



SEASON'S GREETINGS

FOX VALLEY SUBSECTION and POWER ENGINEERING SOCIETY

FEATURES A JOINT DINNER PROGRAM

FLYWHEEL ENERGY STORAGE SYSTEM

Presented by

John R. Hull of Argonne National Laboratory

Wednesday, December 7, 1994

ABOUT OUR TOPIC

It floats, it spins, it makes electricity —

IT IS THE FLYWHEEL ENERGY STORAGE SYSTEM!

You are invited to listen to John explain how a system that has been designed by the engineers at Argonne National Laboratory and Commonwealth Edison accomplishes such tasks.

The system uses superbearings to spin suspended disks that store electrical energy. A superbearing is made up of a true magnet, a magnet-like substance (virtual-magnet), and liquid nitrogen. The virtual magnet is made up of high-temperature superconductors that generate a repelling magnetic field when cooled by liquid nitrogen. The flywheel is suspended in the magnetic field inside a vacuum chamber. When coils at the top of the chamber generate enough magnetic force on the flywheel such that it starts spinning, the system is activated.

The flywheel is designed to spin at high rates and the resulting momentum can be used to produce electricity and store it more efficiently than batteries. Portable systems, small enough to carry on the back of a truck, could generate 1,000 to 10,000 kilowatts. Smaller systems may become attractive alternatives to batteries for uninterruptable power supplies.

ABOUT OUR SPEAKER

John Hall is with the Energy Technology Division of Argonne National Laboratory where he manages the Superconductivity Applications Section.

PLACE

Jerry Sharko's
2225 Ogden Ave.
Lisle, IL

TIME

Social	6:00 PM
Dinner	7:00 PM
Presentation	8:00 PM

NOTES

Your dinner will cost \$15.00 and will feature Garden Salad, Family Style Courses (Beef, Chicken, Pasta), Dinner Rolls, Coffee, and Dessert. During the Social from 6:30 to 7:00 PM, you can enjoy complimentary bar beverages. Dietary and vegetarian meals can be requested when you make your reservation.

FOR MORE INFORMATION

Contact John Gavin at (708) 717-4505.

POWER ENGINEERING SOCIETY

FEATURES A LUNCHEON PROGRAM

EMERGING TRENDS IN

POWER SYSTEM PROTECTION AND CONTROL

Presented by

Thomas E. Wiedman of Commonwealth Edison

Wednesday, December 14, 1994

ABOUT OUR TOPIC

The application of digital technology to protective devices combines control and monitoring functions within the device, spawning new uses for what was previously only a stand-alone protective relay. The name of the device being referred to is an Intelligent Electronic Device (IED). This talk will present vision of the users of these new emerging technologies. The connection of the devices into a local area network will be described, as will the use of wide area technology for control, monitoring and communication, which is necessary for high speed protective relay pilot channels. The uncertainties and challenges of using digital communication technology will be described.

ABOUT OUR SPEAKER

Mr. Wiedman has 24 years experience with ComEd in the field of protection and control. He has had assignments in protection design, field installation and maintenance, and planning. He has a BSEE (1970) in Communication Engineering from University of Illinois Chicago, a MBA (1974) from Loyola University, and an MSEE in Power Systems Engineering from Illinois Institute of Technology (1993). He is a registered engineer in the State of Illinois, an IEEE Senior Member and a Member of the IEEE Power System Relaying Committee.

PLACE

Chicago Bar Association
321 S. Plymouth Court
Chicago, IL
(Near Jackson and Dearborn)

TIME

Social	11:30 AM
Lunch	12:00 PM
Presentation	12:30 PM

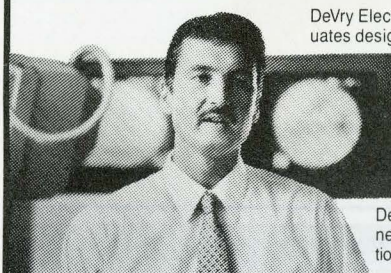
NOTES

Please make your reservation no later than noon, Monday, Dec. 12. Lunch tickets can be purchased in the lobby (\$7.50).

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Ilene Burnstein, 312-567-5155 or Bogdan Korel, 312-567-5145.

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		ASSOCIATE EDITOR Joe Feitler 708/383-8773 rojxf131@glen-ellyn.iit.edu		

CHICAGO SECTION JOB 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 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. 333 **BSEE/MBA/PE, 25YRS EXP MGMT
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PRODUCT MARKETING/DEVELOPMENT.**
- No. 334 **MSEE, 12 YRS EXP IND CONTROL, AD/DA,
DSP, MGMT; ENGINEER POS; LANG: FRENCH.**
- No. 335 **SR EMC/SAFETY ENG 12 YRS EMC
3 YRS SAFETY - DESIGN/TEST TO FCC CSA
UL & INT'L STANDARDS GROUP LEADER.**

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

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

CHICAGO CONSULTANT'S NETWORK

If you would like a copy of the materials presented at the Chicago National Alliance of Consultants Networks on October 15, please call the Chicago Business Office. Also, if you wish to join the Chicago Consultant's Network, please register with the Chicago Business Office.

ANTENNAS AND PROPAGATION SOCIETY and MICROWAVE THEORY AND TECHNIQUES SOCIETY

FEATURES A JOINT DINNER PROGRAM

INTELLIGENT TRANSPORTATION SYSTEMS: PAST, PRESENT AND FUTURE

Presented by
Robert L. French of Robert L. French & Associates

Wednesday, December 14, 1994

ABOUT OUR TOPIC

Intelligent Transportation Systems (ITS), or more recently Intelligent Vehicle Highway Systems (IVHS), is the term for a rapidly evolving worldwide movement to improve the efficiency, safety, and environmental aspects of surface transportation through the use of integrated communication, positioning, control, and information technologies. Although individual elements of ITS have been pursued intermittently for decades, it started becoming a massive, highly organized movement in the United States only about 1990, somewhat later than in Japan and Europe.

