



The IEEE

Newsletter

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Newsletter Deadline

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New York, N. Y. 10017

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 1973-1974

Chairman.....Harlan J. Perlis
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Secretary.....Kenneth Grace, Jr.
Member-at-Large.....James C. Gass
Member-at-Large.....Dr. Robert McMillan
Jr. Past Chairman.....Carl C. Torell

Patent Law

The January 17 meeting of the Power Engineering Society will be a joint meeting with the members of the North Jersey Section. A program will be presented on 'Patent Law and the Engineer' with Mr. Mel K. Silverman as the guest speaker.

Mr. Silverman received a B.S.E.E. from Columbia University in 1965 and a law degree from Seton Hall University in 1969. He was admitted to the New Jersey Bar Association in 1970. Mr. Silverman has been employed by the U.S. Patent Office, RCA in Princeton, and U.S. Army at Picatinny Arsenal. Mr. Silverman, a licensed patent attorney, will discuss the procedures for obtaining a patent.

A question and answer period will follow the conclusion of Mr. Silverman's presentation. Refreshments will be served.

Time: 8:00 P.M., Thursday, January 17, 1974

Place: Auditorium, Automatic Switch Company, Hanover Road, Florham Park, N.J.

Surface Waves

'Elastic Surface Wave Fundamentals, Devices and Applications' will be discussed by R. La Rosa, S. Kerbel and C. Vasile at the January 16th meeting of the North Jersey MTT Chapter.

Contents of the talk will include: Elementary Introduction to the Properties of Elastic Surface Waves; Advantages of Surface Waves in Preforming System Functions with Examples; and Novel Solutions to Problems Encountered in Building High Performance Devices.

The speakers are members of the Hazeltine Electrophysics Laboratory Staff.

Time: 8:00P.M., Wednesday, January 16, 1974

Place: ITT Avionics Auditorium, 390 Washington Avenue, Nutley, New Jersey
Pre-Meeting Dinner: Copperhood Restaurant on Park Avenue in Lyndhurst (off Route 3) at 6:00 P.M.

Power Electronics

The IEEE Power Electronics Specialists Conference scheduled for June 10-12, 1974 at Bell Laboratories, Murray Hill, New Jersey will emphasize new research, development and design of power processing circuits and devices.

Papers are being sought in the following areas: analysis methods for power circuits and components, novel power processing circuits and devices and their characterization, and aerospace, industrial and commercial power electronics applications.

Authors should submit, by January 30, 1974, five copies of a 300-500 word Summary including a 35 word Abstract suitable for printing in an advance program. These must be typed double-spaced on separate sheets each headed by title, author, and affiliation including mailing address and telephone.

Since acceptance of papers will be based on the Summary, it should include illustrations and text which clearly emphasize significant new contributions which warrant inclusion of the paper in the PESC program. Send Summary and Abstract to Dr. William E. Newell, Program Chairman, Westinghouse Electric Corporation, Pittsburgh, PA 15235.

Dr. Frank F. Judd of Bell Laboratories, Whippany, is General Chairman of the Conference.

FELLOWS NIGHT, DINNER-DANCE

North Jersey Section IEEE

Saturday, February 23, 1974

7:00 P.M. (cocktail hour 6:00-7:00)

Dancing 9:00 P.M.-1:00 A.M.

Governor Morris Inn

Morristown, NJ

Dinner Speaker

John A. Casazza

General Manager, Planning & Research

Public Service Electric & Gas Company

John H. Gerth, Dinner Chairman

Bell Telephone Laboratories, Whippany,

NJ 07981

Please forward _____ tickets at \$11.00 each (make checks payable to North Jersey Section IEEE) to:

Name _____

Address _____

City _____

State _____ ZIP _____

I would like to share a table (seating 10) with the following:

Students Night

This year's IEEE Student Night (February 6th) promises to be an extremely enlightening and worthwhile evening. The programs theme will be 'Engineering Today and Tomorrow' and will present four very interesting and talented speakers to support it. The speakers will provide the students with a valuable and comprehensive inside look at different industries and various jobs within these industries.

John Walsh from IBM will speak on marketing and computers; Tom Podesta will discuss engineering management; Tom Kesolits will explore the present and future trends in the microelectronics design and development field; Bert Yankielun, a recent graduate, will compare the student's view of industry with the view of the same engineer after six months of his industrial career.

Use the form below for reservations enclosing a stamped, self-addressed envelope. Reservations received after February 16 or without an enclosed envelope will be held at the door along with telephoned reservations by calling (201) 386-4191 or (201) 543-4220

The evening will also feature dinner and door prizes.

Time: Dinner 6:30 P.M., Meeting 7:30 P.M., February 6, 1974

Place: Newark College of Engineering, 323 High Street, Newark, NJ Center Building

Price: \$1:00

Further Information: Contact either Al Ross at (NCE) 645-5478 or Harold Mauser at 561-0174

IEEE Pension Program

At the January 17th meeting of the Metropolitan Chapter of the Electron Device Group, D. Fink, IEEE executive Director will discuss pension reform.

