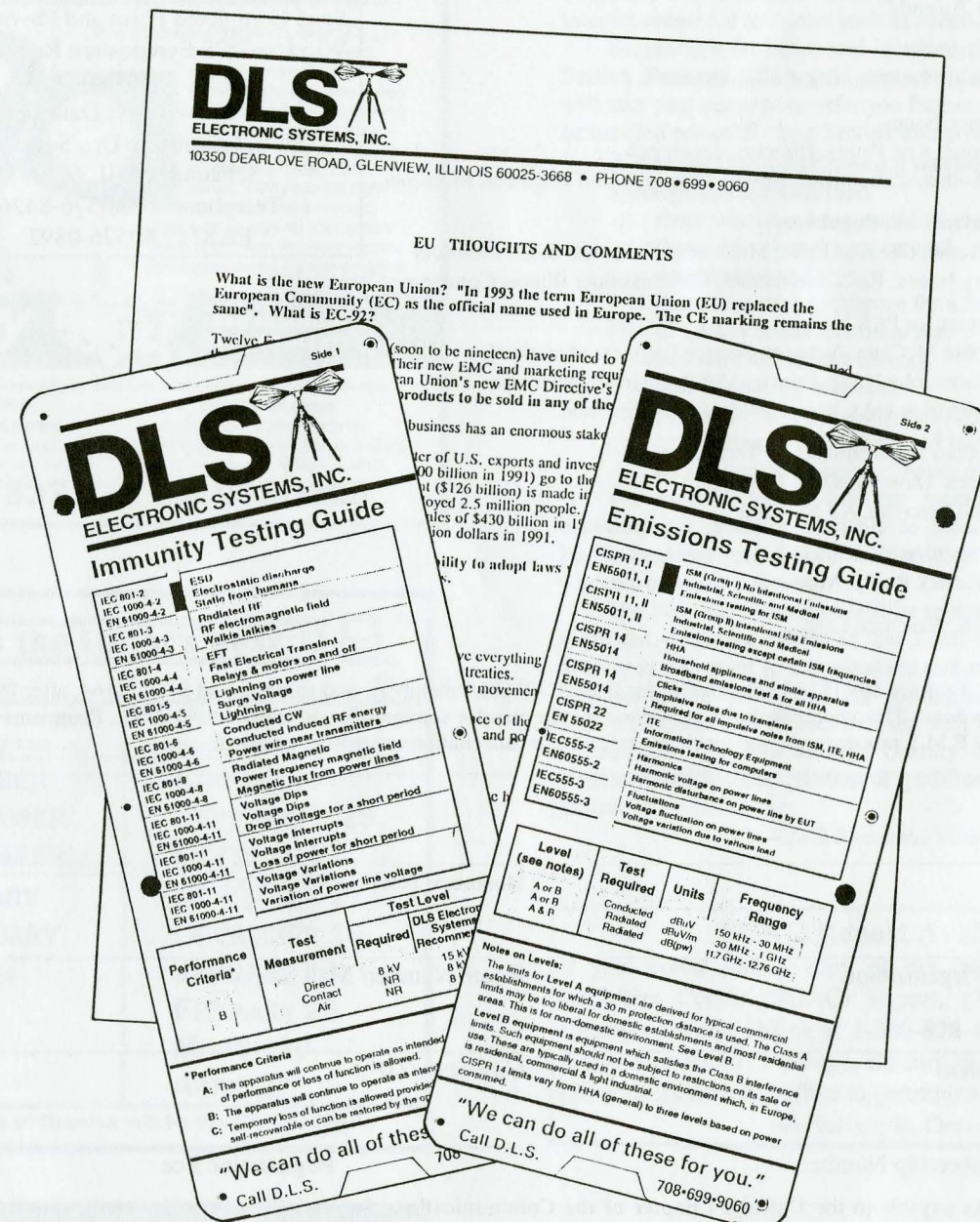
Make checks payable to the **Chicago Chapter of the Communications Society**. To register by credit card, please complete the following information. If your payment is jointly covered by another registrant, include primary registrant's name with the amount of the registration fee. The primary registrant needs to attach a list of the names of all the registrants covered by the payment.

