

Institute News and Radio Notes

W. L. Everitt Receives IRE Medal of Honor

Dr. William L. Everitt, renowned radio authority and Dean of the College of Engineering, University of Illinois, has been named the recipient of the Institute of Radio Engineers Medal of Honor for 1954, the highest annual technical award of the radio engineering profession. The award was made "for his distinguished career as author, educator, and scientist; for his contributions in establishing electronics and communications as a major branch of electrical engineering; for his unselfish service to his country; for his leadership in the affairs of the Institute of Radio Engineers."

Dr. Everitt is a Fellow, Director and Past President of the Institute of Radio Engineers.

The presentation of the Medal of Honor will be made during the annual banquet at the Waldorf-Astoria Hotel, New York, N. Y., on March 24, 1954 during the Institute's National Convention.

Calendar of COMING EVENTS

Conference on Radio Meteorology, University of Texas, Austin, November 9-12

Fourth Annual Meeting of the IRE Professional Group on Vehicular Communications, Hotel Somerset, Boston, Mass., November 12-13

IRE Kansas City Section Annual Electronics Conference, Hotel President, Kansas City, Mo., November 13 and 14

Joint IRE-AIEE 6th Annual Conference on Electronic Instrumentation in Medicine and Nucleonics, New York City, November 19-20

IRE PGME Symposium on Electronic Plethysmography, University of Buffalo Medical School Auditorium, Buffalo, N. Y., December 10-11.

IRE-IAS-ION-RTCA Conference on Electronics in Aviation, Astor Hotel, New York City, January 27.

1954 Sixth Southwestern IRE Conference and Electronics Show, Tulsa, Okla., February 4-6

1954 IRE National Convention, Waldorf Astoria Hotel and Kingsbridge Armory, New York, N. Y., March 22-25

Society of Motion Picture & TV Engineers, 75th Annual Convention, Hotel Statler, Washington, D. C., May 3-7

IRE-AIEE-IAS-ISA National Telemetering Conference, Morrison Hotel, Chicago, Ill., May 24-26

1953 STUDENT BRANCH AWARDS

The annual IRE Student Branch Awards for 1953, as well as the name of the Student Branch in which the student winner was enrolled and the local Section giving the award are listed below. This is the second year that these awards have been made by the IRE Sections under a plan established in 1952 by the IRE Board of Directors.

<i>Student Branch</i>	<i>Student Branch Award Winner</i>	<i>Section</i>
University of Akron (Joint Branch)	Vincent J. DiCaudo	Akron
University of Arkansas	Clarence R. Alls	Kansas City
University of British Columbia (Joint Branch)	Harold Palmer	Vancouver
Polytechnic Institute of Brooklyn (Joint Branch)	Kenneth C. Kelly	New York
Carnegie Institute of Technology (Joint Branch)	William M. Kaufman	Pittsburgh
Clarkson College of Technology	Harold R. Ward	Syracuse
Columbia University (Joint Branch)	Lewis L. Haring	New York
Cooper Union (Joint Branch)	Israel Kalish	New York
Cornell University (Joint Branch)	Lester F. Eastman	Syracuse
University of Dayton	Donald A. Bange	Dayton
University of Detroit (Joint Branch)	Jerome T. Lienhard	Detroit
Illinois Institute of Technology	Charles M. Knop	Chicago
University of Illinois (Joint Branch)	John L. Muerle	Chicago
Johns Hopkins University (Joint Branch)	Francis J. Witt	Baltimore
University of Kansas (Joint Branch)	Melvin Spry	Kansas City
Kansas State College	Bruce W. Bell	Kansas City
Louisiana State University (Joint Branch)	Luong Van Be	Dallas-Ft. Worth
University of Louisville	Raymond F. Irby	Louisville
Manhattan College (Joint Branch)	Alfred E. Diebold	New York
Michigan State College (Joint Branch)	Lawrence M. Scholten	Detroit
University of Michigan (Joint Branch)	Michael E. Mitchell	Detroit
Missouri School of Mines & Metallurgy (Joint Branch)	Charles C. Poe	St. Louis
Newark College of Engineering	Ernest A. Preuss	New York
College of the City of New York	Norman Nesenoff	New York
New York University (Joint Branch)	A. W. Charmatz	New York
Northwestern University (Joint Branch)	Reinhold F. Nylander	Chicago
University of Notre Dame (Joint Branch)	Edward R. Byrne	Chicago
Pennsylvania State College (Joint Branch)	Richard A. Santilli	Emporium
University of Pittsburgh	Donald K. Bauerschmidt	Pittsburgh
Pratt Institute	Robert C. Wagner	New York
Princeton University (Joint Branch)	Thomas C. Henneberger, Jr.	Princeton
Rensselaer Polytechnic Institute (Joint Branch)	Herbert L. Thal, Jr.	Schenectady
Rutgers University (Joint Branch)	Arthur W. Crooke	Princeton
Seattle University	Arthur J. Burgh	Seattle
Southern Methodist University (Joint Branch)	Carl M. Schwalm	Dallas-Ft. Worth
University of Syracuse (Joint Branch)	Paul Dodge	Syracuse
University of Toronto (Joint Branch)	David E. Noble	Toronto
Tulane University (Joint Branch)	Frank X. Remond	Dallas-Ft. Worth
Utah State Agricultural College	Alvin G. Laird	Salt Lake City
University of Utah (Joint Branch)	Ferril A. Losee	Salt Lake City
University of Washington (Joint Branch)	Charles R. Bryant	Seattle
Wayne University (Joint Branch)	Clifford S. Winters	Detroit

