

INDEX TO VOL. CXXIX. (A)

- Absolute intensity of aurora line in the night sky (Rayleigh), 458.
- Aerofoil, wind tunnel interference (Rosenhead), 135.
- Aerofoil, friction on surface (Fage and Falkner), 378.
- Allin (E. J.) *See* McLennan and Allin.
- Allmand (A. J.) and Chaplin (R.) The Sorption of Carbon Tetrachloride at Low Pressures by Activated Charcoals, II, III, 235, 252.
- Alpha-rays from radium (Rutherford and others), 211.
- Arnot (F. L.) The Passage of an Electron Beam through a Field-Free Enclosure, 361.
- Aston (G. H.) *See* Ellis and Aston.
- Aurora line in the night sky (Rayleigh), 458.
- Auroral green line radiation (McLellan and Ireton), 31.
- Balfour (Earl of) Obituary, xv.
- Bhattacharya (R.) and Hilditch (T. P.) The Structure of Synthetic Mixed Triglycerides, 468.
- Bismuth, spark spectra (McLennan and others), 579.
- Bone (W. A.) and Hill (S. G.) The Slow Combustion of Ethane, 434.
- Brett (G. F.) The Combination of Nitrogen and Hydrogen Activated by Electrons, 319.
- Bromwich (T. J. F.A.) Obituary, i.
- Butler (J. A. V.) *See* Shaw and Butler.
- Carbon Tetrachloride, sorption of (Allmand and Chaplin), 235, 252.
- Chaplin (R.) *See* Allmand and Chaplin.
- Clusius (K.) *See* Hinshelwood and Clusius.
- Cockcroft (J. D.) and Walton (E. T. S.) Experiments with High Velocity Positive Ions, 477.
- Colorimetric investigations of indicators (Sidgwick and others), 537.
- Conical order, symmetrical analysis (Robb), 549.
- Crawford (M. F.) *See* McLennan and others.
- Delbrück (M.) The Interaction of Inert Gases, 686.
- Dobson (G. M. B.), Kimball (H. H.) and Kidson (E.) Observations of the Amount of Ozone in the Earth's Atmosphere, and its Relation to other Geophysical Conditions, IV, 411.
- Durnford (A. M. I. A. W.) *See* McLennan and Durnford.
- Electron beam, passage through field-free enclosure (Arnot), 361.
- Electrons, scattering in molecular hydrogen (Massey), 616.
- Electrolytes, behaviour in mixed solvents (Shaw and Butler), 519.
- Ellis (C. D.) and Aston (G. H.) The Absolute Intensities and Internal Conversion Coefficients of the γ -Rays of Radium B and Radium C, 180.
- Energy, exchange between gas atoms and solid surfaces (Roberts), 146.
- Ethane, slow combustion of (Bone and Hill), 434.
- Ewles (J.) The Nature and Size of the Luminescent Centre, 509.
- Explosion limit, displacement in chain reaction (Hinshelwood and Clusius), 589.

