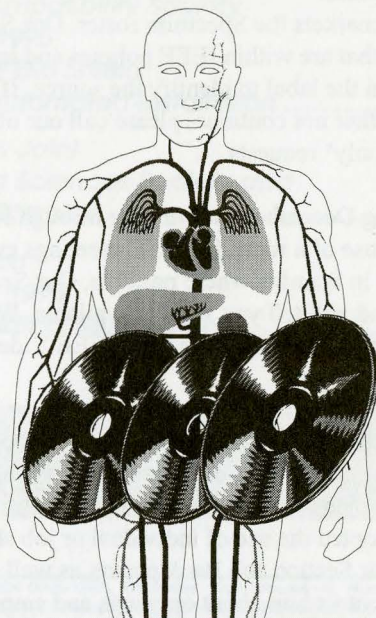




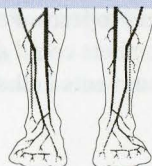
Scanfax

Institute of Electrical & Electronic Engineers  Chicago Section Newsletter

December 1995



Interactive Medical Multimedia



**Fox Valley Subsection
December 13, 1995**

Chairman's Message

Seasons Greetings!

Thanks much for your regards on the Scanfax new look and for comments and spotlights we have been offering. Plaudits are great, but the growing list of volunteers is a warm seasonal message.



Jack Sherman

Here are three unrelated issues.

1. Mailing Lists — IEEE markets the Spectrum roster. Our Section is permitted to market our own roster to entities that are within IEEE policies and intents. All mailings are required to carry a code on the label to identify the source. If for any reason you receive a mailing that you would rather not continue, please call our office to have it deleted. We will also honor "Scanfax only" requests.

2. Appreciation — Starting December and running through February, DeVry DuPage (Addison) has granted us use of a room for IEEE meetings every Tuesday, 7pm to 9pm. Topics will be announced in Scanfax where possible. Our Section office will forward offers to present papers and will tell you what is available. What about student activity and refresher materials for us old timers? Perhaps IEEE Videos? Anybody else have space to offer?

3. Consultants — Our Section database has over 400 members whose data indicate they are individual entrepreneurs. And what only last year was considered embarrassing, 'consultant' is now an accepted social grace. It tends to identify members who either have no choice or who have adopted the use of individual or job shop contracts. For salaried options, John Waters is our Section Job Bank person as well as our Professional Activities Chair. Please contact him about openings and employment. Our IEEE AICN affiliate program starts in January.

Another use of the term consultant is far from intimidating or embarrassing. Business leaders know of corporations, accepted as major facilitators. They have style, quality, and skill inventories - lessons for us all to learn. For a major insight into operations that our individual contract employed members could use profitably, check your library for A.T. Kearney's Fred Steingraber's comments in the Tribune Business Section, Wednesday, September 27.

Is there interest in our Section sponsoring gatherings for consultants and clients? What about contract employer firms, technical service pools. etc.?

Regards and best wishes for happy tidings,

Jack Sherman, IEEE Chicago Section Chair — j.sherman@ieee.org; ieechi@aol.com

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Chicago Section Executive Committee Meeting
December 12, 1995 • 7:15 PM
DeVry • 1221 N. Swift Road • Addison, IL

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Program

OPEN ACCESS ISSUES

Presented by
Harry Terhune
of

Commonwealth Edison

Wednesday, December 6, 1995

ABOUT OUR TOPIC

Mr. Terhune will provide his perspective on open access issues affecting the industry. With the advent of the era of transmission open access the electric utility business is poised for dramatic changes. Mr. Terhune will outline some of the challenges faced by the electric utility industry and discuss the consequences to and potential responses by the relevant players.

ABOUT OUR SPEAKER

Harry Terhune is presently System Planning Manager for ComEd. In this position he directs technical studies, bulk power and interconnection planning for ComEd. Mr. Terhune received his BSEE degree from the University of Notre Dame and his MSEE from IIT. He is a Senior Member of the IEEE.

He represents ComEd on the MAIN Engineering Committee (past Chairman), and has been MAIN representative to the NERC Engineering Committee, the NERC Disturbance Analysis subcommittee and the NERC Reliability Assessment subcommittee. He also currently represents ComEd on the ECAR Executive Board.

PLACE

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

Lunch tickets can be purchased in the lobby (\$8.50).

TIME

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

FOR RESERVATIONS

Please call the IEEE Business Office at (800) 898-IEEE to make your reservation no later than noon, Monday, December 4th.

