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CHICAGO SECTION · IEEE · INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

OCTOBER, 1973

October 16

Computer Science and the Microwave Engineer

On Tuesday, October 16, Harold E. Stinehelfer, manager of computer science at Microwave Associates, will discuss "Computer Science and the Microwave Engineer" at a joint meeting of the Microwave Theory and Techniques and Antennas and Propagation Groups.

Stinehelfer will tell how the computer may be used to solve microwave problems, make microwave measurements, and interpret the results of these measurements. He will also show slides of the latest equipment for making automatic measurements and explain ways to interpret these, using Hewlett-Packard's No. 35 pocket calculator and some simple equations.

Stinehelfer will demonstrate the transformation of real time measurements into the time domain and show how these reveal and separate connector mismatches from device characteristics. This new technique allows the microwave engineer



to separate discontinuities and identify their individual contribution to the overall measured characteristics.

Harold E. Stinehelfer received his BEE and MEE degrees from Polytechnic Insti-

(Continued on Page 2)

Wednesday, October 3

Energy Crisis '73

Is there an energy crisis '73? Find out by attending the joint meeting of the Fox Valley Subsection and the IEEE Power Engineering Society on Wednesday October 3.

The panel discussion will open with a brief synopsis by each panelist, showing how he views the energy crisis from his vantage point. Discussion by the panel and questions from the audience will follow the introductory remarks.

Panelists include: T. (Ted) R. Eck, chief economist, Standard Oil Company of Indiana; George F. Marcus, fuel agent, Commonwealth Edison Company; John G. Morris, environmental engineering consultant; and A. T. (Bud) Wulff, energy conservation engineer, Northern Illinois Gas Company.

The meeting will be held at the Spinning Wheel Restaurant, Hinsdale, Ill. Social hour, 6:00 p.m.; dinner, 7:00 p.m.; and meeting, 8:00 p.m. For reservations, call the IEEE office, 263-5954, by Friday, September 28.

CALENDAR OF EVENTS

IEEE OFFICE: 263-5954

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| Oct. 1-4 | Electrical Insulation Conference, Palmer House. Call IEEE office. |
| Oct. 3 | Joint meeting of Fox Valley Subsection & the IEEE Power Engineering Society (Page 1) |
| Oct. 6 | 1973 Treasure Hunt |
| Oct. 8-9-10 | National Electronics Conference (Page 3) |
| Oct. 9 | NEC-EMB Technical Session. (Page 3) |
| Oct. 16 | Joint meeting of Microwave Theory and Techniques & Antennas and Propagation Groups (Page 1) |
| Oct. 17 | Vehicular Technology Group Meeting (Page 3) |
| Oct. 30 | Chicago Chapter of the IEEE Power Engineering Society (Page 2) |
| Nov. 7 | Fox Valley Subsection Meeting (Page 4) |
| Nov. 8 | Reliability/Parts, Hybrids & Packaging Groups Joint meeting (Page 1) |

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patch within 24 hours of receipt
per 333,321 Postal Manual.

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Reliability of Semiconductor Devices

A panel discussion on "Reliability Considerations of Semiconductor Devices and Integrated Circuits" will be the feature of the November 8 joint meeting of the Reliability/Parts, Hybrids & Packaging Groups.

The panel will be moderated by Hugh Edfors, Victor Comptometer. Speakers include Al Tamburrino, Rome Air Development Center; Dr. T. George and Sam Carroll, Texas Instruments; Frank Moore, National Semiconductors; and Henry Buschke, Zenith Radio Corporation.

Additional data on the panel discussion and speakers biographies will appear in the November issue. For further information and dinner reservations, call the IEEE office, 263-5954. Dinner will be held at Nielsen's Restaurant, Mannheim Road, Rosemont, and will start at 6:00 p.m.

Loewe to Receive ISA Award

Robert Loewe, head of electrical specifications division, Sargent & Lundy, will receive the Instrument Society of America Distinguished Society-Service Award during the annual ISA Honors & Awards Luncheon on Tuesday, October 16, 1973.

The citation of this Award reads: In recognition of his outstanding service and contribution to the Society and its members." The Award includes a certificate and plaque.

