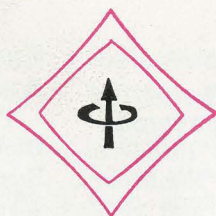


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John Bardeen to Receive IEEE Medal of Honor

Dr. John Bardeen has been awarded the Medal of Honor of the Institute of Electrical and Electronics Engineers. Dr. Bardeen is Professor of Electrical Engineering and Physics, in the University of Illinois at Urbana. In 1956 he shared with William Shockley and Walter Brattain the Nobel Prize in Physics for the trio's discovery of the transistor effect.

IEEE awards its Medal of Honor for a particular contribution which forms a clearly exceptional addition to the science and technology of interest to the Institute. The citation to Dr. Bardeen reads: "For his profound contributions to the understanding of the conductivity of solids, to the invention of the transistor, and to the microscopic theory of superconductivity."

The Bronze Medal and Certificate will be presented to Dr. Bardeen during the IEEE annual banquet on March 24, 1971 at the New York Hilton.

Dr. Bardeen received his BS and MS in electrical engineering from the University of Wisconsin in 1928 and 1929, respectively, and his PhD in mathematical physics from Princeton University in 1936.

Prior to graduate study at Princeton, Dr. Bardeen worked for several years with Gulf Research and Development Corporation as a geophysicist. Subsequently, he was a postdoctoral fellow at Harvard University, assistant professor of physics at the University of Minnesota, a physicist at the U.S. Naval Ordnance Laboratory during the war years, and from 1945 to 1951 a research physicist at the Bell Telephone Laboratories. He assumed his present position as professor of electrical engineering and of physics at the University of Illinois in 1951, where he is also currently a member of the Center for Advanced Study.

Dr. Bardeen has been the recipient of a number of awards including the Nobel Prize in Physics (co-recipient) in 1956 and the National Medal of Science in 1965. He is a Fellow of the American Physical Society, serving as President in 1968-69, and is a member of the National Academy of Sciences, the American Philosophical Society,

MARCH 15

Nonlinear Effects in Components and Systems

Vincent Formanek, IIT Research Institute, will discuss "Nonlinear Effects in Components and Systems" at a meeting cosponsored by the Parts, Materials, and Packaging and the Aerospace and Electronic Systems Groups on Monday, March 15. The meeting will be held at Menard's Black Steer Restaurant, 6446 W. North Ave., Chicago, Ill.

Formanek will discuss the relationship between the transfer function of real devices and the intermodulation and harmonic generation properties. He will also consider practical problems posed in system and circuit design of nonlinear devices such as mixers, amplifiers, detectors and multipliers. Problems caused by ferrous materials, semiconductors, a nonlinear electromagnetic environment, and other nonlinear components will also be covered.

Since 1969, Formanek has been a technical assistant at IITRI, principally working on electromagnetic compatibility. He has worked on measurements of the shielding effectiveness of shielded enclosures, atmospheric noise, and the effects of atmospheric noise on shielding effectiveness. He has also worked on nonlinear components, effects upon system nonlinearities, and the development of a fast rise time, high-voltage pulse source.

Formanek received his BS in electrical engineering from Illinois Institute of Technology in 1969 and is presently studying for his MS in electrical engineering, also at IIT. He is a member of IEEE, Eta Kappa Nu, Tau Beta Pi, and the National Society of Professional Engineers.

Social hour, 5:30 p.m.; dinner, 6:30 p.m.; meeting, 7:30 p.m. For meeting or dinner reservations, call Steve Heiress, 967-8300, ext. 566 by Friday, March 12.

and the American Academy of Arts and Sciences. He is a member of the Board of Directors of Xerox Corporation.

Dr. Bardeen's main research interests have been in the theory of solid state and low temperature physics, with emphasis on semiconductors and superconductivity.

Engineering Techniques And Health Services

The Engineering in Medicine and Biology Group will meet at the Rush-Presbyterian-St. Luke's Medical Center, 1750 W. Harrison, Chicago, Ill., on Tuesday, March 23. The Department of Biomedical Engineering of the Medical Center and the Bioengineering Program of the College of Engineering, University of Illinois, Chicago Circle Campus, will cosponsor the evening.

