



The IEEE

Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

NY/North Jersey-EMS: **Managing ISDN Technologies**

The New York/North Jersey IEEE Engineering Management Society will meet on April 9, 1991. The meeting topic will be "Managing ISDN Technologies." The speaker will be Dr. Ricardo N. Zapata, Bellcore.

About The Talk

ISDN implementation presents many managerial challenges. In addition to the technical complexity there is a large number of key "stakeholders" who must agree on a consistent course of action. This talk addresses these challenges in the context of Bellcore's successful program to provide a compatible, nationwide ISDN implementation beginning in 1992. The structure established to achieve the 1992 ISDN goal is discussed together with the major roadblocks and their resolution.

About The Speaker

Dr. Zapata has been Bellcore's ISDN Project Manager for the last three years. He has been responsible for planning the evolution of ISDN products in concert with the Bellcore client companies and network equipment suppliers, as well as coordinating execution of the plans throughout Bellcore. Dr. Zapata earned a PhD in Engineering Physics from the University of Virginia. He held faculty positions at Princeton University, the University of Arizona, and the University of Virginia. Dr. Zapata joined Bell Labs in 1978 and moved to Bellcore in 1984.

There will be networking 6:30-7:00 PM. Refreshments will be available.

The next meeting of the Engineering Management Society will be held on May 21st. This will be a joint meeting with the Project Management Institute. The topic will be "Computer Program Validation."

Time: 7:00 PM, Tuesday, April 9, 1991.

Place: Bellcore, 290 W. Mount Pleasant Ave., Livingston, N.J.

Information: Al Connelly (201) 616-0755.

Section Banquet April 18th At New Location—Make Reservation Now!!

The Annual Section Banquet will be held this year at the Birchwood Manor in Whippany. See page 4 of this issue for complete details and reservation form.

As part of the program, Dr. Eugene I. Gordon will present a short talk on "The Role of the Engineer in Society."

Man's uniqueness as a tool-maker will be reviewed and the physiological basis for tool-making skills discussed and rationalized. It is posited that the ancient tool-maker is the forerunner of the modern engineer. Thus, the historic origins of engineering and the incalculable impact on civilization as we know it today is put in context. An attempt is made to portray the engineer as possibly the most important professional. The obligations entailed are described and the relative silence of the engineering profession on issues of grave importance to civilization is decried. In particular, the failed energy policy of the U.S. and its immediate result, the war in the Persian Gulf, are discussed and its implications for us as engineers are drawn.

The role of the award process as a regenerator for the engineering profession is described. This leads naturally to the main function of the evening, honoring our most recent Fellows and Award recipients.

About The Speaker

Eugene I. Gordon is a Distinguished Research Professor in the Department of Electrical and Computer Engineering, New Jersey Institute of Technology in Newark. Dr. Gordon is also Chairman of the IEEE North Jersey Section Awards Committee.

ELECTRO REMINDER

World class engineering solutions is what you'll find at Electro/International, this year at the Javits Center in New York City, April 16-18, 1991. Plan to visit the East Coast's only global electronics conference. Additional details page 2.

IEEE JOB FAIR REMINDER

See page 8 for details on "IEEE EMPLOYMENT ASSISTANCE WORKSHOP" and "IEEE JOB FAIR" April 14, 15 & 16th.

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NEWSLETTER STAFF

Editor.....M.M. Perugini
Business Manager.....A.M. Beattie

Deadline for receipt of material is the 1st of the month preceding the month of publication. All communications concerning editorial and business matters, including advertising, should be addressed to: The Newsletter, c/o Girard Associates, Inc., 6 Robert Terrace, Mt. Arlington, N.J. 07856 (201) 398-5524.

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IEEE Service Center
445 Hoes Lane, P.O. Box 1331
Piscataway, N.J. 08854-1331
(201) 981-0060

It is not necessary to inform the North Jersey Section when you change your mailing address. The NEWSLETTER and other section mailings use a list provided by IEEE's national headquarters in New York. This means the Section has no need to maintain a mailing list or addressing plates. Section membership records are changed when Headquarters notifies us.

SECTION OFFICERS

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The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7 PM. These meetings (held at ITT, 500 Washington Ave., Nutley, N.J.) are open to all members. Information on each meeting agenda is available from Thomas De Nigris, Section Secretary at (201) 575-1300.

