PUBLICATIONS AND REPORTS

MEETING PAPERS PRESENTED

Howard Hughes Lecture, Hughes Research and Development Laboratory, Culver City, California, Dec. 10, 1956

S. C. Brown, Microwave gaseous breakdown (invited)

Colloquium, General Electric Research Laboratory, Schenectady, N. Y. Dec. 19, 1956

W. A. Rosenblith, The auditory nervous system and theories of hearing (invited)

Annual Meeting, American Mathematical Society, Rochester, N. Y. Dec. 23-24, 1956

- M. P. Schützenberger, A generalization of the Frêchet-Cramér inequality to the case of Bayes estimation
- M. P. Schützenberger, Some properties of semigroups I
- M. P. Schützenberger, Some properties of semigroups II

AAAS Annual Meeting, New York Dec. 26-31, 1956

V. H. Yngve, Mechanical translation of German

Joint Meeting, AAAS and American Documentation Institute, New York Dec. 27, 1956

A. N. Chomsky, Logical structures in language (invited)

American Mathematical Society and Association for Symbolic Logic, Rochester, N. Y. Dec. 27-28, 1956

- H. Rogers, Jr., Provable recursive functions
- H. Rogers, Jr. and R. M. Friedberg, Remarks on complete degrees of recursively enumerable sets

Linguistic Society of America, Philadelphia Dec. 27-29, 1956

J. R. Applegate, Special problems in the morphology of Shilha

Colloquium, Department of Electrical Engineering, Syracuse University, Syracuse Dec. 28, 1956

M. H. Goldstein, Jr., Signal representation in the auditory nervous system (invited)

Modern Language Association, Washington, D. C. Dec. 29, 1956

M. Halle, On some acoustical properties of consonants (invited)

Kings County Hospital, Long Island, New York Jan. 3, 1957

W. S. McCulloch, The afferent peripheral neuron (invited)

MEETING PAPERS PRESENTED (continued)

- Sigma Xi, Northeastern University, Boston Jan. 14, 1957
 - W. A. Rosenblith, On the use of models in science (invited)
- Study Group in Neurophysiology, Biological Laboratory, Harvard University, Cambridge Jan. 29, 1957
 - N. Y. S. Kiang, Electrophysiology of the cat's auditory system (invited)

American Physical Society, New York Jan. 30-Feb. 2, 1957

- M. W. P. Strandberg, On the inherent noise of quantum mechanical amplifiers G. J. Wolga and M. W. P. Strandberg, Hyperfine structure and line width in F-center spin resonance
- Optical Society of America, New England Section, Boston Feb. 21, 1957
 - M. W. P. Strandberg, Microwave spectroscopy (invited)

JOURNAL ARTICLES ACCEPTED FOR PUBLICATION

(Reprints may be requested from the Document Room, 20-B-221, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts)

- E. F. Bolinder, Study of the exponential line by the isometric circle method and hyperbolic geometry (Acta Polytechnica)
- E. F. Bolinder, Survey of some properties of linear networks (Report 32, Royal Inst. of Tech., Div. Radio Engineering, Transistor Group, Stockholm)
- S. J. Buchsbaum and S. C. Brown, Microwave measurements of high electron densities (Phys. Rev.)
- J. Y. Lettvin, B. Howland, and R. C. Gesteland, Footnotes on a headstage (Trans. IRE, PGME)
- M. P. Madan, Potential parameters for krypton (J. Chem. Phys.)
- D. J. Rose and S. C. Brown, Microwave gas discharge breakdown in air, nitrogen, and oxygen (J. Appl. Phys.)
- W. A. Rosenblith, Relation between auditory psychophysics and auditory electrophysiology (Ann. N. Y. Acad. Sci.)
- L. Tisza and I. Manning, Fluctuations and irreversible thermodynamics (Phys. Rev.)
- V. H. Yngve, Mechanical translation at M.I.T. (MT)
- V. H. Yngve, Technical feasibility of translating languages by machine (Communications and Electronics)

TECHNICAL REPORTS PUBLISHED

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

- 144 M. V. Cerrillo and W. H. Kautz, Properties and tables of extended Airy-Hardy integrals
- 242 C. F. Davis, Jr. and M. W. P. Strandberg, The paramagnetic resonance spectrum of ammonium chromium alum
- 283 S. C. Brown and W. P. Allis, Basic data of electrical discharges (3rd edition)
- 299 W. P. Allis, Motions of ions and electrons
- 306 H. A. Haus, Analysis of signals and noise in longitudinal electron beams
- 315 T. E. Stern, Piecewise-linear network theory
- 321 W. B. Nottingham, Thermionic emission

SPECIAL PUBLICATIONS

W. S. McCulloch, "Mysterium Iniquitatis of Sinful Man Aspiring into the Place of God" in Chap. IV, The Validation of Scientific Theories, Philipp Frank, Ed. (Beacon Press, Boston, 1956)