A private dining room in the Hospital cafeteria has been reserved. Get there by 6:30 p.m. as the cafeteria stops serving dinner at 7:00 p.m.; only snacks are available after that.

Meeting will start at 7:30 p.m. in the U.S. Steel Room, located near the cafeteria, and will continue in the laboratories of the Biomedical Engineering Department. Engineering techniques now used in the delivery of health services will be discussed and later demonstrated, and current research will be stressed. Topics to be covered will include computers in hospital laboratories and communications, medical pattern recognition, and engineering analyses of physiological systems.

If you drive, use the parking lot on the south-east corner of Harrison and Paulina Streets. The entrance is on Fluoroy Street, one block south of Harrison Street.

Northwest Subsection Holds Dinner-Dance

The Northwest Subsection will hold a dinner-dance on Saturday, March 27, at Fritzel's in Arlington Heights, one-half mile north of Route 62 on Arlington Heights Road. After a steak dinner, a well-known northwest-side combo will play for the dancing pleasure of IEEE members and their wives.

Reservations are only \$18.50 per couple for dinner and dance. Get your tickets now by calling Bill Kusner at 727-1972.

Many wives have become interested in the IEEE since the founding of the Northwest Subsection and have attended the technical meetings. We hope that this social evening will bring out all the Northwest engineering couples. The evening should provide a welcome hint of spring and a sign that winter is over at last.

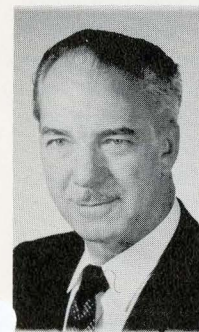
MARCH 18

Communications Technology Meets

The Communications Technology Group will meet on March 18 at Teletype Corp., 5555 W. Touhy, Skokie, Ill. E. W. Kettlich, director of development at Teletype, will present a history of Teletype products. This includes a slide "tour" through Teletype's museum of teletypewriter apparatus, from the days of Morse to the present cathode-ray tube displays.

A sirloin steak dinner will be served in the Teletype cafeteria at 6:30 p.m.; cost, \$5.25. Meeting proper starts at 7:30 p.m. For reservations call ComTech, 982-3771.

E. W. Kettlich has been with Teletype Corp. for 42 years, in all areas of the business from manufacturing through research and development; at present he is director of development. He is an authority on teletypewriter equipment and is active in a number of national and international standards organizations.



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Call for Papers

The 1971 Vehicular Technology conference, to be held December 7-8, 1971, in Detroit, Michigan, has issued a call for papers.

Papers are invited in the areas of: vehicular communications techniques, vehicular command and control systems, electronics in vehicle, and propulsion technology.

Prospective authors should submit six copies of an 800 to 1,000 word summary of the paper, single spaced, with a two-inch left-hand margin, typed in a 4 3/4 inch column. The cover page should include the name, title, company affiliation, and address of the author(s).

Submit summaries by June 15, 1971, to the Technical Program Chairman: Mr. A. E. Marshall, Ford Motor Company, 23400 Michi-

New Societies Formed Within IEEE

Major changes in the organizational structure of the IEEE have been announced by D. G. Fink, General Manager. Three Societies have been created within the Institute's framework; two of its Groups have merged. The three new societies are: The IEEE Control Systems Society; The IEEE Computer Society; and The IEEE Power Engineering Society.

The creation of these societies resulted from the recognition by the IEEE Board of Directors that these specific areas of technology have shown consistent growth, have made significant contributions to man's welfare, and will continue to develop and provide further contributions to the well-being of society.

The IEEE Control Systems Society's field of interest includes the science and technology that underlies systems, and which can be represented by common mathematical symbolism.

The IEEE Computer Society's field of interest includes theory, design and practices relating to digital and analog computation and information processing.

The IEEE Power Engineering Society's field of interest includes planning, research, development, design, application, construction, installation, and operation of apparatus, equipment, structures, materials and systems for the safe, reliable and economic generation, transmission, distribution, conversion and control of electric energy for general industrial, commercial, public and domestic consumption.