Elected Section Officers are listed above.

No. Jersey Comp/Comm Soc: Basic Robot Programming

On April 10, 1991 the North Jersey Computer and Communications Society will present a tutorial on "Basic Robot Programming" by Professor Vandana U. Gogate.

About The Talk

The tutorial will briefly cover robot programming languages and some of their special features. In particular, the programming of the prototype Mitsubishi Robot will be explained in some detail. Professor Gogate will discuss some of the special features, capabilities, accuracy, and interfacing techniques of the Mitsubishi Robot. She will also conduct an on-site demonstration of the Mitsubishi robot.

About The Speaker

Vandana U. Gogate is an Assistant Professor in the Department of Engineering Technology, Fairleigh Dickinson University, Teaneck. She received her Bachelor of Engineering in Electrical and Mechanical Engineering respectively in 1967 and 1968, from the University of Bombay, India. Also from Bombay University, she received a Master's in Electrical Engineering in 1975.

She is a licensed PE in the State of New Jersey and has a wide range of technical interests. These areas include: Industrial Automation, Linear Integrated Circuits, Electro-mechanical power and control systems, and instrumentation, to name a few.

All Welcome

Everyone is invited. You do not need to be a member of the Computer or Communications Societies or of the IEEE to attend.

Time: 8:00 PM, Wednesday, April 10, 1991.

Place: Fairleigh Dickinson University, Teaneck Campus, Room 203, Muscarelle Bldg., 1000 River Road, Teaneck, N.J.

Information/Directions: Howard Leach (201) 885-3530.

Electro/International 1991 World Class Engineering Solutions

That's what you'll find at **Electro/International**, this year at the Javits Center in New York City, April 16-18, 1991, the East Coast's only global electronics conference and exhibition for the entire engineering team.

Over 500 exhibits of the most recent developments in test, measurement, analysis and inspection instrumentation, passive and electro-mechanical components, semiconductors, power supplies, EDA tools, bus/board products and production materials and supplies. The highly acclaimed technical program was assembled under the guidance of industry leaders. Tracks in the technical program include: Communications, Medical Electronics, Computers, Digital Systems and Software, IC Technology, Manufacturing and Test, Global Electronics Business and Career.

The **Electro/International** is expected to be the largest electrical and electronics exhibition in the world. Come and explore what's new in engineering. For registration information call or write Mr. Jim McDonald at 8110 Airport Blvd., Los Angeles, CA 90045-3194, or call (800) 877-2668, FAX (213) 641-5117.

North Jersey-IAS: Microprocessor Controlled DC Drives

On April 11, 1991, the North Jersey Section Industrial Application Society will host a presentation on "DC Drives" using microprocessor controls for Industrial Applications. The speaker will be Mr. Greg Rinehart.

About The Talk

For many years, the DC motor has been the machine of choice for driving complex industrial adjustable speed applications. In the past two to three decades, SCR converters, using analog regulation techniques, have provided the control for these DC applications. The latest advance in DC control is the microprocessor-based regulation system, raising the reliability, serviceability, performance and capabilities of the DC SCR control to new heights. The talk will concentrate on the technical aspects and advantages achieved.

About The Speaker

Greg Rinehart is a graduate of Purdue University, with a BS degree in Industrial Engineering and has over 20 years experience in the electrical industry; the past 15 years in the application and marketing of DC Drives. Presently Mr. Rinehart is working as Product Manager, Adjustable Speed Drives at Siemens Energy and Automation, Inc., Motor and Drives Division, Alpharetta, Georgia.

Pre-Meeting Dinner

The pre-meeting buffet dinner starts at 6PM and the presentation begins at 7:PM.

Time: 7:00 PM, Thursday, April 11, 1991. (6:00 PM, buffet dinner.)

Place: ITT Auditorium, 500 Washington Ave., Nutley, N.J.

Further Information/Reservations: Vittal Rebbapragada; (201) 804-2011; Max C. Schramm (201) 887-1120.

New Senior Members

Doowhan Choi
Michael J. Di Julio
Juan M. Dominguez
John P. Fishburn
Fuming Fong
Mohamed L. Hambaba
Hazem A. Huss
Phillip A. Laplante
Roger J. Malik
Ralph J. Mauro
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Bhawani P. Mukherjee
Krishnan Padmanabhan
V. Rebbapragada
Hady R. Salloum
Shuenn-Jyi Wang
Gerald Whitman

Add your name to this list. For information and an application for advancing to Senior Member, contact Don Weinstein, Kulite Semiconductor, One Willow Tree Road, Leonia, NJ 07605 (201) 461-0900, ext. 3106.