FOR FURTHER INFORMATION

Contact Sam Peach at (708) 995-2537.

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Microwave
Theory and
Techniques
Society*

FEASIBILITY STUDIES OF A COMPACT SHORT WAVELENGTH FREE ELECTRON LASER BASED ON MM-WAVE LINAC

Presented by
Dr. Alireza Nassiri of
Argonne National Laboratory

Wednesday, December 6, 1995

ABOUT OUR TOPIC

Short wavelength FELs impose stringent requirements on the quality of the electron beams. The key factor in obtaining a single-pass short wavelength FEL is the generation of small beam emittance electron beams with ultra-high brightness. The pioneering work at the Los Alamos National Laboratory on RF photocathode source has demonstrated the potential use of such a device for production of high quality intense electron beams for the 4th generation of light sources and the next linear collider application. In this paper we present a feasibility design study for a 300 nm FEL based on deep x-ray lithography process known as LIGA (Lithography, Electroforming, and Molding). This system will consist of a photocathode RF gun operated at 30 GHz, a 50-MeV superconducting constant gradient accelerating structure at 60 GHz, and a microundulator with 1-mm period.

ABOUT OUR SPEAKER

Dr. Alireza Nassiri is a Physicist at Advanced Photon Source, Argonne National Laboratory. He played a key role in the design, construction and testing of a 60 MeV electron LINAC test-stand and was in charge of commissioning the test stand which is now used as an injector for the APS 250 MeV electron LINAC. In the RF group, he initially worked on the design and feasibility studies of mm-Wave, 50 MeV LINAC for production of short wavelength synchrotron radiation based on microfabrication techniques.

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

FOR RESERVATIONS and DIRECTIONS

Please call the IEEE Business Office at (800) 898-IEEE to make your reservation no later than noon, Monday, December 4th. The office will provide you with directions and admittance procedures.

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Sr. UNIX System Administrator—Successful candidate will possess the following: a BSCS; minimum of five years professional or lab experience in a UNIX environment; experience applying production-quality system administration in a distributed, multi-vendor UNIX production environment; and a history of establishing and implementing high availability production standards. Proficiency administering UNIX communications software, including asynchronous, TCP/IP, and SNA services essential. **Reply Code: IEEE 1**

UNIX System Administrators—Successful candidates will possess a BSCS, a minimum of two years professional or lab experience in a UNIX environment, and proficiency administering UNIX communications hardware (AIX, HP-UX, SCO, AT&T SVR3) and software (TCP/IP and SNA). Proficiency in installing and maintaining the following are essential: SYBASE in an HP-UX environment; and Informix 4GL, Informix I-Net, Informix Online, and Informix Standard Engine in an SCO and AT&T SVR3 environment. The ability to write simple C programs, complex shell scripts, and cron jobs are also required. **Reply Code: IEEE 2**

Programmer/Analysts (Jr. & Sr.)—If you have programming experience in the following areas you may qualify for a position: BAL, COBOL, "C", CICS or DB2. Other skills required include VSAM, TSO/ISPF, and OS/MVS JCL. **Reply Code: IEEE 3**

Openings also available for Programmers at all levels. UNIX experience and expertise in one of the following desired: "C", DBMS, SQL. Client server development a big plus. Limited travel. **Reply Code: IEEE 4**

Database Administrator—Proficiency with SYBASE, UNIX (preferably AIX), SQL and database design and implementation are essential. **Reply Code: IEEE 5**

Electronic Messaging Specialist—Minimum 2 years experience building/administering electronic messaging systems in the following areas: GroupWise or Word Perfect Office, Internet (SMTP), Lotus Notes, Windows & OS/2. **Reply Code: IEEE 6**

PC Technical Representatives—Bachelor or Associates degree or equivalent technical training required. Minimum 1 year software/hardware products experience essential. **Reply Code: IEEE 7**

Networking—Various positions available for individuals with experience in data communications in a large network/mainframe environment. Network expertise and CNE are essential. **Reply Code: IEEE 8**

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SURFACE MOUNT EMI SHIELD PACKAGE FOR AUTOMATED INSTALLATION

Presented by
Jack Black of
Boldt Metal Industries Inc.

Wednesday, December 6, 1995

ABOUT OUR TOPIC

Today's modern electronic devices use board level Faraday caged type of EMI shields directly attached to circuit boards allowing for modular compartmental EMC shielding. These shields are installed automatically using standard installation equipment such as pick place robotics. These shields regularly meet or exceed FCC, VDE, CISPR, EC shielding specifications. This low cost method of shielding is commonly used for all commercial EMC shielding requirements.