As further evidence of the continuing effort to maintain coherence and meaning within the wide variety of technical areas of interest to IEEE, the Man-Machine Systems Group and the Systems, Science, and Cybernetics Group have merged to become the Systems, Man, and Cybernetics Group.

gan Avenue, Dearborn, Michigan 48124.

Authors of accepted papers must submit a complete *Transactions* paper to the Technical Program Chairman by December 1, 1971.

Nominations Now Open For Advancement To Fellow Grade

The grade of Fellow, awarded by invitation only, is the highest grade of membership in the Institute. To attain it is to receive one of the Institute's highest honors, as will be appreciated by reviewing the qualifications in the By-Laws which follow: "The grade of Fellow is one of unusual professional distinction and shall be conferred only by invitation of the Board of Directors upon a person of outstanding and extraordinary qualifications and experience in the fields of electrical engineering, electronics, radio and allied branches of engineering or the related arts and sciences, who meets the requirements for Senior Member, as stated in these By-Laws and who has been a member in any grade for a period of seven years preceding the year of nomination, except that the seven year provision, in any individual case, may be waived for cause by the Board of Directors."

The Chicago Section Awards Committee would like to assist any members who believe that one of their friends or associates should be nominated for this honor. Because IEEE forms are required and the nomination procedure must be carefully followed, such members should seek the assistance of one of the committee members. Nominations must be in New York by April 30 to be considered in 1971.

The Awards Committee members are: J. Edward Brown, Zenith Radio Corporation, 6001 Dickens Ave., Chicago 60639 — 745-4700; Francis A. Cox, Commonwealth Edison Co., 1 First National Plaza Box 767, Chicago 60690 — 294-2915; H. Earle Vaughn, Bell Telephone Laboratories, Naperville, Ill. 60590—682-3242.

For further details see Page 106 of the IEEE Spectrum for November 1970.

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SOMEBODY WAS LISTENING

In response to the editorial in the January issue asking whether the IEEE—and the Chicago Section—were obsolete, I received six letters and two telephone calls. A response of about 0.1% of the Chicago area members!

Of these, half pointed out that SCANFAX frequently reaches them late—an on-going problem that we sometimes beat and sometimes do not. The cooperation of a number of people—committee chairmen, editor, printer, and post office—is involved. If any one party in this chain slips, the issue may be delivered late, particularly in certain suburban areas. The problem is not new, but we keep trying to correct it.

One of the letters proposed a new format for SCANFAX—a folded 8½ x 11 sheet, with meeting information printed in a single column to be torn for future reference. I do not know what the postal regulations are on mailing such a sheet,

but this suggestion will be investigated during the summer when we set up for the 1971-72 year.

The other responses concerned the relevance of IEEE as an organization. The longest letter came from an engineer nearing retirement who feels that “like an old car, IEEE needs a tune-up and possibly a major overhaul.” He pointed out that data/information retrieval systems in large companies give engineers access to technical information published throughout the world. (But what of the engineer in a small or moderate size company? *Ed.*) He also feels that the IEEE, or some other organization, structured something like the American Medical Association perhaps, is needed if the individual engineer is to receive recognition, and the salary, that his work merits. Any comments?

Paul Carroll, president, Semiconductor Specialists, and a past chairman of the Chicago Section, also

replied. His letter is printed below:

“I am responding to your challenge in the January issue of SCANFAX. I feel that IEEE is the organization that should represent the electrical-electronic engineer in his professional career, his continuing education, and in the community. I feel that IEEE should become more involved in government, engineering salaries, and unemployment.

There has always been a question of whether IEEE should be organized along geographical or technical interest lines. In Chicago we have a diversity of interest and occupations to justify over 15 active technical groups. I have always thought even when I was Section Chairman that the function of the section is to administer, coordinate, and communicate among the groups. Since these are vital functions, I suggest that the Chicago Section is not obsolete and that SCANFAX is the vital communications medium of all groups and members in the Chicago area.”

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