

## PUBLICATIONS AND REPORTS

### MEETING PAPERS PRESENTED

I.R.E. National Convention  
March 23-26, 1953, New York City, New York

- A. D. Berk, B. Lax: Cavities with Complex Media  
B. Lax, A. D. Berk: Resonance in Cavities with Complex Media  
R. E. Scott, R. H. Blanchard: An Iterative Method of Network Synthesis

American Physical Society Meeting  
March 26-28, 1953, Durham and Chapel Hill, North Carolina

- J. G. King, V. Jaccarino: The Hyperfine Structure and Nuclear Moment Ratios of the Stable Bromine Isotopes

Thirteenth Annual Conference on Physical Electronics  
March 26-28, 1953, M.I.T. Cambridge, Massachusetts

- S. Aisenberg: Ionization Gauge Control Circuit  
W. Grattidge: Conduction and Thermo-Electric Processes in Silver Chloride

Annual Meeting of the American Academy of Neurology  
April 9-11, 1953, Chicago, Illinois

- W. S. McCulloch: What the Electroencephalogram Can Never Show

Worcester Foundation for Experimental Biology  
April 20, 1953, Shrewsbury, Massachusetts

- W. S. McCulloch: Carbohydrate Studies of Central Nervous System Functions – in Health and Disease

U.R.S.I.-I.R.E. Joint Meeting  
April 27-30, 1953, Washington, D.C.

- S. J. Fricker: Methods of Sharp Ionized Layer Formation  
F. M. Reza: On the Structure of Driving-Point Impedances – RLC Canonical Forms

American Physical Society Meeting  
April 30-May 2, 1953, Washington, D.C.

- C. E. Chase, Jr.: Ultrasonic Measurements in Liquid Helium  
R. T. Daly, Jr., J. R. Zacharias: Doppler Effect in the Atomic Beam Magnetic Resonance Method  
J. G. King, H. H. Stroke, V. Jaccarino: The Hyperfine Structure of Iodine  
D. H. Rogers, M. A. Herlin: Thermomechanical Effect in Liquid Helium II to 0.9°K

MEETING PAPERS PRESENTED (continued)

P. Tate, M. W. P. Strandberg: Stark Effect in High-Temperature Microwave Spectroscopy

S. Waldron, M. A. Herlin: Measurement of Thermal Diffusivity of Magnesium at Low Temperatures by Variable State Techniques

Boston Society of Psychiatry and Neurology  
May 21, 1953, Boston, Massachusetts

W. S. McCulloch: Studies of Carbohydrate Metabolism and Regulation in Health and Disease of the Central Nervous System (invited paper)

JOURNAL ARTICLES ACCEPTED FOR PUBLICATION

L. B. Arguibau: Frequency Modulation (J. Madras Inst. Tech.)

R. B. Adler, S. J. Fricker: Notes on the Flow of Scheduled Air Traffic (J. Roy. Aeronautical Soc.)

Y. Bar-Hillel: Some Linguistic Problems Connected with Machine Translation (Phil. Sci.)

Y. Bar-Hillel: Machine Translation (Computers and Automation)

Y. Bar-Hillel: On Recursive Definitions in Empirical Sciences (Proc. Eleventh International Congress of Philosophy)

E. C. Cherry: Some Experiments on the Recognition of Speech, with One and with Two Ears (J. Acoust. Soc. Am.)

H. H. Cross: The Design of a Very High Frequency Superheterodyne Tuning Head (T.V. and Radio Eng.)

L. Gould, S. C. Brown: Methods of Measuring the Properties of Ionized Gases at High Frequencies. IV. A Null Method of Measuring the Discharge Admittance (J. Appl. Phys.)

R. M. Howe: Probe Studies of Energy Distributions and Radial Potential Variations in a Low-Pressure Mercury Arc (J. Appl. Phys.)

R. Duncan Luce: Networks Satisfying Minimality Conditions (Am. J. Math.)

B. Mandelbrot: Une Théorie Statistique de la Structure des Langues (Word)

R. A. Paananen: A Receiver Design for Rejecting Interference (T.V. and Radio Eng.)

L. Weinberg, L. G. Kraft, Jr.: Experimental Study of Nonlinear Devices by Correlation Methods (Proc. I.R.E.)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

F. Bitter, H. Plotkin, B. Richter, A. Teviotdale, J. E. R. Young: A "Magnetic Scanning" Method for Investigating Hyperfine Structure and Isotope Shift. Application to Mercury (Phys. Rev.)

D. W. Posener, M. W. P. Strandberg: Microwave Spectrum of HDO (J. Chem. Phys.)

TECHNICAL REPORTS PUBLISHED

(The technical reports listed here may be obtained from  
the Document Office, 20-B-221, Research Laboratory  
of Electronics, Massachusetts Institute of Technology,  
Cambridge 39, Massachusetts.)

- No. 153 S. J. Mason: Feedback Theory. I. Some Properties of Signal Flow Graphs
- No. 232 A. Tonning: Propagation of an Electromagnetic Wave Along a Helix Surrounded by a Resistance Sheath
- No. 249 E. J. Angelo: An Electron-Beam Tube for Analog Multiplication

