

## PUBLICATIONS AND REPORTS

### Meeting Papers Presented

American Chemical Society, Atlantic City, Sept. 22, 1949

L. Tisza: On the Theory of Critical Points.

National Electronics Conference, Chicago, Sept. 26-28, 1949

J. B. Wiesner: Application of Statistical Theory in Communications.

Y. W. Lee, C. A. Stutt: Statistical Prediction of Noise.

International Conference on the Physics of Very Low Temperatures, Massachusetts Institute of Technology, Sept. 6-10, 1949

L. Tisza: The Present State of the Helium Problem.

L. Tisza: The Theory of Superconductivity.

E. H. Sondheimer (also of Trinity College, Cambridge): A New Type of Magneto-Resistance Effect in Metals.

S. C. Collins: Helium Liquefier.

### Journal Articles Accepted for Publication

- L. B. Arguimbau, J. Granlund: Sky-Wave FM Receiver. (Electronics)
- F. Bitter: Magnetism. (Physics Today)
- F. Bitter: Nuclear Moments. (Nucleonics)
- S. C. Brown, M. A. Biondi: Measurement of Electron-Ion Recombination. (Phys. Rev.)
- S. C. Brown, A. D. MacDonald: Limits for the Diffusion Theory of High Frequency Gas Discharge Breakdown. (Phys. Rev.)
- A. D. MacDonald, S. C. Brown: High Frequency Gas Discharge Breakdown in Hydrogen. (Phys. Rev.)
- A. D. MacDonald: Properties of the Confluent Hypergeometric Function. (J. Math. Phys.)
- A. B. Macnee: An Electronic Differential Analyzer. (Proc. I.R.E.)
- E. Maxwell, P. M. Marcus, J. C. Slater: Surface Impedance of Normal and Superconductors at 24,000 Mc/Sec. (Phys. Rev.)
- R. M. Redheffer: Remarks on the Basis of Network Theory. (J. Math. Phys.)
- L. A. Siegel: Molecular Rotation in Sodium Cyanide and Sodium Nitrate. (J. Chem. Phys.)
- I. Simon: Surface Impedance of Superconducting Tin, Mercury and Lead at 9200 Mc/Sec. (Phys. Rev.)

- ✓ I. Simon: A Helium Cryostat Temperature Control. (Rev. Sci. Instruments)
- L. D. Smullin: Design of Tunable Resonant Cavities with Constant Bandwidth. (Proc. I.R.E.)

Letter to the Editor Accepted for Publication

- ✓ W. C. Dickinson: Magnetic Moment of La<sup>139</sup>. (Phys. Rev.)

Technical Reports Published\*

- No. 73 R. B. Bien: Correlation of Pulsed and D-C Electron Emission from an Oxide Cathode.
- No. 100 E. E. David, Jr.: Some Aspects of R-F Phase Control in Microwave Oscillators.
- No. 109 E. Maxwell, P. M. Marcus, J. C. Slater: Surface Impedance of Normal and Superconductors at 24,000 Mc/Sec.
- No. 120 A. Roberts, Y. Beers, A. G. Hill: Microwave Magnetic Absorption Spectrum of Atomic Cesium.
- No. 123 G. Knight, Jr., B. T. Feld: Nuclear Quadrupole Hyperfine Structure in Slightly Asymmetric Rotor Molecules.
- No. 126 I. Simon: Surface Impedance of Superconducting Tin, Mercury and Lead at 9200 Mc/Sec.
- No. 131 C. S. Hung: Thermionic Emission from Oxide Cathodes: Retarding and Accelerating Fields.
- No. 140 D. J. Rose, D. E. Kerr, M. A. Biondi, E. Everhart, S. C. Brown: Methods of Measuring the Properties of Ionized Gases at Microwave Frequencies
- No. 141 Y. W. Lee, T. P. Cheatham, Jr., J. B. Wiesner: The Application of Correlation Functions in the Detection of Small Signals in Noise.
- No. 142 L. D. Smullin: Shot Noise in Beam Type Traveling-Wave Amplifiers.

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