Professional Group News

ULTRASONICS ENGINEERING

The Professional Group on Ultrasonics Engineering conducted a panel on ultrasonics at the National Electronics Conference, held in Chicago at the Hotel Sherman on September 28-30.

The following papers were presented: "A Non-contact Microdisplacement Meter," by H. M. Sharaf; "Ultrasonics and Medicine," by J. F. Herrick; "Ultrasonics and Industry," by O. Mattiat; "Characteristics of Ultrasonic Delay Lines Using Quartz and Barium Titanate Ceramic Transducers," by J. E. May, Jr.; and "A Temperature Controlled Ultrasonic Solid Acoustic Delay Line," by E. S. Pennell.

Mr. Morris Kenny of the Naval Ordnance Laboratory, White Oak, Maryland, has been appointed the new Secretary of the IRE Professional Group on Ultrasonics Engineering.

VEHICULAR COMMUNICATIONS

The Fourth Annual Meeting of the Professional Group on Vehicular Communications will be held November 12 and 13, at the Hotel Somerset, Boston, Mass.

The theme of this meeting will be design, planning, and operation of mobile communication systems. Several papers have been offered. For example, RCA and Oklahoma Natural Gas Co. have offered a paper on "Integration of Microwave and Mobile Systems"; George Doddrell of REA has offered a paper on "Radio Systems for Rural Power Companies"; F.C.C. has offered a paper on "Railroad Communication Companies"; New England Telephone & Telegraph has offered a paper on "Maintenance Problems of Mobile Equipment"; Bill Claypoole of U.S.D.A. has offered a paper on "Systems, Designs and Operations for Forestry"; Philadelphia Electric has offered a paper on "Planning and Engineering Mobile Communication Systems"; and Motorola, Inc. has offered a paper on "Portable Communication Systems."

The Executive Committee of the IRE has recently approved the establishment of the Boston Chapter of the Professional Group on Vehicular Communications. Robert Lewis and S. M. Wolf will act as Interim Chairman and Secretary, respectively.

MEDICAL ELECTRONICS

The Sixth Annual Conference on Electronic Instrumentation and Nucleonics in Medicine, sponsored jointly by the IRE Professional Group on Medical Electronics and the American Institute of Electrical Engineers, will be held on November 19 and 20 at the Hotel New Yorker, New York, N. Y.

On Thursday, November 19, papers will be given on the following subjects: "Multi-channel Electromyography-Instrumentation and Application," John F. Davis, Allan Memorial Institute, McGill University, Montreal Canada; "A Stimulus Monitor—Its Use in Electrophysiology," Hal C. Becker, Tulane University; "Application of Positron Emitting Isotopes to the Localization of Brain Tumors," G. L. Brownell, Massachusetts General Hospital, Boston, Mass.; The "Application of Ultra-Sonic

Mechanical Waves to the Visualization of Normal Soft Tissue Structures and Disease Processes, Including Cancer," Douglas H. Howry, Veterans Administration, Fort Logan, Colo.; "Isodose Plotting Instrument for X-Rays," John S. Laughlin, Memorial Center, New York, N. Y.; "The X-Ray Microscope," S. P. Newberry, General Electric Company.

The Thursday evening session will be devoted to the discussion of the application of motion-picture technique to the field of fluorography, which has produced the new field of "cinelfluorography" providing the diagnostician with a new tool capable of recording the dynamics of the bone structure and various organs of the body. Sydney A. Weinberg of the University of Rochester will conduct a semi-popular type of session on the subject. He will discuss the three-dimensional techniques in use at his institution and will moderate a panel discussion on cinelfluorography. Material will be introduced on the new image brightness intensifiers and their impact on the field. Motion pictures will be included describing the work of the Westinghouse Electric Corp. in the field of image intensification. There will be an opportunity for audience participation in the session since it is anticipated that many will have questions for the panel to answer in this stimulating new field.

