

## UNIVERSITY OF TORONTO STUDIES

### PAPERS FROM THE PHYSICAL LABORATORIES

The "Papers from the Physical Laboratories", issued as a special series of University of Toronto Studies, date from the year 1900. Nos. 1-17 were published by the Physical Department in a very limited edition and are no longer in print. For the sake of a complete record the numbering of the Papers, as forming a series of University of Toronto Studies, is made continuous with the earlier series and commences with No. 18. The earlier numbers are not now available either for sale or gift.

- No. 41: The intensity of the earth's penetrating radiation at different altitudes and its secondary radiation excited by it, by Professor J. C. McLENNAN and E. N. MACALLUM 0.25
- No. 42: On the relation between the adiabatic and isothermal Young's moduli of metals, by E. F. BURTON . . . . . 0.25
- No. 43: On the rotatory dispersion of quartz, by H. F. DAWES 0.25
- No. 44: On the mobilities of ions in gases at high pressures, by A. J. DEMPSTER . . . . . 0.25
- No. 45: Measurements of precision on the penetrating radiation from the earth, by ARTHUR THOMSON . . . . . 0.25
- No. 46: On the number of delta particles expelled concurrently with each alpha particle emitted by polonium, by W. T. KENNEDY . . . . . 0.25
- No. 47: On the mobilities of ions in air at high pressures, by Professor J. C. McLENNAN and DAVID A. KEYS . . . . . 0.25
- No. 48: On the absorption spectra of mercury, cadmium, zinc, and other metallic vapours, by Professor J. C. McLENNAN and EVAN EDWARDS . . . . . 0.50
- No. 49: On the infra-red emission spectrum of the mercury arc, by Professor J. C. McLENNAN and RAYMOND C. DEARLE . . . . . 0.25
- No. 50: On the ionisation tracks of alpha rays in hydrogen, by Professor J. C. McLENNAN and H. N. MERCER . . . . . 0.50
- No. 51: On the delta rays emitted by zinc when bombarded by alpha rays, by Professor J. C. McLENNAN and C. G. FOUND . . . . . 0.25
- No. 52: On the ultra-violet spectrum of elementary silicon by Professor J. C. McLENNAN and EVAN EDWARDS . . . . . 0.25
- No. 53: On the ionisation potentials of magnesium and other metals, and on their absorption spectra, by Professor J. C. McLENNAN . . . . . 0.25
- No. 54: On the Bunsen flame spectra of metallic vapours, by Professor J. C. McLENNAN and ANDREW THOMSON . . . . . 0.25
- No. 55: On the ionisation of metallic vapours in flames, by Professor J. C. McLENNAN and DAVID A. KEYS . . . . . 0.25
- No. 56: Emission and absorption in the infra-red spectrum of mercury, by RAYMOND C. DEARLE . . . . . 0.25
- No. 57: Some experiments on residual ionization, by K. H. KINGDON . . . . . 0.25