We will also show a fifteen minute video from Eye to Eye with Connie Chung from December 1, 1994. During this segment, they investigated various examples of "EMI" interference in medical devices and aircraft.

ABOUT OUR SPEAKER

Jack Black has over ten years experience of EMI RFI shielding, most recently as a sales and marketing manager for BMI Inc.

PLACE

AT&T Bell Laboratories
2000 N. Naperville Rd.
Naperville, IL
(708) 979-2000

TIME

Social 7:15 PM
Presentation 7:30 PM

NOTES

Refreshments will be served at 7:15 PM.

DIRECTIONS

Bell Labs is located at the northwest corner of Warrenville Rd. and Naperville Rd. To enter, go west on Warrenville Rd. to the first turn on the right. Enter the drive and again take the first right into the parking lot. To enter the building, go to the center of the southeast side near the flag poles.

FOR RESERVATIONS

Please call the IEEE Business Office at (800) 898-IEEE to make your reservation.



Spotlight on the New Joint Nuclear and Plasma Sciences Society and Magnetics Society Chapter

A new Joint Nuclear and Plasma Sciences Society and Magnetics Society Chicago Chapter is now formed. The Chapter is looking forward to providing a forum for discussion on a range of topics relevant to its members' interests.

Potential technical topics include magnetic recording, magnetics in power conversion and conditioning, magnetic materials and sensors, medical imaging, nuclear instrumentation, radiation hardness, radiation detectors, ion beams, magnets useful for particle beam control, nuclear transmutation of wastes, free electron lasers, plasmas, high power microwave generation, electromagnetic launch technology and ionospheric phenomena.

Many technical subjects fall within the scope of multiple IEEE societies. The NPS/MAG Chapter is looking forward to working with our sibling chapters where technical interests overlap.

There is a substantial member base for the Magnetics and Nuclear Science societies in the Chicago area. We suspect that members of both societies are often actively involved in other, very specialized, professional organizations. Participating in the activities of the local IEEE Chapters is an excellent way of expanding your horizons in your field outside of your narrow daily preoccupations and build a network of professional contacts here in Chicago.

The new NPS/MAG Chapter will hold its first meeting next month. Details regarding the meeting's time, location and agenda will be in January's SCANFAX.

For more chapter information contact Tom Jurgens at 708-840-4803, t.jurgens@ieee.org or Francois Ostiguy at 708-840-2231, ostiguy@fnal.fnal.gov.

*From Tom Jurgens, Section Vice Chair and Treasurer, Fermilab and
Francois Ostiguy, Fermilab*

FOX VALLEY SUBSECTION

Welcomes You
to an
Evening Program

INTERACTIVE MEDICAL MULTIMEDIA

Presented by
Jeffrey Nemetz of FACE Communications
Wednesday, December 13, 1995

ABOUT OUR TOPIC

The prevention and wellness movement has gathered increasing momentum as more healthcare systems have embarked on capital care and experienced a direct financial benefit from managing the health of their patient population. It is of paramount importance to ultimately serve the needs of the patient and their employers on reducing both incidence and duration of illness through more effective health maintenance and rehabilitation in an appealing user friendly setting with advanced communication programs.

Interactive multimedia presents an opportunity for a myriad of uses including patient education and informed consent which can help providers to manage health care. The incorporation of interactive multimedia tools can help maximize physician time, reduce the risks of litigation, facilitate staff training, and educate patients and their families about home care, drug interactions and side effects.

This presentation will provide samples of this type of interactive media and address the new frontier in which this medium can be utilized.

ABOUT OUR SPEAKER

Jeffrey Nemetz is the President of FACE Communications, Inc. (FCI), and has, for the last seventeen years, been spearheading a quiet revolution in the way organizations and individuals approach and solve critical business problems. The focus of FCI is the translation of often overly complex healthcare and scientific information into illustrations, animation, video, and sound which are integrated to interact with users at their own pace and level of interest.

PLACE

Jerry Sharko's
2225 Ogden Ave.
Lisle, IL

TIME

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

NOTES

Dinner costs \$15.00 per person and the presentation is free. Dinner menu includes Garden Salad, Dinner Rolls, Family Style Entree, Coffee, and Desert. Dietary and vegetarian meals can be requested when you make your reservation.

FOR RESERVATIONS

Please call the IEEE Business Office at (800) 898-IEEE to make your reservation.



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