North Jersey Section PACE: Resolutions

The North Jersey Section's Professional Activities Committee for Engineers will meet on Wednesday, April 10, 1991. The topic at this meeting will be "Resolutions." The speaker will be William F. Wilkes, Loral Fairchild Systems, Inc.

About The Talk

Bill will talk about efforts underway in Long Island through the Center for Practical Solutions (CPS) to involve displaced defense technical professionals in the economic development process, creating engineering jobs through technology infusion into existing commercial companies, and the creation of new engineer owned businesses. The (CPS) is a non-profit economic development organization developed to implement long-term, socially responsible solutions to Long Island's current economic crisis.

About The Speaker

William Wilkes is in Systems Engineering with Loral Fairchild Systems, Inc. He has a BChE (Nuclear Science) from Manhattan College; MS Marine Science (Ocean Engineering), Long Island University; Graduate Studies in Materials Sci., Fluid Mechanics and Computer Science, SUNY at Stony Brook.

Members and non-members are welcome.

Time: 7:30 PM, Wednesday, April 10, 1991.

Place: ITT Auditorium, 500 Washington Avenue, Nutley, N.J.

Further Information: Robert Sinusas (201) 228-3941.

North Jersey Section Activities APRIL

April 3, 1991--"Executive Committee Meeting"--IEEE North Jersey Section, 7:00 PM, ITT, 500 Washington Ave., Nutley, N.J. Thomas De Nigris (201) 575-1300.

April 9--"Managing ISDN Technologies"--NY/No. Jersey Section EMS, 7:00 PM, Bellcore, 290 W. Mount Pleasant Ave., Livingston, N.J. Al Connelly (201) 616-0755.

April 10--"Electrotechnological Advances In Rehabilitation Engineering"--IEEE Metropolitan EMBS and Biomedical Engineering Section of New York Academy of Medicine, 7:30 PM, New York Academy of Medicine, 2 E. 103rd St., NYC. Robert Heyman (516) 867-0620.

April 10--"Resolutions"--No. Jersey Section's Professional Activities Committee for Engineers, 7:30 PM, ITT Auditorium, 500 Washington Ave., Nutley, N.J. Robert Sinusas (201) 228-3941.

April 10--"Basic Robot Programming"--No. Jersey Computer/Communications Society, 8:00 PM, Fairleigh Dickinson Univ. Teaneck Campus, Room 203, Muscarelle Bldg., 1000 River Rd, Teaneck, N.J. Howard Leach (201) 885-3530.

April 11--"Microprocessor Controlled DC Drives"--No. Jersey Section IAS, 7:00 PM, ITT Auditorium 500 Washington Ave., N.J. Vittal Rebbapragada (201) 804-2011.

April 16-18--"Electro/International"--Javits Center, NYC. Mr. Jim McDonald (800) 877-2668, FAX (213) 641-5117.

April 18--NORTH JERSEY SECTION ANNUAL DINNER AND AWARDS PROGRAM—Plan on attending this special evening. See reservation form on page 4.

April 20-21--"Annual Trenton Computer Festival '91"--Mercer County Community College, Sat. 10 AM-6 PM, Sun. 10 AM-4 PM. (609) 655-4999.

April 24--"NJIT Optoelectronic Seminar III—Biomedical Applications"--Center for Microwave and Lightwave Engineering, No. Jersey Section IEEE & Graduate Student Association, NJIT Theater, Newark, N.J. Ms. Noel Manente (201) 596-5709/3512.

Upcoming Meetings

May 8--"High Voltage Optical Metering And Relay Systems"--No. Jersey Section Power Engineering Society, 7:00 PM, JCP&L, Punchbowl Rm., Punchbowl Rd. & Madison Ave., Morristown, N.J. Augi Franzoni (908) 964-2130.

May 9--"Resource Recovery"--No. Jersey Section PACE, 7:30 PM, ITT Tower, 500 Washington Ave., Nutley, N.J. Robert Sinusas (201) 228-3941.