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Account Number	Expiration Date
Cardholder's Signature	Date

FREE

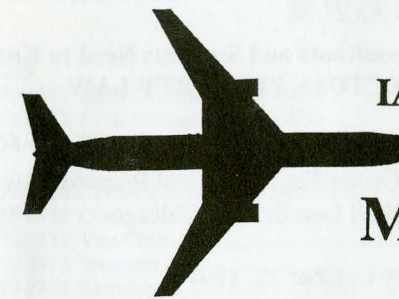
European Testing Guide



An **Immunity and Emissions Testing Guide/Slide Chart** is available from D.L.S. along with **EU Thoughts and Comments**—a complete guide to the EMC requirements for Europe.

Call: (708) 699-9060 or FAX: (708) 699-9093 with your request.
Ask for the **Testing Guide** and **EU Thoughts and Comments**.

D.L.S. Electronic Systems, Inc. ■ 10350 Dearlove Road ■ Glenview, IL 60025-3668



JOINT MEETING
IAS/IES AND PEL CHAPTERS

MEETING NOTICE

DINNER MEETING

THURSDAY, OCTOBER 20, 1994

Topic: Overview of O'Hare Airport Airfield Lighting and Power Systems

Speaker: Peter G. Contos, P.E., FIES

Abstract: Aviation lighting is remarkably different in technique, principle and equipment as contrasted to roadway lighting. Aviation Ground Lighting must provide pilots navigational guidance for airport location, runway, approach, landings and take offs. This discussion of Aviation Ground Lighting will cover the navigational aids for airports that convey information to pilots by means of color, brightness, location, flash characteristics and light patterns.

About the Speaker:

Peter G. Contos, P.E., FIES and received his B.S.E.E. from Illinois Institute of Technology. He has recently retired from the City of Chicago after more than 40 years of service. He was the Chief Electrical Engineer for the Department of Public Works and was responsible for the design and construction of Chicago's Municipal Facilities which included:

- ▶ O'Hare Airport power distribution; emergency power, runway lighting and control tower improvements,
- ▶ Mass Transit extension of CTA to O'Hare,
- ▶ Water purification, pumping and distribution in Chicago and to 86 suburbs,
- ▶ Cogeneration of steam and electricity by waste to energy incinerator,
- ▶ Power and control of Chicago's movable bridges.

He has authored and presented many papers covering O'Hare Airport.

Location:

Como Inn, 546 N. Milwaukee Ave., Chicago, IL 60622

Cocktails	:	5:30 P.M.
Dinner	:	6:15 P.M.
Meeting	:	7:15 P.M.



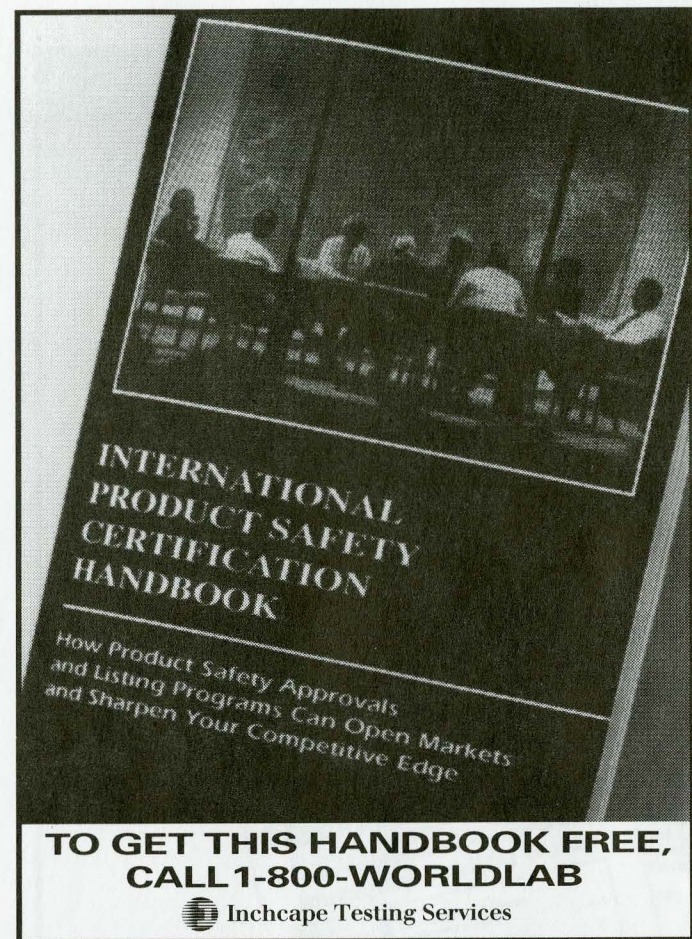
Dinner is \$20.00 per person. Advance registration should be made by calling IEEE Office at (800)898-IEEE (4333) before October 17, 1994.

