INDEX TO VOLUME 195 (A)

Automatic computing engine at the National Physical Laboratory (Wilkinson), 285.

Barium sulphate, electrokinetic potential (Buchanan & Heymann), 150.
Batchelor, G. K. The role of big eddies in homogeneous turbulence, 513.
Bateman, L. & Gee, G. A kinetic investigation of the photochemical oxidation of certain non-conjugated olefins, 376.
Bateman, L. & Gee, G. The determination of absolute rate constants in olefinic oxidations, 391.
Binary and ternary interstitial alloys (Jack). I. The iron-carbon-nitrogen system: the structures of Fe₄N and Fe₅N, 34. II. The iron-carbon-nitrogen system, 41. III. The iron-carbon system: the characterization of a new iron carbide, 56.
Bond dissociation energies of Cd-CH₃ in Cd(CH₃)₂, and of CH₃-I in CH₃I (Carson, Hartley & Skinner), 500.
Booth, A. D. Recent computer projects, 286.
Buchanan, A. S. & Heymann, E. The electrokinetic potential of barium sulphate, 150.

Cathode-ray tube digit store (Williams), 279.
Changes induced in Bact. lactis aerogenes by irradiation with ultra-violet light (Peacocke & Hinselwood). (Abstract), 407.
Chapman, S. & Tschu, K. K. The lunar atmospheric tide at twenty-seven stations widely distributed over the globe, 310.
Classical electrodynamics without singularities (McManus), 323.
Collective electron ferromagnetism. III. Nickel and nickel-copper alloys (Wohlfarth), 434.
Computing machines. Discussion (Hartree et al.), 295.
Conductivity of aqueous solutions of lanthanum ferricyanide (Davies & James), 116.
Conjugated systems, electronic structure (Coulsen & Longuet-Higgins), 188.
Coulsen, C. A. & Longuet-Higgins, H. C. The electronic structure of conjugated systems. V. The interaction of two conjugated systems, 188.

Deformation of metals in static and in sliding contact (Moore), 231.
Design of a practical high-speed computing machine. The EDSAC (Wilkes), 274.
Determination of absolute rate constants in olefinic oxidations (Bateman & Gee), 391.
Deuteron-deuteron reaction, neutrons produced (Livesey & Wilkinson), 123.
De Wet, J. S. On the relativistic invariance of quantized field theories, 365.
Drury, A. N. The Lister Institute of Preventive Medicine, 409.

Elastic deformations (Rivlin), 463.
Elastic equilibrium of isotropic plates and cylinders (Green), 533.
Electrical fluctuations, theory (MacDonald), 225.
Electrodynamic self-energy of the electron (Salpeter), 163.
Electrokinetic potential of barium sulphate (Buchanan & Heymann), 150.
Electron, electrodynamic self-energy (Salpeter), 163.
Electron ferromagnetism (Wohlfarth), 434.
Electronic structure of conjugated systems. V. The interaction of two conjugated systems (Coulson & Longuet-Higgins), 188.

Gee, G. See Bateman & Gee.
General principles of the design of all-purpose computing machines (Newman), 271.
Generation of radio frequency radiation in the sun (Ryle), 82.
Green, A. E. The elastic equilibrium of isotropic plates and cylinders, 533.

Hartree, D. R. A historical survey of digital computing machines, 265.
Heymann, E. See Buchanan & Heymann.
High explosives, sensitivity to impact (Rideal & Robertson), 135.
Hinshelwood, C. N. See Peacocke & Hinshelwood.
Historical survey of digital computing machines (Hartree), 265.
Induction of electric currents in a non-uniform ionosphere (Ashour & Price), 198.
Infra-red spectra and state of aggregation. II (Richards & Thompson), 1.
Integration of the boundary-layer equations for a plane in a compressible fluid (Meksyn), 180.
Investigation of the neutrons produced in the deuteron-deuteron reaction (Livesey & Wilkinson), 123.
Ionosphere, induction of electric currents (Ashour & Price), 198.
Isothermal distillation in the porous-dish osmometer (Williamson), 97.

Jack, K. H. Binary and ternary interstitial alloys. I. The iron-carbon-nitrogen system; the structures of Fe₅N and Fe₅N, 34. II. The iron-carbon-nitrogen system, 41. III. The iron-carbon system: the characterization of a new iron carbide, 56.
James, J. C. See Davies and James.