May 15--"Design Criteria For Efficient LANs"--No. Jersey Joint Computers & Communications/LEO Society, 7:30 PM, AT&T Bell Labs, Arnold Aud., Murray Hill, N.J. Norman Hettinger (201) 835-6935.

May 21--"Computer Program Validation"--NY/No. Jersey EMS jointly with the Project Management Institute, 7:00 PM, Snuffy's Pantagis Renaissance, Rte. 22, Scotch Plains, N.J. Al Connelly (201) 616-0755. (Details in next issue.)

May 30--"Low Frequency EMF—Are They Hazardous?"--IEEE No. Jersey Section IAS, 7:00 PM, ITT Auditorium, 500 Washington Ave., Nutley, N.J. Vittal Rebbapragada (201) 804-2011.

Members and Non-Members Welcome

PLEASE POST

NEW LOCATION: BIRCHWOOD MANOR

SECTION BANQUET - APRIL 18, 1991

A time to relax, unwind and enjoy —
A time to pay tribute to our New Fellows —
A time to honor our new Senior Members —
YES it's time for the Annual Section Banquet

The Annual Section Banquet will be held this year at the Birchwood Manor in Whippany. The affair is scheduled for Thursday evening, April 18, 1991. Tickets are \$45.00 each for a Member and \$45 for one guest of a Member; \$60.00 each for non-members. The price includes a complete prepaid Cocktail Hour preceding dinner. Spouses and guests are welcome.

Reservations required by April 10, 1991. Complete the reservation form below and return it with your payment. If any additional information is required concerning the Banquet, contact Anne Giedlinski at 455-8556.

Inquire about corporate tables.

Use this form for Banquet reservations enclosing a stamped self-addressed envelope. **Reservations required by April 10, 1991.** Mail reservation request to:

Anne Giedlinski
299 Brooklake Road
Florham Park, NJ 07932

Enclosed is _____. Please forward _____ tickets at \$45.00 each for Member and one guest; \$60.00 each for non-member (make checks payable to **North Jersey Section IEEE**) to:

Name: _____

Address: _____

_____ Zip _____

I would like to share a table (seating _____) with the following:

North Jersey Section-PES: High Voltage Optical Metering And Relay Systems

At the May 8, 1991 meeting of the North Jersey Section IEEE Power Engineering Society the topic will be "High Voltage Optical Metering and Relay Systems." The speaker will be Mr. Harley S. Gilleland.

About The Talk

In 1986, the first successful transmission voltage field installation of an optical current sensing and revenue metering system was installed on TVA's 161kv system. Over the next three years other metering systems were installed at 138kv (Houston Lighting and Power), 161kv (TVA), and 345kv (Con Edison). In 1991, the first optical current sensing and protective relaying system was installed at 161kv (TVA). The optical system components include an optical sensor, located on the substation bus; an electronic module located remote from the high voltage conductor in the substation control house; and the optical fiber that connects the electronics module and the optical sensor. The system operates on the Faraday effect where polarized light passing through the glass rotator or optical sensor will rotate in proportion to the current flow in the high voltage bus. The electronic module includes the optical to electronic circuitry, signal processing and either or both the electronic meter or the electronic relay.

The optical system operation is independent of voltage, maintains very good accuracy over a dynamic current range of 20 amps to 4000 amps, is explosion proof plus offering other benefits to the users. The system uses commercially available electronic meters and electronic relays.

About The Speaker

Harley Gilleland's career with ABB, formerly Westinghouse Electric Corporation, has included Marketing, Purchasing, and General Management assignments in several manufacturing operations in Pennsylvania, as well as the corporation headquarters in Pittsburgh. He is currently in Raleigh, North Carolina at the World Headquarters of the ABB Electric Metering Business Area, part of the ABB Power T&D Company. His responsibility is with optical metering and relaying systems.

Mr. Gilleland is a graduate of the University of North Carolina with a BS in Physics, and attended the Penn State University School of Business.

Time: 7:00 PM, Wednesday, May 8, 1991.
Place: JCP&L Punchbowl Rm, Punchbowl Rd., and Madison Ave., Morristown, N.J.
Further Information: Augie Franzoni (908) 964-2130.