One of the more central aspects of ITS is in-vehicle navigation and driver information systems linked by wireless communications to traffic management centers which maintain real-time databases on traffic conditions. Dynamic turn-by-turn route guidance is provided by the in-vehicle systems to enable each vehicle to carry out its journey in the most efficient manner and to increase the effective capacity of the road network. This presentation will outline the background, principal technologies involved, overall system architecture approach, current status, and future for ITS.

ABOUT OUR SPEAKER

Robert L. French is an independent consultant in the field of ITS. He has worked with vehicular applications of computer technology since 1969 and is the inventor of map-matching technology now being used in virtually all automobile navigation systems. He is the author of 70 publications on IVHS topics and was the founding editor of The Intelligent Highway. He also serves on the Editorial Advisory Boards of GPS World and IVHS Journal. Mr. French serves as Board Liaison responsible for the Vehicular Navigation and Information Systems (VNIS) conference series of the IEEE Vehicular Technology Society and is a member of the Society of Automotive Engineers.

PLACE

Motorola Schaumburg Campus
Building 1301, Door Location 13
1301 Algonquin Road, Gate A
Schaumburg, IL

TIME

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

DIRECTIONS

Use the far left gate of Gate A and inform security that you will be attending the IEEE Meeting in Building 1301. Proceed to Building 1301 and enter through door 13 where you will receive a badge and be escorted to Conference Room C.

NOTES

Please make your reservation no later than noon, Monday, December 12, 1994. Dinner will be available in the cafeteria starting at 6:00 PM. Everyone will be billed separately.

FOR MORE INFORMATION

Contact Ed Bogus at (708) 259-9600 x24738.

Chicago Section Executive Committee Meeting • December 13th • 7:15 PM • DeVry 1221 N. Swift Rd Addison

IEEE COMPUTER SOCIETY

FEATURES A SEMINAR

FAST TRACK TO OBJECTS

A PRACTICAL INTRODUCTION TO

OBJECT-ORIENTED CONCEPTS AND TECHNOLOGY

Presented by Dr. Frank Sternberg of Key Concepts, Inc.

Saturday, January 28, 1995

ABOUT OUR TOPIC

The seminar will be focused on the following topics:

- A User's View of Objects
- The Developer's View of Objects
- Objects in Graphical User Interfaces (GUIs)
- Objects in the Client/Server World, and
- The Object-Oriented Project.

ABOUT OUR SPEAKER

Dr. Frank Sternberg is a recognized expert in the Object-Oriented field and has given many presentations on this subject to industry and professional groups. Dr. Sternberg is President of Key Concepts, Inc.

NOTES

Please call the Chicago Business Office promptly if you are interested in attending. Once we know the approximate number of interested members, we can then further plan and will publicize the details (location, price, and time) in the January issue of Scanfax.

FOR MORE INFORMATION

Contact Joe Feitler at (708) 383-8773.

CHAIR'S CORNER

Dear Member,

Congratulations to Jim Fancher, one of our Chicago Section members, who has been elected as our new Region 4 Director starting in 1995. Jim will replace Vern Albertson from the University of Minnesota.

A local (708 area code) Bulletin Board Service (BBS) is being setup for Chicago Section news items. Watch Scanfax for upcoming information on how to get connected to the information highway. This will be a great way to keep up-to-date on late changing information or publicity on upcoming meetings of interest.

We are planning a Job Search Workshop for late January or early February. This workshop has been presented previously and has received enthusiastic reviews. The tentative plans indicate holding the workshop on a Saturday, with the actual program lasting about six hours. John Waters, our PACE Chairperson, will be coordinating this activity. Anyone interested in assisting John can contact him at (708) 392-2733.

Ed Capouch — Chicago Section IEEE Chair

CHICAGO SECTION

1995 RECOGNITION DINNER

Saturday, April 29, 1995

EARLY ANNOUNCEMENT

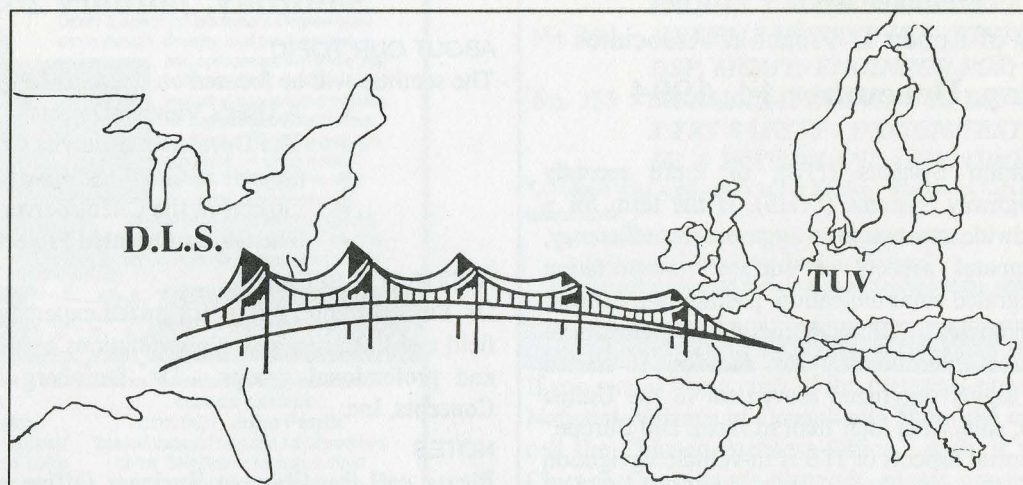
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