Kinetic investigation of the photochemical oxidation of certain non-conjugated olefins (Bateman & Gee), 376.

Lanthanum ferricyanide, conductivity (Davies & Jones), 116.
Large elastic deformations of isotropic materials. V. The problem of flexure (Rivlin), 463.
Lister Institute of Preventive Medicine (Drury), 409.
Lunar atmospheric tide at twenty-seven stations widely distributed over the globe (Chapman & Tschu), 310.

Martin, D. G. E. & Richardson, H. O. W. The nuclear β-spectra of thorium B→C and C→C', and the intensities of some β-ray lines of (B+C+C'), 287.
Mass-centre in the restricted theory of relativity and its connexion with the quantum theory of elementary particles (Pryce), 62.
McManus, H. Classical electrodynamics without singularities, 323.
Mechanism of the isothermal distillation in the porous-disk osmometer (Williamson), 97.
Meksyn, D. Integration of the boundary-layer equations for a plane in a compressible fluid, 180.
Meksyn, D. Note on stability of laminar viscous flow between parallel planes, 174.
Methaemoglobin, horse (Perutz), 474.
Mixing of sea water by turbulence (Proudman), 300.
Moore, A. J. W. Deformation of metals in static and in sliding contact, 231.
Newman, M. H. A. General principles of the design of all-purpose computing machines, 271.
Nuclear $\beta$-spectra of thorium B$\rightarrow$C and C$\rightarrow$C', and the intensities of some $\beta$-ray lines of thorium (B+C+C') (Martin & Richardson), 287.

Olefins, photochemical oxidation (Bateman & Gee), 376, 391.

Perutz, M. F. An X-ray study of horse methaemoglobin. II, 474.
Physical theory of supersonic aerofoils in unsteady flow (Strang), 245.
Porous-disk osmometer, isothermal distillation in (Williamson), 97.
Proudman, J. On the mixing of sea water by turbulence, 300.
Pryce, M. H. L. The mass-centre in the restricted theory of relativity and its connexion with the quantum theory of elementary particles, 62.

Radiation in the sun, generation (Ryle), 82.
Recent computer projects (Booth), 286.
Relativistic invariance of quantized field theories (de Wet), 365.
Richards, R. E. & Thompson, H. W. Infra-red spectra and state of aggregation. II, 1.
Richardson, H. O. W. See Martin & Richardson.
Rideal, E. K. & Robertson, A. J. B. The sensitiveness of solid high explosives to impact, 135.
Rivlin, R. S. Large elastic deformations of isotropic materials. V. The problem of flexure, 463.
Robertson, A. J. B. See Rideal & Robertson.
Role of big eddies in homogeneous turbulence (Batchelor), 513.
Royal Botanic Gardens, Kew (Salisbury), 423.
Ryle, M. The generation of radio-frequency radiation in the sun, 82.

Salpeter, E. E. On the electrodynamical self-energy of the electron, 163.
Sea water, mixing by turbulence (Proudman), 300.
Sensitiveness of solid high explosives to impact (Rideal & Robertson), 135.
Skin effects in metals (Reuter & Sondheimer), 336.
Stability of laminar viscous flow between parallel planes (Meksyn), 174.
Strang, W. J. A physical theory of supersonic aerofoils in unsteady flow, 245.
Supersonic aerofoils, physical theory (Strang), 245.

Theory of electrical fluctuations (MacDonald), 225.
Theory of statistical and isotropic turbulence (Heisenberg), 402.
Theory of the anomalous skin effect in metals (Reuter & Sondheimer), 336.
Thompson, H. W. See Richards & Thompson.
Tschu, K. K. See Chapman & Tschu.
Turbulence, homogeneous (Batchelor), 513.
Turbulence, statistical & isotropic (Heisenberg), 402.

Wilkes, M. V. The design of a practical high-speed computing machine. The EDSAC, 274.
Wilkinson, J. H. The automatic computing engine at the National Physical Laboratory, 285.
Williams, F. C. A cathode-ray tube digit store, 279.
Williamson, A. T. The mechanism of isothermal distillation in the porous-disk osmometer, 97.

X-ray study of horse methaemoglobin. II (Perutz), 474.