New Fellows and Award Citations

John C. Bean, AT&T Bell Labs

"For contributions to silicon molecular-beam epitaxy"

Charles A. Brackett, Bellcore

"For leadership in and contributions to optical networking"

Stephen J. Brolin, AT&T Bell Labs

"For development of telephone subscriber line digital carrier systems"

Richard V. Cox, AT&T Bell Labs

"For contributions to real-time speech coding, and to the standardization of digital technology for secure voice, cellular radio, and telephony applications"

Stuart I. Feldman, Bellcore

"For contributions to software engineering and software configuration management"

Bhaskarpillai Gopinath, Rutgers University

"For contributions to the modeling and analysis of communication systems"

Renuka P. Jinda, AT&T Bell Labs

"For contributions to the field of solid-state device noise theory and practice"

Krishnan K. Sabnani, AT&T Bell Labs

"For contributions to research and development in communication protocols"

David J. Thomson, AT&T Bell Labs

"For contributions to the theory of spectral estimation and its applications"

James P. Van Etten, Consultant

"For contributions to the development of the loran radio navigation system"

1991 David Sarnoff Award

Federico Capasso

"For pioneering contributions to heterostructure devices through the use of bandgap engineering techniques"

1991 Morris N. Liebmann Award

Morton B. Panish

"For outstanding contributions to the epitaxial growth of compound semiconductor materials and devices"

Metro EMBS:

High-Technology Rehab Devices For The Disabled

On April 10, 1991, the IEEE Metropolitan Sections Engineering in Medicine and Biology Society and the Biomedical Engineering Section of the New York Academy of Medicine, will present a lecture on "Electrotechnological Advances In Rehabilitation Engineering." The speaker will be Charles J. Robinson, D.Sc., P.E.

About The Talk

Modern technology can be used to better the lives of those individuals affected by physical and sensory disabilities. Some innovations are truly dazzling, where the blind can "see" again, the lame "walk", the deaf "hear" and the mute "speak". Unfortunately, many of these innovations exist only in the laboratory and are extremely difficult to commercialize because of the fragmented market that exists for such devices. Yet, the use of an "appropriate" amount of technology to solve a particular problem for the disabled can have a major impact on the individual's quality of life. Such "appropriate" technology is often cost effective, easy to commercialize, and may have a potential that extends beyond the rehabilitation market.

A review of the state-of-the-art in sensory-motor prostheses will be presented with descriptions as they exist today in the laboratory and a forecast of what might be on the horizon. "High-technology" rehabilitation devices that have been commercialized will be compared to those that have failed, with a discussion of the factors behind the failures and successes. Finally, areas where fruitful research is needed will be pointed out.

About The Speaker

Dr. Robinson is the Associate Director of the Rehabilitation R&D Center at Hines, IL (near Chicago), that is one of the four such Centers set up nationwide by the U.S. Department of Veterans Affairs. He is a Professor of Neurology at Loyola University's School of Medicine, and has been a Visiting Lecturer in the Bioengineering Program at the University of Illinois, Chicago. He has lectured and written extensively in the fields of rehabilitation engineering and neurophysiology, with a particular emphasis on spinal cord injury.

Time: 7:30 PM, Wednesday, April 10, 1991.
Place: New York Academy of Medicine, 2 East 103rd Street (at 5th Ave.), NYC. **LIMITED**, repeat **LIMITED** free parking on East side of building (come West on 103rd St.).
Further Information: Robert Heyman, (516) 867-0620; Edna Feher (212) 757-0610; Joel Levitt (718) 891-6460; John Frederick (212) 595-2599.

North Jersey Section PACE:

Resource Recovery

The North Jersey Section's Professional Activities Committee for Engineers will meet on Thursday, May 9, 1991. The topic at this meeting will be "Resource Recovery." The speakers will be Larry Smith and Laurie Cooper of American Ref-Fuel Company of Essex County.

About The Talk

Smith, general manager of the Essex County Resource Recovery Facility, will explain how garbage, "a resource too valuable to be thrown away," can be converted into electrical power equivalent to what would be produced by burning three million barrels of oil a year. American Ref-Fuel sells the extra electricity to Public Service Electric & Gas Company, providing revenue which helps reduce the cost of garbage disposal for Essex County taxpayers. There will be a detailed slide show to help illustrate how resource recovery is part of an integrated solid waste management plan which includes source reduction, recycling and sanitary landfilling.

A joint partnership of Air Products & Chemicals and Browning Ferris Industries, American Ref-Fuel is the builder and operator of the Essex County Resource Recovery Facility.