Papers to be heard at the morning session, Friday, November 20, are "A Method for the Exact Determination of Volume Concentration and Non-conducting Particles in Conducting Solvent," Herman P. Schwan and Theodore P. Bothwell, Moore School of Electrical Engineering, University of Pennsylvania; "An Instrument for Rapid Dependable Determination of Freezing Point Depression," Robert L. Bowman, National Institute of Health, Bethesda, Md.; "Blood Serum Analysis by a Quantitative Paper Electrophoresis Apparatus," E. L. Durrum and S. R. Gilford, Army Medical Center and National Bureau of Standards, Washington, D. C.; "An Electrical Method for Determining Action Spectra of CO-Inhibited Respiration," L. R. Caster and Britton Chance, Johnson Foundation for Medical Physics, Philadelphia, Pa.; "An Infra-red Analyzer for Continuous Respiratory CO₂ Analysis," Max D. Liston, Liston Becker Co., Stamford, Conn. At the afternoon session, papers will be heard on: "Physiological Effects of Condenser Discharge with Application to Tissue Stimulation and Ventricular Defibrillation," R. S. Mackay, University of California at Berkeley; "A Dynamic Heart-Body Simulator," E. Frank, Moore School of Electrical Engineering, University of Pennsylvania; "Application of Analogue Computer Techniques to Biological Problems," E. P. Radford, Harvard University; "A Method of Determination of Dispersion of Ultrasonic Velocity in Liquids," Edwin L. Carstensen, Moore School of Electrical Engineering, University of Pennsylvania.

The Group will also sponsor, with the Medical and Electrical Engineering Schools of the University of Buffalo, a symposium on electronic plethysmography, to be held in

the auditorium of the new University of Buffalo Medical School, December 10 and 11. The keynote speaker will be Dr. Jan Nyboer, of Dartmouth College. The Buffalo-Niagara Chapter, under the chairmanship of Wilson Greatbatch, is handling local arrangements. A complete program will appear in the December issue.

METEOROLOGICAL FACTORS IN RADIO-WAVE PROPAGATION

The Physical Society of England has available copies of the proceedings of a joint conference by the Royal Meteorological Society and the Physical Society held at the Royal Institution in London on April 8, 1946.

Twenty papers on the subject of "Meteorological Factors in Radio-Wave Propagation" were read at the conference and are included in the report.

Reports may be secured by writing to the following address: The Physical Society, 1 Lowther Gardens, Prince Consort Rd., London, S.W. 7, England, for 24 shillings, inclusive of postage, or 15 shillings each for orders of 12 or more.

SPECIAL PROCEEDINGS ISSUE ON COLOR TELEVISION

A special and greatly expanded issue of the PROCEEDINGS devoted exclusively to the subject of Color Television will be published in January 1954. The issue will contain several hundred pages of important contributions including the technical monographs of the National Television System Committee, reports of various NTSC panels and officials, and papers presenting the latest developments in this timely subject.

Single copies of the January 1954 issue may be purchased at \$3.00 per copy. IRE members may purchase one extra copy at \$1.25. Public libraries, colleges, and subscription agencies may order copies at the special rate of \$2.40. For copies shipped outside of the United States and Canada, there is an additional charge of \$0.25 for mailing. You are urged to send your order in promptly with your remittance to the Institute of Radio Engineers, 1 East 79th Street, New York 21, N. Y.

The second Color Television issue combined with the first Color Television issue published in October 1951 will form a complete bibliography of major historical importance. Copies of the first Color Television issue are still available at the following prices: \$1.00 for IRE members; \$2.25 for nonmembers.

IRE People

John L. Drew (M'45), electrical engineer in the Engineering and Technical Division of the War Department, Washington, D. C., passed away this past winter.

Born in Pennsylvania on June 12, 1888, Mr. Drew received the B.S. degree in electrical engineering from Villanova College in 1911. He also held a Certificate in the Elements of Radio Engineering from George Washington University received in 1942.

Mr. Drew was a student engineer with the Philadelphia Electric Co. and the General Electric Co. in Lynn and Pittsfield, Mass., from 1911 to 1917. He was an associate engineer in the design, manufacturing and application of electrical machinery when he joined the U. S. Corps of Engineers in 1917, serving until 1920 in the operation of searchlights for anti-aircraft defense.

From 1920 to 1927 Mr. Drew was associated with the Gray & Davis Corporation and the American Bosch Magneto Corporation as a research and experimental engineer working on the design, manufacturing and application of automotive, starting, lighting, and ignition equipment.

Following these associations Mr. Drew did sales promotion until 1939. After a two-year illness he joined the Office of the Chief Signal Officer in the War Department, supervising research and development of radio communication equipment. In 1945 he transferred to the Engineering and Technical Division as an electrical engineer.

John Ruze (S'39-A'40-M'46) has been appointed director of the Gabriel Laboratories, Needham Heights, Mass.