Mr. Fink will review the issues of pension reform on which IEEE has taken its stand with other societies in presentations to the Congress. The current state of the proposed legislation will be outlined,

including an estimate of its chances of being enacted into law. IEEE outlook for pension plans to be offered to members will also be described. One of these (paid for by after-tax dollars) does not require new legislation but does not enjoy the advantages of tax deferral. The problems of safely investing members' money devoted to such plans will be discussed. Finally, the tradeoff between immediate vesting (a feature of the proposed IEEE PLAN) and the amount of pension benefits accrued will be explored.

Time: 8:00., P.M., January 17, 1974

Place: C.U.N.Y. Graduate Center, Rm. 207

33 West 42nd Street, New York, NY

PRE-MEETING DINNER: Graduate Center Buffeteria at 6:00 P.M.

Section Nominations

The nominating committee will soon start looking for nominees for the Section officers for the 1974-1975 year. If you have someone who should be considered, the committee will welcome your suggestion which should be sent by the 25th of January to Carl C. Torell, Chairman of the Nominating Committee. (See address below).

Additional persons can be nominated in addition to those recommended by the nominating committee by the following procedure:

1. Obtain in writing a statement from the nominee declaring that if elected to that office, he or she will serve ie: I will accept the nomination for (name of office) of the North Jersey Section IEEE for the 1974-1975 year and if elected will serve in this capacity.

Signature and Membership Number

2. Obtain signatures and membership no. of 25 current North Jersey Section IEEE members nominating the candidate ie: Nomination for (name of candidate) for the office of (name of office) of the North Jersey Section IEEE for the 1974-1975 year.

Signature and Membership Number

3. Deliver the acceptance statement and signatures before March 20th to Carl C. Torell, c/o Federal Pacific Electric Company, 150 Avenue L, Newark, NJ 07101
4. Nominees and nominators must be of member grade or higher. It is expected that mail ballots will be in the May Newsletter.

PRINCIPLES OF ELECTRICAL DISTRIBUTION DESIGN

This ten session study group is presented for the benefit of electrical, consulting and project engineers, contractors, manufacturers, and designers who are concerned with power distribution systems.

This course will stress practical design and application information for distribution systems, stressing actual experience over abstract theory.

February 27, 1974—MEDIUM VOLTAGE (5-15KV)—Switchgear construction ratings. Application. Relaying fusible switches. Circuit breakers. Motor starters.

March 6, 1974—TRANSFORMERS—Dry type. Askarel filled. Oil filled. Ratings. Application. Connections.

March 13, 1974—SERVICE ENTRANCE EQUIPMENT—Large services. Small services. Code requirements. Metering. Circuit breakers. Service protectors. Bolted pressure switches.

March 20, 1974—LOW VOLTAGE SWITCHGEAR—Construction. Air circuit breakers. Ratings. Application. Selectivity. Magnetic trip units. Static trip units.

March 27, 1974—LOW VOLTAGE SWITCHBOARDS—Nema standards. Design and construction. Bus ratings. Bus bracing. Circuit breakers. Fused switches. Hybrid types. Applications.

April 3, 1974—PANELBOARDS—Circuit breakers and ratings. Switches and fuses. Construction. Application. Standards. Special features. UL fuse classifications.

April 10, 1974—MOTOR CONTROL AND MOTOR CONTROL CENTERS—Starters reduced voltage starting. Ratings. Overcurrent protection. Short circuit protection. Motor control center construction. Application.

April 17, 1974—GROUND FAULT PROTECTION—Needs. 1971 code requirements. Practical system design. Application. Damage limits. Coordination. Life protection. Hospital systems.

April 24, 1974—GROUNDING—Power factor correction. Wire and cable. Grounding code requirements. Good ground-ing power factor. Cost savings. Calculations. Application.

April 30, 1974—BUS DUCT—Bus duct design types. Horizontal systems. Vertical risers. Code requirements. Voltage drop take-off devices and methods. Application.

SPEAKER: Mr. Herman Reichenstein, P.E. Consulting Engineer
TIME: 7:00-9:00 P.M. Tuesday evenings, beginning February 27, 1974
PLACE: To be announced.
FEE: \$60.00 to members of IEEE, ASME, AIME, ASCE, etc. \$70.00 to non-members.
SPECIAL OFFER: A \$5.00 savings for advanced registrants whose mail registrations are received prior to February 20, 1974.

REGISTRATION FORM—PRINCIPLES OF ELECTRICAL DISTRIBUTION DESIGN

Mail to: Al Cox, Bussmann Mfg., 155 Ridge Street, Newark, N.J. 07104; phone (201) 484-3500, (212) 267-1466.

Name _____ Tech. Society _____

Firm _____ Position _____

Business Address _____ Phone _____

Home Address _____ Phone _____

*Check or money order enclosed: Member: \$55.00 (after February 20, 1974, \$60.00)
 Non-member: \$65.00 (after February 20, 1974, \$70.00)*

Please make check or money order payable to: North Jersey Section IEEE.

INDUSTRIAL POWER SYSTEM GROUNDING

The instructors will be some of the top experts from leading manufacturers of grounding equipment.

April 11, 1974—THE NATURE OF ELECTRICAL INJURIES—The methods by which electricity harms the human being. The amount of current required to kill.

SPECIAL OFFER: A \$10.00 savings for advance registrants whose mail registrations are received prior to February 14, 1974.

Make checks payable to: North Jersey Section IEEE.