About The Speakers

Larry Smith, who holds a Bachelor of Science Degree in Mechanical Engineering from Grove City College, Grove City, PA, is responsible for plant operation, contract management and waste flow at the facility. Prior to joining American Ref-Fuel, Smith was production manager for Air Products and Chemicals in Kentucky, and head of the maintenance department for Union Carbide Chemicals and Plastics in Texas. He is a member of the Newark Rotary Club and the Ironbound Manufacturers Association.

Laurie Cooper holds a Bachelor of Science Degree in Chemistry from the University of Oklahoma and is currently pursuing a Master's Degree in environmental science from New Jersey Institute of Technology. An environmental scientist with American Ref-Fuel, she previously served as an environmental specialist for ITT Avionics Division, Nutley, N.J. and technical manager for CycleChem, Inc., Elizabeth, N.J. Cooper is a member of the American Chemical Society, the American Institute of Chemical Engineers, the Institute of Hazardous Materials Management, the National Fire Protection Association and Nutley HAZMAT (hazardous materials) team.

Members and non-members are welcome.

Time: 7:30 PM, Thursday, May 9, 1991.

Place: ITT Tower, 500 Washington Avenue, Nutley, N.J.

Further Information: Robert Sinusas (201) 228-3941; Stacey Waring (201) 902-

The New Jersey Institute of Technology Optoelectronic Seminar Series & Industry Show

sponsored by

Center for Microwave and Lightwave Engineering
North Jersey Section IEEE & Graduate Student Association,

Planning Committee

M. Ettenberg, DSRC; E. Gordon, NJIT; H. Gröbel, NJIT; W. Kosomocky, NJIT, R. Leheny, Bellcore; T. Li, AT&T; S. Nagel, AT&T; E. Niver, NJIT; I. Reingold, Geo-Centers; G. Whitman, NJIT; J. Yardley, Allied Signal.

III BIOMEDICAL APPLICATIONS

April 24, 1991, Wednesday 3-6 PM, NJIT Theater

Fiber Optic Biochemical Sensors

Henrik Pedersen, Rutgers University

A Revolution in the Eye Care Business

William B. Telfair, Taunton Technology

Future Applications of Magneto-Optic
Sensors in Medical Diagnostic Imaging

Philip A. Femano, Siemens Medical Systems

Registration:

No charge. Refreshments served. Reserved Parking in Lot #7.

Information:

Ms. Noel Manente (201) 596-5709/3512

16th Annual Trenton Computer Festival

The Trenton Computer Festival '91 is celebrating its 16th anniversary on April 20-21, 1991 and has moved to Mercer County Community College to provide improved parking and facilities.

- Over a hundred forums, talks and seminars will be held Saturday and Sunday. Meet the leading experts and attend sessions on the latest advances in hardware and software, artificial intelligence, operating systems, Unix, windows, OS/2, PC/Macintosh, cd rom, interactive computer video, lans, computer communications, robotics, business application, computer graphics, computer-aided design (CAD), amateur radio, and computer languages.
- Special Conferences: Packet Radio, Desktop Publishing, Business Applications, High Tech Work Stations, and 8-bit Computers.
- User Groups Meetings/Birds-of-a Feather Sessions, IBM PC/PC Compatibles, Macintosh, Apple, Tandy, Commodore, Amiga, Heath/Zenith, CP/M and UNIX.
- Free classes for the general public and novices and software demonstrations galore!
- The highly successful, Computer Graphics Theatre will once again be featured at TCF.
- A National Industry Exhibit will feature the latest in software/hardware technology.
- Enlarged commercial exhibition area. 150% increase. Huge outdoor flea market with more than 900 tables. Special expanded shuttle bus and package delivery service.

For General Information: (609) 655-4999; write to TCF'91 c/o Publicity Chairman, P.O. Box 135, Scotch Plains, NJ 07076. Flea Market space may still be available. Call the Concordia Group at (609) 395-8972.

Admission/Registration: General admission will be at the door only. General admission fee covering both days and including all events except the banquet, is \$7; students and senior citizens, \$3; pre-school children are admitted free.

Sunday Only: \$5 general admission, students and senior citizens, \$3. Children under 12, accompanied by an adult, will be admitted free on Sunday.

