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CHICAGO SECTION · IEEE · INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

OCTOBER 1974

CALENDAR OF EVENTS

IEEE OFFICE: 263-5954

- Oct. 1 Chicago Executive Committee; Meeting Room 12, 10th floor, Illinois Bell Telephone Company, 225 W. Randolph Street, Chicago, Ill.
- Oct. 4 Saville Organ Demonstration; Fox Valley Subsection; Glenview Country House, 1560 Waukegan Road, Glenview. Demonstration at Saville Organ Corporation, Northbrook (Page 2)
- Oct. 9 "Corrosion and Cathodic Protection;" IAS/IECI: Nielsen's Village, 7330 W. North Avenue. Social hour, 5:30 p.m.; dinner, 6:15 p.m., meeting, 7:15 p.m.
- Oct. 16 "Metallized Capacitors;" PHP; Nielson's Restaurant, 6475 Mannheim Road, Rosemont; social hour, 6:00 p.m.; dinner, 6:30 p.m.; meeting, 7:30 p.m. (Page 1)
- Oct. 16-18 Communications/74; Hyatt Regency O'Hare (Page 4)
- Oct. 23 "Refuse as a Fuel," Dr. Richard Carlson, Allis Chalmers, speaker. White Fence Farm, Lemont.
- Nov. 6 "Microprocessors;" Fox Valley Subsection; Stevens Restaurant, Elmhurst, Ill.; social hour, 6:00 p.m.; dinner, 7:00 p.m.; meeting, 8:00 p.m. (Page 2)
- Nov. 13 "Reliability of Power Systems and their Components;" IAS/IECI; Nielsen's Village, 7330 W. North Ave.; social hour, 5:50 p.m.; dinner, 6:15 p.m.; meeting, 7:15 p.m.

Deadline for copy: First week of month preceding publication

Metallized Capacitors

Frank Lakowski, The Gudman Company, will describe "Metallized Capacitors for AC Use" at the October 16 meeting of the Parts, Hybrid & Packaging Group.

Perhaps the most often asked questions about metallized dielectric capacitors covers their use at power and high audio frequencies. New techniques and materials have pushed back the frontier in this important area.

Lakowski will cover basic considerations and limitations of the metallized dielectrics. He will describe present dielectric materials and point out which new materials hold promise for the future.

Dinner and meeting will be at Nielson's Restaurant, 6475 Mannheim Road, Rosemont. Social hour, 6:00 p.m.; dinner, 6:30 p.m.; meeting, 7:30 p.m. Cost of dinner is \$5.25. For reservations, call IEEE office, 263-5954.

IAS/IECI Plans Meetings

The Chicago joint chapter of IAS/IECI plans nine meetings from October 1974 through June 1975. (The first meeting of the season was held on September 11). All meetings will be held at Nielsen's Village, 7330 W. North Avenue. Social hour at 5:30 p.m.; dinner, 6:15 p.m.; meeting, 7:15 p.m. Information and reservations on any of the meetings may be obtained by calling Robert Loewe, 782-5520 between 8 a.m. and 5 p.m.

October 9—"Corrosion and Cathodic Protection," Joseph Rog, Harco Corporation.

November 13—"Reliability of Power Systems and their Components," A. D. Patton, Texas A&M College

Dec. 11, 1974—"Calibration and Maintenance of Protective Devices," A. Harry Magnuson, Multi Amp. Corporation

Jan. 8, 1975—"Hospital Electrical Systems," Kent P. Stiner, I-T-E Imperial Corporation

February 12—"Types of Power Transformers, Their Application, Standards, Ratings, Tests," Westinghouse Electric Corporation

March 12—"Electrical Safety—What Unsafe Practices Have Been Encountered," William Hogen, City of Chicago

Executive Committee to Meet

The Chicago Section Executive Committee will meet on October 1, 1974, 7:30 p.m., in Meeting Room 12, 10th Floor, Illinois Bell Telephone Company, 225 W. Randolph Street, Chicago, Ill.

All members of the Chicago Section may attend, but only voting members of the Executive Committee may vote. Enter the building and register (or call George Mack, 727-3339) at 212 West Washington Street reception desk.

