## PUBLICATIONS AND REPORTS

#### MEETING PAPERS PRESENTED

Thirty-fifth Annual Convention, American Speech and Hearing Association, Cleveland, Ohio

Nov. 11-14, 1959

A. S. House, Effect of formant bandwidth on vowel preference

Eastern Joint Computer Conference, Boston, Massachusetts Dec. 1-3, 1959

N. Rochester, S. H. Goldberg, and D. J. Edwards, Machine manipulation of algebraic expressions

American Physical Society, Division of Plasma Physics Meeting, U.S. Naval Post-graduate School, Monterey, California Dec. 3-5, 1959

- R. B. Hall and G. Bekefi, Cesium plasma
- J. L. Hirshfield and D. E. Baldwin, Cyclotron harmonic radiation from plasmas

Linguistic Society of America Meeting, Chicago, Illinois Dec. 27-29, 1959

- E. S. Klima and R. B. Lees, Rules for English pronominalization
- V. H. Yngve, A model and a hypothesis for language structure

Association for Symbolic Logic Meeting, Columbia University, New York Dec. 28, 1959

T. More, Jr., A normal form theorem for the implicational ordering, A0

Intra-Neural Society Meeting, Boston, Massachusetts Jan. 12, 1960

N. Y-S. Kiang, Coding in the auditory nervous system (invited)

Sixth National Annual Meeting, American Astronautical Society, New York Jan. 18-21, 1960

E. J. Baghdady, Techniques for enhancing an FM signal in the presence of random noise (invited)

IRE, Professional Group on Medical Electronics, Metropolitan New York Chapter Meeting, New York
Jan. 21, 1960

T. F. Weiss, A discussion of two techniques for the processing of EEG data (invited)

#### MEETING PAPERS PRESENTED (continued)

AIEE Winter General Meeting, New York Feb. 1, 1960

W. S. McCulloch, O. G. Selfridge, and H. von Foerster, Parallel computation of the nervous system - Reliability through redundancy

IRE Symposium on Modern Communication, Philadelphia, Pennsylvania Feb. 1, 1960

W. A. Rosenblith, The quantitative assessment of the electrical activity of the nervous system (invited)

Department of Anatomy, University of California Medical Center, Los Angeles, California Feb. 4-5, 1960

J. S. Barlow, Some aspects of computer analysis in neurophysiology (Two lectures) (invited)

Conference on Cerebral Systems and Computer Logic (California Institute of Technology and The Rockefeller Foundation), Pasadena, California Feb. 8-11, 1960

- H. R. Maturana, Problems of the visual physiology and anatomy of amphibia (invited)
- W. S. McCulloch, Parallel computation in neural circuits (invited)
- W. A. Rosenblith, Temporal characteristics of processes that accompany the handling of sensory information (invited)

International Solid State Circuits Conference, Philadelphia, Pennsylvania Feb. 9-13, 1960

R. P. Rafuse, Measurement of absolute noise performance of parametric amplifiers

Symposium on the Engineering Aspects of Magnetohydrodynamics, Philadelphia, Pennsylvania Feb. 18-19, 1960

G. Bekefi and J. L. Hirshfield, Thermal radiation from plasmas and its application to microwave diagnostics (invited)

Fourth Annual Meeting, Biophysical Society, Philadelphia, Pennsylvania Feb. 24-26, 1960

- J. S. Barlow, Periodicities in the electrical activity of the brain in relation to biological rhythms
- J. E. Brown, Peripheral nerve responses to simple stimulus configurations in man
- M. Eden and M. Halle, A model for cursive writing viewed as a process of pattern generation

#### MEETING PAPERS PRESENTED (continued)

- C. D. Geisler, Electrical responses to acoustic clicks recorded from human scalp
- G. L. Gerstein, Firing patterns of single cells in the auditory cortex
- M. H. Goldstein, Jr. and W. T. Peake, A model for overlapping of neural responses; application to peripheral and cortical responses in the auditory system
- J. L. Hall, Binaural "fusion" for trains of acoustic pulses in relation to electrophysiological data
- N. Y-S. Kiang, Single unit activity in the cochlear nucleus region in response to repetitive acoustic stimuli
- W. T. Peake and N. Y-S. Kiang, Electrical responses to rarefaction and condensation clicks
- T. F. Weiss and C. E. Molnar, Repetitive electrical activity from the cat's auditory cortex

## JOURNAL ARTICLES ACCEPTED FOR PUBLICATION

(Reprints, if available, may be obtained from the Document Room, 26-327, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts.)

- L. C. Bahiana and L. D. Smullin, Coupling of modes in uniform composite waveguides (Trans. IRE, PGMTT)
- S. C. Brown, High-frequency waves in ionized gases (Proc. Fourth International Conference on Ionization Phenomena in Gases, Uppsala, Sweden, Aug. 17-21, 1959)
- A. S. House, Formant band widths and vowel preference (J. Speech Hearing Res.)
- R. D. Mattuck and M. W. P. Strandberg, Spin-phonon interaction in paramagnetic crystals (Phys. Rev.)
- L. Mower, The conductivity of a warm plasma (Phys. Rev.)
- W. W. Peterson, Encoding and error-correction procedures for the Bose-Chaudhuri codes (Trans. IRE, PGIT)
- M. W. P. Strandberg, Crossover transitions (J. Phys. Chem. Solids)

## LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- R. L. Kyhl, Negative L and C in solid-state masers (Proc. IRE)
- W. B. Nottingham, Comments on "Heat to Electricity by Thermionic Emission" (J. Appl. Phys.)

# TECHNICAL REPORTS PUBLISHED

(These and previously published technical reports, if available, may be obtained from the Document Room, 26-327, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts.)

- 291 S. Krongelb and M. W. P. Strandberg, Use of Paramagnetic-Resonance Techniques in the Study of Atomic-Oxygen Recombinations
- 341 M. A. Epstein, Construction of Convolution Codes by Suboptimization
- 354 B. J. Leon, A Frequency-Domain Theory of Parametric Amplification
- 359 E. M. Hofstetter, Large-Sample Sequential Decision Theory

## SPECIAL PUBLICATIONS

- M. Halle, The Sound Patterns of Russian (Mouton and Company, The Hague, 1959)
- M. Halle and K. N. Stevens, Analysis by Synthesis (Proc. Seminar on Speech Compression and Processing, AFCRC-TR-59-198, Paper D-7, December 1959)
- W. S. McCulloch, The reliability of biological systems (Proc. Interdisciplinary Conference on Self-Organizing Systems, Chicago, May 5, 1959)
- M. W. P. Strandberg, Analytic design of parametric amplifiers (Quantum Electronics A Symposium, edited by C. H. Townes, Columbia University Press, New York, 1960)