Loewe, a senior member of IEEE as well as of ISA, is a registered Professional Engineer in Illinois, Indiana, and Wisconsin. He is editor of the IEEE Industry Application Society Transactions. Among other accomplishments, Loewe has been instrumental in adopting and applying intrinsic safety to High Energy Physics Research, especially in connection with propane and hydrogen bubble chambers. He developed the first fire prevention system for bubble chambers and targets that was 100% successful. This system used the extension of an overhead grounded cable system to provide a safe discharge location for lightning strokes and for the dissipation of electric charges in the earth from vent stacks.

Annunciators

L. R. Stensland, Sargent & Lundy, will discuss "Annunciators" at the noon meeting of the Chicago Chapter of the IEEE Power Engineering Society on Tuesday, October 30.

Meeting will be held at the Chicago Engineers Club, 314 S. Federal Street, Chicago. Lunch starts at 12:00 noon. For additional information and reservations, call the IEEE office, 263-5954, at least four days before the meeting.

Automatic EMC Instrumentation

On Tuesday, October 23, Glen Whiting, applications engineer, the Singer Company will speak to members and guests of the Electromagnetic Compatibility Group on "New Horizons in Automatic EMC Instrumentation." Whiting will also demonstrate a new family of automatic EMC test instruments, and those present will have time for "hands-on" activities with the new instruments.

Dinner and meeting will be at Menard's Black Steer Restaurant, 6446 W. North Avenue, Chicago. Social hour, 6:00 p.m.; dinner, 6:30 p.m.; meeting, 7:30 p.m. For reservations, call Howie Wolfman, 982-2240.

IEEE Revises Charter

The Institute of Electrical and Electronics Engineers, Inc. has completed the lengthy process of amending its Certificate of Consolidation. The Certificate, commonly called the "Charter," is the legal document that created IEEE as a merger of the American Institute of Electrical Engineers (AIEE) and the Institute of Radio Engineers (IRE). The amended Certificate will permit IEEE to engage in programs concerning the professional activities of its members.

This change enables IEEE to engage in professional activities, conduct and publish surveys and reports of professional concern, collaborate with public bodies and other societies for the benefit of the engineering profession as a whole, and establish standards of qualification and ethical conduct.

Computer Science and the Microwave Engineer

(Continued from Page 1)

tute of Brooklyn in 1948 and 1951, respectively. From 1948 to 1953, he was with the radio research division of Western Union Telegraph Company. From 1953-55, he was chief engineer of Frequency Standards, Inc., and from 1955-56, he was a member of the technical staff of Bell Telephone Laboratories. In 1966, he joined the semiconductor division of Microwave Associates, Inc., as a senior engineer. He has been manager of the computer science department at Microwave Associates since 1969.

The meeting will be held at Menard's Black Steer Restaurant, 6446 W. North Ave., Chicago, Ill. Social hour, 6:00 p.m.; dinner, 6:30 p.m.; meeting 7:30 p.m. For reservations, call the IEEE office, 263-5954, by October 14.

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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 Judy 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.

Communications is NEC/73 Conference Theme

The entire 1973 National Electronics Conference, at the Hyatt Regency O'Hare Hotel on October 8, 9 and 10, will focus on COMMUNICATIONS.

A unique continuing education program has been developed by NEC to bridge the learning gap which technologists and managers face as a result of rapid changes in the engineering art. A carefully organized NEW TECHNOLOGY program has been developed by NEC. These six hour, two day seminars depict the latest significant research and application results from the subject areas presented. Lectures are internationally recognized authorities.