JOHN RUZE

Since 1946 Dr. Ruze has been with the Air Force Cambridge Research Center, specializing in microwave optics. He had been assistant chief of the Antenna Laboratory; more recently he was with the Radar Laboratory.

Dr. Ruze was born in New York City on May 24, 1916. He received the B.S. degree in electrical engineering from the College of the City of New York in 1938, the M.S. from Columbia University in 1940, and the Sc.D. from Massachusetts Institute of Technology in 1952.

Previous to joining the Air Force Cambridge Research Center, from 1940 to 1946

Dr. Ruze was with the Signal Corps Engineering Laboratories, where he headed the antenna design section of the Evans Signal Laboratory after 1942. Here he directed the development and design of radar and IF antenna systems.



Elliot Mehrbach (M'44) has been appointed chief engineer of the Maryland Electronic Manufacturing Corp. of College Park, Md.



E. MEHRBACH

Previously, Mr. Mehrbach had been with Allen B DuMont Labs., Inc. since 1950 as project engineer in charge of the transmitter section in the Research Division, where he was responsible for much of the uhf television transmitter development, including a commercial 5KW transmitter and a low power experimental station now operating as KE2XDR in New York City.

Mr. Mehrbach was born in New York City in 1916. He received the B.S. degree in electrical engineering from the Newark College of Engineering in 1938.

From 1938 to 1942 Mr. Mehrbach was a radio engineer for Federal Telegraph Co., Newark, N. J., where he worked on the design and development of air navigation aids and miscellaneous transmitting equipment. He then joined the J. H. Bunnell and Co., where he later became assistant chief radio engineer. He was a project engineer with Radio Receptor Co. and the Curtiss Wright Co. before going to the DuMont Labs.

Mr. Mehrbach is a member of Tau Beta Pi.



John H. Howard (SM'50), senior research engineer with Burroughs Corporation, Philadelphia, has been elected chairman of the Joint Computers Committee of the AIEE, IRE and Association for Computing Machinery; also chairman of the Professional Group on Electronic Computers.

Before joining Burroughs Mr. Howard had his own consulting firm. During 1949 he was a senior project engineer on a special study project with Sperry Gyroscope Co.

Mr. Howard was born on November 14, 1913, in Topeka, Kan. He received the B.S. degree in electrical engineering from Kansas State College in 1935 and the M.S. in electrical engineering from Massachusetts Institute of Technology in 1939. From 1935 to 1942 he was a staff member of the electrical engineering department of MIT, working on cinema integrator, development of a rapid selector, and in charge of a NDRC project. He then became a special consultant on Navy development and operational work. Until 1946 he was on active duty with the Navy, and received the Legion of Merit.

From 1946 to 1948 Mr. Howard, as one of the founding members, was director of de-

velopment of the Engineering Research Associates, St. Paul, Minn.

John E. Gorham (A'42-M'46-SM'49), chief of the Thermionics Branch of the Signal Corps Engineering Laboratories, Fort Monmouth, N. J., died recently.

As chief of the Evans Signal Laboratory Dr. Gorham was responsible for the planning and directing of research, design, development, construction, standardization, and qualification testing of electron tubes and solid-state devices for the Department of the Army, and of the Air Force.

Dr. Gorham was born on November 11, 1911, in Moline, Ill. He received the B.S. and M.S. degrees from Iowa State College in 1933 and 1934. He received his Ph.D. from Columbia University in 1938, having been a teaching assistant in the physics department since 1934.

In 1939 and 1940, Dr. Gorham was associated with Hawley Products Co. of St. Charles, Ill., as a loudspeaker design engineer, with Belmont Radio Co. of Chicago, Ill., where he was concerned with the designing, setting up and maintenance of production test equipment for home receivers, and the Continental X-Ray Corp. of Chicago, where he designed high-voltage industrial X-ray equipment, including transformers and switching gear.

In 1940 Dr. Gorham joined the U. S. Signal Corps Engineering Laboratories as an associate physicist in the Engineering Branch, serving as chief of the circuit subsection, where he developed modulator circuits to test developmental uhf transmitting tubes. In 1942 he became chief of the special components subsection, being responsible for radar development of modulators, transmitters, and indicator circuits. He then became chief of the vacuum tube development section of the Thermionics Branch, where he was responsible for all vacuum tube development work for the Signal Corps, before attaining his position as chief of the Branch.

Dr. Gorham was the author of many technical papers and held a number of patents dealing primarily with electron tubes. He served on many military and professional committees dealing with electron tubes and solid-state devices.

Dr. Gorham was a member of the Advisory Council for the Electrical Engineering Department of Princeton University, Delta Upsilon, Sigma Xi, Phi Kappa Phi, Pi Mu Epsilon, Delta Sigma, and the Armed Forces Communications Association.