Microprocessors

Fox Valley Subsection members and guests will hear a user panel on "Microprocessors" at the November 6 meeting. Users on the panel represent applications including video terminals, process control, point-of-sale terminals, and communications. After an introduction covering the "What and Why" of microprocessors, the panel will discuss current application problems and plans for the future.

Panel moderator will be Paul M. Vargo, product manager for editing systems for the MCD Graphics Division, Rockwell International Corporation. Dr. Vargo, who formerly taught in the Electrical Engineering Department, University of Oklahoma, obtained his PhD from Case Western Reserve University.

Meeting will be at Stevens Restaurant, Elmhurst, Ill. Social hour, 6:00 p.m.; dinner, 7:00 p.m.; meeting, 8:00 p.m. For reservations, call the IEEE office, 263-5954.

Broadcast and TV Receivers Group Changes Name

Reflecting the shift in interest of the members of the B&TVR Group, the IEEE Executive Committee approved the Group's petition to change the name to Consumer Electronics.

According to the new by-law establishing the name, "The field of interest of the Group shall be that which stems from the design of, manufacture of, and other

Fox Valley To Hear Organ Demonstration

The IEEE Fox Valley Subsection meeting on October 4, 1974, will be at the Glenview Country House, 1560 Waukegan Road, Glenview. Dinner will be at 7:00 p.m., followed by a demonstration at the Saville Organ Corporation, 2901 Schermer, Northbrook.

One of the controlling factors of a pipe organ is that part of its tonal qualities is determined by the characteristics of the performing area. The Saville Organ Corporation entered the electronic organ market in the mid-'60's, supplying electronic organs custom-designed to their performing environment.

Before launching the firm, Bob Saville, a retired electrical engineer, organ enthusiast, and founder of the corporation, developed a special tape recorder to

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activities related to electronic, consumer products and shall include scientific, technical, industrial, standardization or other activities that contribute to this field or utilize its techniques or products. This definition includes electronic equipment for sound reproduction, picture reproduction, and related devices normally used by the consumer for educational, informational, and leisure-time entertainment purposes."

record sounds of organ pipes. He traveled extensively, recording different pipe organs and collecting representative organ pipes. Using the recordings and pipes, he developed electronic circuits which reproduce the tonal qualities of organ pipes across their entire respective harmonic range. With the aid of his associates, he developed sound systems which could faithfully reproduce the sounds of a pipe organ.

The October 4 program will consist of an introduction at the Glenview Country House, followed by the demonstration at the Saville Corporation and an inspection of the pipe laboratory.

Make reservations by September 30 by calling 263-5954.

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Meeting Reservations

Remember that the IEEE office, (312) 263-5954, will take your meeting reservations. The best time to call is between 9:30 a.m. and 12:30 p.m. or between 2:30 p.m. and 5:00 p.m.

The meeting coordinator for any group should call and leave his number with Ollie at the office, so she can refer questions on matters other than reservations.

Change of Address

If you have moved — or are about to move — please notify the IEEE office in NEW YORK. Our SCANFAX mailing labels come from there, and we cannot update your mailing address locally in Chicago.

A change of address form is included in each issue of SPECTRUM. Your local post office will also supply you with cards; mail to Emily Sirjane, Membership Services, IEEE, 345 E. 47th Street, New York, NY 10017. Include your SPECTRUM mailing label if possible. We cannot forward this information for you, so please do not send it to the local office.

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NEC Communications/74

Thirty years ago this October, several Midwestern educators and a few leaders of the electronics industry in the Midwest brought to life a unique technical meeting called the National Electronics Conference. This first conference was held at the Medina Club of Chicago and nearby hotels, and was attended by 2,300 persons, many of whom braved long lines and inadequate accommodations to attend. The conference was founded as "a national forum on electronic developments and their application." Following that rather austere and hectic beginning, NEC grew to a nationally recognized conference and exhibition held at Chicago's McCormick Place, with hundreds of exhibitors and a substantial technical program. More than 25,000 engineers, technicians, educators, and industry leaders attended the conferences during the late '50's and early '60's.