Saturday Evening Banquet: register in advance by sending a check for \$15 per person made payable to TCF'91 to the address above.

FREE parking will be available with shuttle buses to the campus at Mercer County Park immediately adjacent to the campus at Mercer County Community College. Please exit Hughes Drive or Old Trenton Road to Mercer County Park before you get to the campus and follow the signs/volunteer directions.

Sponsored by Mercer County Community College and the Amateur Computer Group of New Jersey, Trenton State College, Central Jersey Computer Club, New York Amateur Computer Club, Philadelphia Heath User Group, IEEE/ACM - Princeton Section.

On May 15, 1991 the No. Jersey Joint Computers and Communications/LEO Society will meet to hear a talk on "Building Networks Today For Tomorrow's Application." The speakers will be Frank Henderson, Dave Koehler, and Steve Morgenthal.

Necessary design criteria for building efficient distributed Local Area Networks (LANs) will be discussed with a view towards managing distributed tasks over an integrated network.

relay for extended LANs; and integrated networks of distributed platforms.

Frank Henderson, Director of Network Technology, Dave Koehler, Senior Consultant, and Steve Morganthal, Senior Network Management Consultant, are with General Logistics International, Inc. Henderson and Koehler have been instrumental in the design and implementation of UNIX-based local and wide-area networks. Currently, Steve Morganthal is developing integrated network solutions for SNMP and OSI-based packages.

Members and quests are welcome.

Place: Arnold Auditorium, AT&T Bell Labs, Murray Hill, N.J.

Low Frequency EMF—Are They Hazardous?

About The Talk

Electric and magnetic fields know no boundaries and exist in residential, commercial, industrial or utility environments. Daily exposure to 60 HZ low frequency electric and magnetic fields (EMF) is common because virtually all household appliances, video display terminals (VDTs) as well as utility equipment produce such fields. Recently, certain reports have raised public concern over potential adverse health effects from electromagnetic fields. Laws are in effect in North California on the use of VDTs.

The talk will cover all the above issues including a review of the Science of magnetic fields, comparison of field intensities between home, VDTs and power lines culminating with a demonstration of a portable battery powered instrument for measuring and mapping the temporal and spatial variation of 60 HZ magnetic fields.

National organizations addressing the issue will be discussed along with a review of Utility Company general policies and procedures being put in place to best deal with customer calls and concerns.

George V. Fantozzi is employed by Ebasco Services Inc., as General Manager, Electric Power Systems Division. Before he joined Ebasco, he was with Florida Power and Light Co. in Juno Beach, where for 22 years he was involved in a number of different technical and managerial capacities focusing on Planning, Engineering and Operations of the Transmission Substation and Distribution facilities. He is a Senior member of IEEE and a member of BEMS (Bioelectromagnetics Society). He is a member of the EEI (Edison Electric Institute) EMF Task Force, member of the AEIC (American Electric Illuminating Companies) Electric Apparatus Committee and presently Chairman of the IEEE-PES EMF AD-HOC Committee.

George has authored several papers on Transmission and Distribution systems.

The pre-meeting buffet dinner starts at 6PM and the presentation begins at 7:PM.

Time: 7:00 PM, Thursday, May 30, 1991.
(6:00 PM, buffet dinner.)

Place: ITT Auditorium, 500 Washington Ave., Nutley, N.J.

Further Information/Reservations:
Vittal Rebbapragada; (201) 804-2011;
Max C. Schramm (201) 887-1120.

The North Jersey Section of the IEEE is making desk nameplates available to all our members. These attractive engraved nameplates have an IEEE logo and your name on a two inch high blue panel mounted in a gold colored base.

The 8 inch long nameplate can have up to 15 characters and costs \$10.95. The 10 inch long nameplate can have up to 21 characters and costs \$13.10. These prices include the New Jersey Sales tax.

Fill out the form below or a copy of it and send it with a check payable to: "North Jersey Section, IEEE." Mail to the address below.

You can pick up your nameplate at the Executive Committee meeting or at one of the Society meetings. You will be notified when it is ready. If you want it mailed to you, please add \$1.50.*

Remember, the nameplate may have up to 15 to 21 characters including punctuations and spaces. Please type or print your name as you would like it to appear on the nameplate.

If you have any questions, call (201) 461-0900 during working hours or (201) 797-4366 in the evening.

