

PUBLICATIONS AND REPORTS

MEETING PAPERS PRESENTED

Veterans Administration Hospital
March 18, 1954, Northampton, Massachusetts

W. S. McCulloch, The carbohydrate story in the central nervous system.

IRE National Convention
March 22-25, 1954, New York

R. M. Fano, Information theory – past, present, and future.

R. E. Scott, N. DeClaris, An iterative method for R-C ladder network synthesis.

14th Annual Conference on Physical Electronics
March 25-27, 1954, M.I.T.

D. H. Dickey, Helium clean-up in the modified Bayard-Alpert ionization gauge.

J. M. Houston, A photometric measurement of field emission.

A. R. Hutson, Energy analysis of thermionic emission from a single crystal of tungsten.

H. Shelton, L. D. Smullin, Emission from hollow internally coated cathodes.

General Science Seminar
March 26, 1954, Brandeis University, Waltham, Massachusetts

W. A. Rosenblith, Auditory psychophysics.

Medical School
March 31 and April 3, 1954, University of Washington, Seattle

W. S. McCulloch, Some aspects of the mind.

W. S. McCulloch, Current neurophysiological studies at the Research Laboratory of Electronics: inhibition in afferent neurons.

Crease Research Unit
April 5, 1954, University of British Columbia, Vancouver

W. S. McCulloch, Neuromechanisms responsible for mental activity.

Northeast Conference on the Teaching of Foreign Languages
April 9-10, 1954, Brown University, Providence

V. H. Yngve, A new type of language test.

38th Annual Meeting, Federation of American Society for Experimental Biology
April 11-16, 1954, Ambassador Hotel, Atlantic City

J. Y. Lettvin, P. D. Wall, B. Howland, W. S. McCulloch, W. H. Pitts, Inhibition of impulses travelling in the primary afferent dorsal column fibres of cat spinal cord.

W. H. Pitts, W. S. McCulloch, P. D. Wall, J. Y. Lettvin, B. Howland, Maps derived by bipolar microelectrode stimulation within the spinal cord.

MEETING PAPERS PRESENTED (continued)

Colloquium, Physics Department
April 12, 1954, Brown University, Providence

C. E. Chase, Some recent experiments on liquid helium.

Symposium on Information Networks, Microwave Research Institute
April 12-14, 1954, Polytechnic Institute of Brooklyn

P. Elias, Optical systems as communication channels.

R. M. Fano, Information theory and generalized networks.

D. A. Huffman, Information conservation and sequence transducers.

Y. W. Lee, On Weiner filters and predictors.

W. A. Rosenblith, Electrical responses from the auditory nervous system.

IRE, Connecticut Valley Section
April 15, 1954, Storrs, Connecticut

E. A. Guillemin, Time and frequency domain interrelationships.

Conference for Visual Research Specialists
April 20, 1954, Nela Park, Cleveland

W. S. McCulloch, Central pathways mediating our response to light.

Joint Meeting, American Academy of Neurology and American League Against Epilepsy
April 26-May 1, 1954, Washington, D. C.

A. M. Andrew, Phase measurement in E.E.G.

American Physical Society
April 29-May 1, 1954, Washington, D. C.

K. S. W. Champion, S. C. Brown, The phenomena of plasma resonance.

C. F. Davis, Jr., M. W. P. Strandberg, Paramagnetic resonance absorption in ammonium chrome alum.

M. B. Palma, M. U. Palma, D. Palumbo, Paramagnetic resonance absorption of $\text{VO}_2 \cdot 5\text{H}_2\text{O}$.

M. Peter, M. W. P. Strandberg, Microwave spectrum of OCS.

I. H. Solt, M. W. P. Strandberg, Conduction electron spin resonance absorption in sodium.

M. W. P. Strandberg, M. Tinkham, Effects of the deviation of O_2 from Hund (b).

M. Tinkham, M. W. P. Strandberg, Selection rules in the microwave magnetic resonance spectrum of oxygen.

Annual Round Table Meeting on Linguistics and Language Teaching,
Institute of Languages and Linguistics
April 30-May 1, 1954, Georgetown University, Washington, D. C.

M. Halle, Why and how do we study the sounds of speech?

MEETING PAPERS PRESENTED (continued)

IRE (North Atlantic section) New England Radio Engineering Meeting
May 7-8, 1954, Boston

E. A. Guillemin, The problem of time domain synthesis.

IRE (Boston section) Professional Group on Electronic Computers
May 27, 1954, Harvard University, Cambridge

W. S. McCulloch, How information is coded in brains.

JOURNAL ARTICLES ACCEPTED FOR PUBLICATION

(Reprints of these and previous articles still in print are available from the Document Room, 20-B-221, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts)

- E. C. Cherry, W. K. Taylor, Some further experiments upon the recognition of speech, with one and with two ears (J. Acoust. Soc. Am.).
- P. Elias, Optical systems as communication channels (Symposium Proceedings).
- L. Gould, S. C. Brown, Microwave determination of the probability of collision of electrons in helium (Phys. Rev.).
- W. A. Hardy, G. Silvey, C. H. Townes, B. F. Burke, M. W. P. Strandberg, G. W. Parker, V. W. Cohen, The nuclear moments of Se^{79} (Phys. Rev.).
- H. A. Haus, An equivalent circuit for a passive nonreciprocal network (J. Appl. Phys.).
- Hsi-Teh Hsieh, J. M. Goldey, S. C. Brown, A resonant cavity study of semiconductors (J. Appl. Phys.).
- D. W. Posener, M. W. P. Strandberg, Centrifugal distortion in asymmetric top molecules. III. H_2O , D_2O , and HDO (Phys. Rev.).
- F. H. Reder, S. C. Brown, The energy distribution function of electrons in pure helium (Phys. Rev.).
- F. M. Reza, Conversion of a Brune cycle with an ideal transformer into a cycle without an ideal transformer (J. Math. Phys.).
- P. Tate, M. W. P. Strandberg, Stark effect in the microwave spectra of KCl and NaCl (J. Chem. Phys.).

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- C. E. Chase, M. A. Herlin, Ultrasonic measurements in magnetically cooled helium (Phys. Rev.).
- V. Jaccarino, J. G. King, R. A. Satten, H. H. Stroke, Hyperfine structure of I^{127} . A nuclear magnetic octupole moment (Phys. Rev.).
- F. M. Reza, A bridge equivalent for a Brune cycle terminated in a resistor (Proc. I.R.E.).
- F. M. Reza, P. M. Lewis II, Note on the transfer voltage ratio of passive RLC networks (Proc. I.R.E.).
- M. W. P. Strandberg, H. Dreicer, Doppler linewidth reduction (Phys. Rev.).

TECHNICAL REPORTS PUBLISHED

(These and previously published technical reports, as well as a current list of available reports, may be obtained from the Document Room, 20-B-221, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts)

- No. 273 D. H. Looney, S. C. Brown, The excitation of plasma oscillations.
(also published in *The Physical Review*).
- No. 274 D. A. Huffman, The synthesis of sequential switching circuits.
- No. 275 K. Putter, A time-gated amplitude quantizer for neural signals:
an application to electric signals from the auditory nervous
system.
- No. 283 S. C. Brown, W. P. Allis, Basic data of electrical discharges.