In recent years, NEC has become somewhat more specialized, with smaller, more intimate sessions and a refined format. Through this evolution, NEC has maintained its place as the foremost annual technical conference in the Midwest. This year's conference will be held at the Chicago Regency O'Hare Hotel on October 16, 17, and 18, and features a program of substantial interest to educators, engineers, businessmen and technicians interested in electronics in general and communications in particular. NEC/74, whose theme is Communications, features 11 intensive seminars, 100 technical papers covering a wide range of topics, exhibits of the latest communications equipment, computers and instrumentation, and an industry dinner that will bring together leaders of the technical community throughout the Midwest.

The annual National Electronics Conference and Exhibition is one of several activities sponsored by the newly formed National Engineering Consortium, Inc. While electronics continues to serve as the base for NEC activities, the National Engineering Consortium directs its attention toward the advancement of the art and science of engineering and its application to the public interest. The Consortium and the National Electronics Conference are self-supporting, non-profit organizations.

The Consortium is sponsored by 13 leading Midwestern universities and has the following major objectives:

1. To contribute to the development and dissemination of engineering know-

ledge.

2. To contribute to the professional development of engineers by providing a variety of continuing educational opportunities.

3. To help assure an adequate supply of highly trained engineers through programs designed to motivate students toward engineering careers.

4. To provide a vehicle for member universities to engage in cooperative programs and activities for their mutual benefit and the benefit of engineering nationally.

5. To promote and develop cooperative programs and information interchange between technical universities and industry, government, professional societies, and the community.

Until recently, the National Electronics Conference was structured in much the same manner as are most of the large technical conferences, featuring a Technical Paper Program and exhibits. Recently, however, NEC has recognized the need for a more intensive treatment of topics of general interest than can be provided in a 30-minute paper or a session comprised of several such papers. In acknowledgement of this need, a seminar program was inaugurated and has proven to be extremely popular. This program, called the New Technology Seminar Program, provides those attending an intensive six-hour exposure to a single topic. The programs are presented by recognized industry leaders and experts in the field. Coordinated with the seminar program is a Technical Papers Program providing insight into recent developments and applications in communication and related topics. These complementary technical programs have proven to be extremely popular. They provide registrants with a broad overall perspective in a particular field and an opportunity to learn of recent developments in this and related areas.

NEC/74 will provide an opportunity for registrants to participate in one (or two) of 11 six-hour Seminars and to learn about state of the art developments and applications in a wide spectrum of communications-related topics. Considerable effort has been expended to coordinate the seminar program with the papers sessions to provide a well-rounded and in-depth view of a number of topics.

Included among the Seminar topics are Digital Electronic Switching, several sessions related to the use of Minicomputers and Microprocessors in Communications,

Mobile Communications, Satellite Communications, and a highlight session on Health Care and Biomedical Engineering.

The Technical Papers Program includes sessions on Microelectronics, Power Systems, Optical Communications, Simulation, Medical Imaging, Speech Coding and Processing, and many others, as well as a panel discussion related to Energy Policy Planning.

A social highlight of NEC/74 will be the annual communications industry dinner, scheduled for Wednesday, October 16. The principal speaker will be Dr. Edward E. David, Jr., president of Gould Laboratories and recently science advisor to the President and Director of the Office of Science and Technology. Award presentations will be made at the dinner to winners of the outstanding papers competition from NEC/73.

New products from leading manufacturers of communications equipment, computers, and instrumentation will be displayed.

For registration information, please contact the NEC office, Oakbrook Executive Plaza No. 1, 1301 West 22nd Street, Oak Brook, Illinois 60521, Telephone (312) 325-5700. Registration may be made in advance, or may be purchased on the days of the conference. Registration opens at 7:00 AM, seminars begin at 8:30 AM and Technical Papers sessions begin at 10:00 AM. Registration forms, detailed program information, and other information can be obtained from the NEC office.

12th Annual Review of Electronics

College of Engineering

University of Illinois at Urbana-Champaign
October 14-15, 1974

The College of Engineering of the University of Illinois at Urbana-Champaign is pleased to present its Twelfth Annual Review of Electronics. It is intended to be informative of recent results and be a basis for discussion. The subject matter to be presented is selected from broad areas of research activities in the Departments of Electrical Engineering, Physics, Chemistry, Computer Science, and the Materials Research Laboratory and the Coordinated Science Laboratory. The material will be presented at a level of interest for both researchers and technical management.