To: Don Weinstein, 30-18 Grunstra Place, Fair Lawn, NJ 07410

Text for Nameplate

Name _____

Address _____

Phone _____ Membership Number _____

☐ Enclosed is \$10.95

☐ Enclosed is \$13.10

*[] Enclosed is \$12.45

*[] Enclosed is \$14.60

Job Search Assistance Program Set in April

Few things in life are more emotionally devastating than losing a job, especially when the opportunities in your field are suddenly reduced due to cutbacks or a sluggish economy.

Engineers and other technical professionals who find themselves in this situation need help in two important areas. Outplacement assistance can help an individual get back on the road to productivity quickly. Good outplacement programs demonstrate to individuals their value to industry and permit a positive, confident approach to their job search. The development of the right resume and cover letter, together with training in the interview process, are among the assets that can make the difference in a competitive job market.

But even for those engineers and other technical professionals who are fortunate enough to be offered quality outplacement training, more is needed in order to find the right career in the shortest possible time. Individuals need help making contact with hiring companies, and ideally this assistance should complement outplacement/job search training.

Until recently, few programs offered job search training in combination with assistance in meeting directly with hiring companies. The North Jersey Section of IEEE plans to change that on April 14th, 15th, and 16th by introducing a unique event which will provide both of these essential

services. A letter about the event will be sent to all IEEE members in the area, and instructions about registering for the Employment Assistance Workshop will be included.

On Sunday, April 14th, a group job search training program (Employment Assistance Workshop) will be conducted free of charge at The Embassy Suites Hotel, 909 Parsippany Boulevard, Parsippany, New Jersey, from 9:00 a.m. until 4:30 p.m. The Employment Assistance Workshop is only for IEEE members, on a first-come, first-served basis, and advance registration is required.

A Technical Job Fair will be held on Monday, April 15th, from 4:00 p.m. to 7:00 p.m., and on Tuesday, April 16th, from 11:00 a.m. to 2:00 p.m. and 4:00 p.m. to 7:00 p.m. at the Embassy Suites Hotel in Parsippany. The Job Fair is open to IEEE members and nonmembers alike. Employers with immediate jobs to fill will be on hand both days to discuss job opportunities with IEEE members.

This program is being produced for IEEE members by The Lendman Group, the nation's oldest and largest career fair producer, and by Payne-Lendman, the outplacement division of The Lendman Group. Payne-Lendman is one of the nation's premiere outplacement firms and has conducted outplacement assistance programs for General Electric, UNISYS, AT&T, Chevron, and many others.

Employers interested in more information about the event may call 1-(800) 562-2820 and ask for Linda Lennon. Companies cur-

IEEE EMPLOYMENT ASSISTANCE WORKSHOP

Sunday, April 14, 1991
9:00 a.m. - 4:30 p.m.

Embassy Suites Hotel
909 Parsippany Boulevard
Parsippany, NJ

IEEE JOB FAIR

Monday, April 15, 1991
4:00 p.m. - 7:00 p.m.

Tuesday, April 16, 1991
11:00 a.m. - 2:00 p.m.
4:00 p.m. - 7:00 p.m.

Embassy Suites Hotel
909 Parsippany Boulevard
Parsippany, NJ

rently hiring will want to recruit at the program, and companies in the process of downsizing are invited to discuss the possibility of offering this job search training to engineers and other technical professionals being terminated. Substantial cost savings are available to companies wishing to schedule participation in multiple IEEE programs. Other programs in the northern New Jersey area will take place in June, September, and December, and a national schedule of IEEE programs will be produced in a number of cities in 1991 including Boston; Los Angeles; San Jose; Washington, D.C.; Chicago; Dallas; Philadelphia; New Haven; and New York City, to name a few.

Please complete this form and mail it to:

Northern New Jersey IEEE Program Coordinator
c/o The Lendman Group
5500 Greenwich Road
Virginia Beach, Virginia 23462

Pre-registration deadline: Form must be received by Thursday, April 11th.

Your Name: _____

Company Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone () _____ (Work ____; Home ____)

☐ I will attend the Employment Assistance Workshop on Sunday, April 14th, at the Embassy Suites Hotel in Parsippany.

☐ My company is interested in participating as an employer. Please contact:

Name: _____

Company: _____

Tel. No.: _____

Space is limited - we encourage you to register as soon as possible.