COMMUNICATIONS/73 SEMINARS

1. ELECTRONIC SWITCHING SYSTEMS — overall review of time division; multiplex switching processes.
2. SATELLITE COMMUNICATIONS SYSTEMS — application of satellite communications; systems for domestic communications.
3. MOBILE RADIO COMMUNICATIONS — developments in mobile radio communications; domestic communications; improved mobile radio for common carriers; bell boy paging set; police radio systems.
4. NEW DEVELOPMENTS IN TELEPHONE TRANSMISSION DESIGN, TESTING AND MAINTENANCE — New systems for automatic transmission, testing of telephone circuits; testing of facilities for the nationwide digital data system.
5. ECONOMICS IN ENGINEERING — telephone industry plant extension engineering; methods and techniques for engineering cost studies.
6. ANALOG TO DIGITAL AND DIGITAL TO ANALOG CONVERTERS — Active Filter Design Tutorial Seminar.
7. NEW ELECTRONICS IN THE TRANSPORTATION INDUSTRY — Electronic developments needed by the automobile industry, electronic control for modern passenger trains.
8. MINICOMPUTERS — applications software and fundamentals.
9. MINIATURE CALCULATORS — Review of current products and applications.

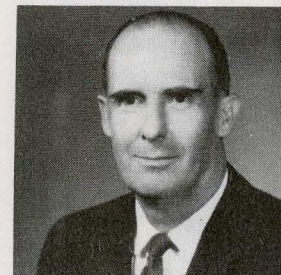
For Meeting Notices

... that people will read, be sure to include a paragraph telling why topic is important. A short biography of the speaker and a photograph also make people read your meeting notice. Get this to the IEEE office, by the first of the month preceding date of issue.

Spectrum Management in Chicago

The newly revitalized Vehicular Technology Group will hold their October 17 meeting at Henrici's Restaurant, Mannheim & Higgins Road, Rosemont. Topic of meeting will be the "FCC's Approach to Spectrum Management in Chicago. Cocktails will be at 6:30, dinner at 7:00. A tour of the FCC facilities will follow the meeting. For further information, call IEEE office, 263-5954.

Frank M. Scott Appointed Harza Associate



Frank M. Scott, past chairman of Chicago Section IEEE and also past president of Western Society of Engineers, has been appointed an Associate and Acting Director, Power Management Group, of Harza Engineering Company, Consulting Engineers, Chicago. Scott was formerly Head of the Electric Utilities Division. Prior to joining Harza in 1968, he was Manager of the West Central Area for the Utility Industry with Allis-Chalmers.

As Acting Management Group Director for Management Group I, USA Power, he will be responsible for the management of Harza's services to the electric power industry in the United States.

ICC'74 Call for Papers

The 1974 IEEE International Conference on Communications (ICC'74) will be held at the Hotel Leamington in Minneapolis, Minnesota, June 17-19, 1974. The theme will be "Communications - Providing Intellectual Bridges for a Shrinking World." Original papers, not submitted elsewhere, are invited, but not limited to, the following technical areas: computer and data communications systems; communication switching; radio and space communications; communication theory; communication systems; optical and millimeter-wave technology; wire transmission systems; satellite communications; communication electronics; and signal processing.

Prospective authors are requested to

Engineering in Medicine & Biology

In keeping with the theme of this year's NEC, an EMB technical session has been scheduled to present selected topics in biomedical engineering, emphasizing applications which involve communications:

Tuesday morning, October 9, 1973 10:30 AM, Delta Room

Session 8: ENGINEERING IN HEALTH CARE DELIVERY

Co-Chairmen: D. Krucoff, Hines VA Hospital, and E. E. Brueschke, IIT Research Institute

DIGITAL COMMUNICATION FOR A PHYSIOLOGICAL DATA ACQUISITION SYSTEM

R. L. Stout, H. U. Wessel, and M. H. Paul, Northwestern University Medical School

BIOMEDICAL ENGINEERING IN THE VETERANS ADMINISTRATION

D. A. Simmons, Veterans Administration

MEDICAL DECISION PROCESSES IN HEALTH CARE

J. Levett, and J. Dow, Rush-Presbyterian St. Luke's Hospital

COMMUNICATION CHANNEL REQUIREMENTS FOR HEALTH CARE DELIVERY

J. H. Maness, E. E. Brueschke, and B. Ebstein, IIT Research Institute

A COMPUTER CANCER INFORMATION NETWORK

L. V. Ackerman, and G. Gottlieb, Rush-Presbyterian St. Luke's Hospital

This program is timely for all IEEE members, but should be of particular interest to G-EMB members. Plan to attend this important session at NEC/73.

send five (5) clear copies, in English, of both the paper and a one-page summary of the paper to: Dr. M. S. Ulstad, ICC'74, P.O. Box 35366, Minneapolis, Minnesota 55435. The copies must be received by December 17, 1973.