Entree: Breast of Chicken or Pasta

(Includes: soup, salad, rolls, coffee and dessert)

FOR MORE INFORMATION:

Irwin Smiley, P.E. 312/648-1700



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IEEE CHICAGO SECTION PLACEMENT SERVICE

The Chicago Section provides a free placement service for its unemployed members of Member Grade or above. If you want additional information about the applicants listed below, contact the Chicago Section Business Office at 800/898-4333. If the applicant's form is marked confidential, our office will notify the applicant about the prospective employer's inquiry.

No.	Description
328	BSEE/MBA/PA, 20YRS EXP FOR ENG/PROJ MGMT OF NEW PRODUCT DEV; TEST EQUIP, OFFICE PROD, IND CONTROLS.
329	CONTROLLER/ACCOUNTING MGR POSITION TECHNOLOGY BASED COMP MBA/CPA/B.PHYSICS - 14 YRS ROCKWELL - SEEK MED/SML.
330	MSEE-20YRS ANALOG, DIGITAL, MGMT; CONSUMER+MILITARY. STRONG ANALYTICALLY.
331	BSEE-SEEKS ENTRY LEVEL POSITION IN DIGITAL DESIGN. RECENT GRADUATE OF BRADLEY UNIVERSITY
332	BSEE-PWR; OV, LOAD-FL;FAULT ANAL. AND EMTF SIM; EXP: PWR PLANT S/S CABLE SYS; ENGINEER POS; LANG: JAPANESE, FRENCH

To submit your application to our Section's Placement Service, please follow these instructions:

- Contact the Section Office for an application.
- Follow the instructions listed on the form.
- Submit completed form to Robert Schrage at the address found on the form.

IEEE CHICAGO CONSULTANTS CORNER MEETING

TOPIC: What Consultants and Students Need to Know About INTELLECTUAL PROPERTY LAW

SPEAKER Prof. Donald Reynolds
Director, Center For Intellectual Property Law
John Marshall Law School, Chicago

DATE: Wednesday October 12, 1994
TIME: 7:00 PM
FOOD: The DeVry cafeteria is open until 7:00 PM
FEE: Free to IEEE members and students. \$2 to guests.

REGISTRATION REQUIRED:
IEEE Chicago Section Office
800 898 4333 from 312, 708, most 815.
Else 708 964 4333.

PLACE: DeVry Institute of Technology
Addison Campus Room 254
1221 Swift Road, Addison.
Take IL355 to Lake Street (IL20)
Exit westbound on IL 20.
Immediately move left to pick up Swift Road, south.
DeVry building is on the east side, about 1/2 mile.