All authors whose papers are accepted will be required to prepare a camera-ready manuscript based on a five-page maximum length, double-column format similar to that used in the ICC'72 Conference Record.

The author's name, complete return address and telephone number should appear on the summary and the first page of the paper. Additional pages, illustrations or photographs should bear the author's name and the title of the paper.

At EIC . . .



Townsend

Robert Townsend, former chairman and chief executive officer, Avis Corporation, and author of "Up The Organization" will be featured speaker at the Electrical/Electronics Insulation Conference (E.I.C.) Marketers' Luncheon, October 1, at the Palmer House Hotel. Townsend's talk, titled "Further Up The Organization" will be given to an audience of professional personnel from engineering, design, production and purchasing and management of companies engaged in the manufacture of electrical and electronic products. Nationally known for his book, Townsend has held various executive positions in American business. The E.I.C. Conference will be Sept. 30-Oct. 4, 1973, and will be highlighted by workshops and approximately 100 papers.



Goldmark

Dr. Peter Goldmark, Chairman and President, Goldmark Communications

Corporations and former Director, C.B.S. Laboratories will receive the Golden Omega Award presented by the Electrical/Electronics Insulation Conference (E.I.C.). Holder of some 160 patents and widely known for his creation of the long-playing phonograph record, Dr. Goldmark will receive the Golden Omega Award at the Awards luncheon Oct. 3 during the E.I.C. Conference Sept. 30-Oct. 4, at the Palmer House Hotel. One of industry's most coveted awards, the Golden Omega presented to Dr. Goldmark also recognizes his contributions of the first practical color television system and electronic video recording. Fellow of the IEEE, Dr. Goldmark is a Poynter Fellow of Yale University and Visiting Professor of Medical Electronics at the University of Pennsylvania and of Communications Technology at Fairfield University.



Reischauer

Dr. Edwin O. Reischauer, former United States Ambassador to Japan (1961-1966) under Presidents Johnson and Kennedy will address the Electrical/Electronics Insulation Conference Awards Luncheon, October 3, at the Palmer House Hotel, Chicago. Now a Professor of Japanese History at Harvard, Dr. Reischauer is the author of "Beyond Vietnam," "The U.S. And Asia," "Wanted," and "Asian Policy."

The theme of his address to the E.I.C. Awards Luncheon will be "Trade and Our Future Relationship with Asia."

Tour of WGN

The November 14th meeting of the Northwest Subsection will feature a tour of the WGN Continental Broadcasting Company facilities at 2501 Bradley Place, Chicago.

Social hour at 6:00 p.m.; dinner at 6:45 p.m. at a nearby restaurant. Meeting and tour at 8:00 p.m. at the WGN Broadcasting Center.

Because of limited facilities, only those who have made previous reservations for the meeting and tour can be accommodated. No reservations will be accepted after November 1st. Call the IEEE office, 263-5954 for reservations.

Quadraphonic Systems

Are you ready for 4-channel stereo? Find out more about it at the November 7 meeting of the Fox Valley Subsection. G. E. Owen, Jr., Motorola, Corp., will discuss the subject. Meeting will be at the Back Door Restaurant, West Chicago, Ill. Social hour, 6:00 p.m.; dinner, 7:00 p.m.; meeting, 8:00 p.m. For additional information and dinner reservations, call the IEEE office, 263-5954, by November 3.

Panel to Discuss Electric Vehicles

"Electric vehicles — When, Where, If" will be the topic of a panel discussion at the fall meeting of the IEEE Industry Applications Society on October 11 in the Pfister Hotel in Milwaukee, Wisconsin. Discussion will be concerned with electric drive vehicles especially for off-highway usage such as recreation vehicles, mining and agricultural equipment and similar vehicles operating over land. Panel moderator is John A. Kirtland, senior staff electrical engineer, FMC Corp.

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