SPONSORS: IEEE Chicago Chapter Circuits and Systems Society
IEEE Chicago Northwest Subsection

IEEE Video Teleconferences

These conferences will be available at the College of DuPage, Business and Professional Center, Glen Ellyn. Registration fees are \$35. For registration, call 708/858-7148. For program information, call 708/858-2594. Calls to the IEEE Chicago Section Business Office should have available the registrant's name, address and phone number so that the College registrar can assist with the transaction. The programs are all on Wednesdays at 11 am to 2 PM, COD building K Room 131. Walk-ins can be accommodated, but registration is much preferred. A descriptive bulletin is available. Call 708/858-2800 x2594 or 800/898-4333.

Scheduled are:

Date	Code #	Description
Wed Sep 21	15356	Maximizing Productivity: Multimedia
Wed Oct 5	15357	ISO 9000 A Critical Review for the 1994 Revisions
Wed Oct 19	15358	Maximizing Productivity: Information Integration
Wed Nov 9	15359	Mechatronics
Wed Dec 7	15360	Maximizing Productivity: Redesigning the Engineer

Segments of tapes of prior years will be available for IEEE sponsored programs. Call 800/898-4333 and register for the IEEE Videotapes Interested Roster. You will be contacted when the programs become available. Eligible volunteers for the activity steering committee will be welcomed with tape availability.

IEEE CHICAGO SECTION TELEPHONE CONTACTS

OFFICES

800 898 4333 IEEE Chicago Section Office
708 964 4333 IEEE Chicago Section Office
800 678 4333 IEEE Headquarters

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312 362 2495 Fox Valley Subsection.....Peter Nguyen
708 576 8222 Northwest Subsection.....Jack Sherman

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708 491 8163 IEEE Awards.....Carl Kannewurf
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708 224 6626 SCANFAX Editor.....Marty Lake
312 394 2759 SCANFAX Job Notices.....Robert Schrage
708 457 0083 Section Recognition/Awards.....Frank Lakowski
708 629 3184 SGAC and IEC.....Bert Orszula
312 394 3766 Student Activities.....Betty Bajana
312 707 8889 Committee Person At Large.....Donald Reynolds

SOCIETY CHAPTER CHAIRS or CONTACTS

708 259 9600 Antennas, Microwaves.....Ed Bogus
800 898 4333 Circuits and Systems.....Chicago Section Office
708 224 4511 Communications.....Weider Yu
708 576 8222 Components, Pkg Manuf Tech.....Jack Sherman
708 383 8773 Computer.....Joe Feitler
708 576 8222 Consumer Elec/Signal Proc.....Jack Sherman
708 699 9060 Electromagnetic Compatibility.....Donald Sweeney
708 491 8163 Electron Devices.....Carl Kannewurf
708 383 8773 Engineering Management.....Joe Feitler
800 898 4333 Eng'g in Medicine & Biology.....Chicago Section Office
312 648 1700 Ind'l App'l/Ind'l Electronics.....Irwin Smiley
800 898 4333 Lasers & Electro Optics.....Chicago Section Office
708 955 2533 Power Engineering.....Mark Warren
708 383 8773 Professional Communication.....Joe Feitler
800 898 4333 Robotics & Automation.....Chicago Section Office
708 520 4405 Reliability.....Dan Glab
708 392 7189 Power Electronics.....George Studtmann
708 349 2790 Systems, Man, Cybernetics.....Bob Camillone
800 898 4333 Vehicular Technology.....Chicago Section Office

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708 953 1300 DeVry Addison.....Warren Foxwell
312 929 8500 DeVry Chicago.....Syed Naqui Akhter
312 362 8722 DePaul University.....Chengwen Liu
312 567 3521 IIT.....David Patterson
708 491 7007 Northwestern University.....Alan Sahakian
312 996 3453 UIC.....Sharad Laxpati

SPECIAL INTEREST GROUPS (SIG)

800 898 4333 Women in Engineering.....Chicago Section Office
800 898 4333 Consultants Corner.....Chicago Section Office
800 898 4333 Life Members.....Chicago Section Office
800 898 4333 Software Quality Assurance.....Chicago Section Office
800 898 4333 Private Practioners Network.....Chicago Section Office
800 898 4333 Job Bank.....Chicago Section Office

Note:  indicates IEEE email contact - initial.last name@ieee.org

IEEE Fox Valley Subsection

Presents

A Tour of the

DuPage County Intermediate Processing (Recycling) Facility

Saturday, September 24, 1994

Take a tour of the DuPage County Recycling facility and see many exhibits, such as shoes made from 100% recycled material.

View the conveyor belts and the sorting machinery through the picture windows of the Solid Waste Education Center. The machines sort the waste products that arrive at the facility into glass, plastic and steel & aluminium cans. Glass and plastic next get sorted into green, brown, clear or broken glass bins and plastic #1 or plastic #2 bins. Paper products get sorted into corrugated boxes, magazines, newspaper bins and miscellaneous boxes such as cereal boxes.

Location: North side of Fullerton between Gary and Schmale Roads in Carol Stream.

Time: 9:30 AM

Make Your Reservation by Sept 16

Call IEEE Message Desk at

1-800-898-IEEE

Tour is Limited to First 50 Callers!

For More Information Call Channing Brown at 708-260-9631

IEEE CHICAGO SECTION PRESENTS ITS FALL KICKOFF PROGRAM

Polishing Your Professional Image

Presented by Jim Watson of Watson Associates

and

Communication Engineering Aspects of the England to France Tunnel

Presented by Chris Nelson of Unisource

Wednesday, September 28, 1994

Dinner 7:00 PM

Program 7:30 PM

at DeVry Institute of Technology - DuPage

Serving Pizza and Refreshments

\$8.00 IEEE Members, \$5.00 Students

and

Thursday, September 29, 1994

Lunch 11:30 AM

Program 12:00 PM

at Chicago Bar Association

Luncheon Buffet \$7.50 per person

Tickets purchased in lobby.

Tour of the John Marshall Law School after program.

ABOUT Polishing Your Professional Image

Engineers are aware of the challenges associated with rapid changes in technical aspects of the profession. But there is another important challenge that is often overlooked. In a world daily growing more dependent upon practical uses of technology, the role of engineering is greatly misunderstood by those outside the profession.

The solution of how to improve our image can be found if we apply proven engineering optimization techniques. We need to identify sources of misconceptions and evaluate various options for change. Using effective interpersonal skills adds to the 'polish' of our image.

Jim Watson is a EE Graduate of Purdue and a graduate of U-Michigan Public Utility Executive Program. He is a Registered Professional Engineer (Ohio), a Senior Member of IEEE, a member of the Professional Communications Society, a charter member of the IEEE Student Professional Awareness

Committee, Editor - IEEE HOTLINES, and an IEEE Distinguished Lecturer.

Jim has provided more than 900 programs in 41 states, to a total audience of over 55,000 and has presented programs to more than 23,000 students.

ABOUT Communication Engineering Aspects of the England to France Tunnel

Chris will discuss the systems engineering of the Euro-Tunnel private telephone system. The telephone system consists of fifteen interconnected PBXs utilizing ISDN PRI over fiber cable. This network spans two countries (France and The United Kingdom).

Chris Nelson holds a degree in Applied Mathematics from Rensselaer Polytechnic Institute and a Bachelor of Science and Masters degrees in Mathematics from Ball State University. Mr. Nelson is a member of the IEEE Communications Society.

DeVry Institute of Technology - DuPage
1221 Swift Rd
Addison, IL
Take IL355 to Lake Street (IL20)
Exit westbound on IL20
Immediately move left to pick up Swift Rd South
DeVry building is on the east side, about 1/2 mile

Chicago Bar Association
Downtown
321 Plymouth Court
Chicago, IL
Near Jackson and Dearborn

**To Make Your Reservation Call the IEEE Chicago Section Office at
800/898-4333 or 708/964-4333. Reservations are Required.**

For More Information, contact Don Harris at 708/450-5556