- Fage (A.) and Falkner (V. M.) An Experimental Determination of the Intensity of Friction on the Surface of an Aerofoil, 378.
- Falkner (V. M.) *See* Fage and Falkner.
- Finch (C. I.) and Thompson (H. H.) Gaseous Combustion in Electric Discharges, V, 314.
- Finch (G. I.) and Patrick (W. L.) Gaseous Combustion in Electric Discharges, VI, VII, 656, 672.
- Flow behind circular cylinders in channels (Rosenhead and Schwabe), 115.
- Flow through a pipe, theory of heat transfer (Taylor), 25.
- Fort (R.) and Hinshelwood (C. N.) Further Investigations on the Kinetics of Gaseous Oxidation Reactions, 284.
- Fowler (R. H.) Speculations concerning the α -, β - and γ -Rays of Ra, B, C, C', I, 1.
- France (R. W.) The Absorption Spectrum of Lithium Vapour, 354.
- Gaseous combustion in electric discharges, V (Finch and Thompson), 314.
- Gaseous combustion in electric discharges, VI, VII (Finch and Patrick), 656, 672.
- Gaseous oxidation reactions (Fort and Hinshelwood), 284.
- Gayler (M. L. V.) *See* Jenkins and Gayler.
- Helium, relative intensities of stark components in (Langstroth), 70.
- High metallurgical temperatures (Jenkins and Gayler), 91.
- Hilditch (T. P.) *See* Bhattacharya and Hilditch.
- Hill (S. G.) *See* Bone and Hill.
- Hinshelwood (C. N.) and Clusius (K.) The Displacement by Ultra-Violet Light of the Explosion Limit in a Chain Reaction, 589.
- Hinshelwood (C. N.) *See also* Fort and Hinshelwood.
- Hydrogen activated by electrons (Brett), 319.
- Indicators, colorimetric investigations (Sidgwick and others).
- Indium, spectrum of (McLennan and Allin), 208.
- Intensity of friction on the surface of an aerofoil (Fage and Falkner), 378.
- Ions, mobility in pure gases (Tyndall and Powell), 162.
- Ions, positive, high velocity of (Crockcroft and Walton), 477.
- Ireton (H. J. C.) *See* McLennan and Ireton.
- Jenkins (C. H. M.) and Gayler (M. L. V.) The Optical Determination of High Metallurgical Temperatures—The Melting-point of Iron, 91.
- Kidson (E.) *See* Dobson and others.
- Kimball (H. H.) *See* Dobson and others.
- Krishnamurti (K.) The Scattering of Light in Protein Solutions, I, 490.
- Langstroth (G. O.) Relative Intensities of Stark Components in Helium, 70.
- Lennard-Jones (J. E.) Perturbation Problems in Quantum Mechanics, 598.
- Light, absorption in xenon (McLennan and Turnbull), 266.
- Light, geometrical inversion in (Vaidya), 299.
- Light, scattering in protein solutions (Krishnamurti), 490.
- Lithium vapour, spectrum (France), 354.
- Luminescent centre, nature and size (Ewles), 509.

- McLay (A. B.) *See* McLennan and others.
- McLennan (J. C.) and Allin (E. J.) The Fine Structure of Some Lines in the Visible Region of the Spectrum of Thallium, III, 43. The Hyperfine Structure of some lines in the Arc and First Spectrum of Indium, 208.
- McLennan (J. C.) and Durnford (A. M. I. A. W.) Zeeman Effects for Fine Structure Components of Thallium Spectral Lines, 48.
- McLennan (J. C.) and Ireton (H. J. C.) On the Spectroscopy of Auroral Green Line Radiation, 31.
- McLennan (J. C.), McLay (A. B.) and Crawford (M. F.) Spark Spectra of Bismuth, Bi II and Bi III. Evidence of Hyperfine Structure, 579.
- McLennan (J. C.) and Turnbull (R.) On the Absorption of Light by Gaseous, Liquid and Solid Xenon, 266.
- Massey (H. S. W.) Theory of the Elastic Scattering of Electrons in Molecular Hydrogen, 616.
- Metallurgical temperatures (Jenkins and Gayler), 91.
- Nitrogen, energy losses of electrons (Rudberg), 628.
- Nitrogen-hydrogen activated by electrons (Brett), 319.
- Obituary notices : Balfour, Earl of, xv ; Bromwich, T. J. P.A, i ; Orton, K. J. P., xi.
- Orton (K. J. P.) Obituary, xi.
- Ozone in earth's atmosphere (Dobson and others), 411.
- Pearse (R. W. B.) The λ 3400 Band of Phosphorus Hydride, 328.
- Perturbation problems in quantum mechanics (Lennard-Jones), 598.
- Phosphorus hydride, λ 3400 band (Pearse), 328.
- Powell (C. F.) *See* Tyndall and Powell.
- Quantum mechanics, perturbation problems (Lennard-Jones), 652.
- Radiation accompanying scattering (Rudberg), 652.
- Radium, α , β and γ Rays of (Fowler), 1.
- Radium, γ -rays of (Ellis and Aston), 180.
- Rayleigh (Lord) Absolute Intensity of the Aurora Line in the Night Sky, and the number of Atomic Transitions Required to maintain it, 458.
- Robb (A. A.) On a Symmetrical Analysis of Conical Order and its Relation to Time-Space Theory, 549.
- Roberts (J. K.) The Exchange of Energy between Gas Atoms and Solid Surfaces, 146.
- Rosenhead (L.) The Effect of Wind Tunnel Interference on the Characteristics of an Aerofoil, 135.
- Rosenhead (L.) and Schwabe (M.) An Experimental Investigation of the Flow behind Circular Cylinders in Channels of Different Breadths, 115.
- Rudberg (E.) Energy Losses of Electrons in Nitrogen, 628. On a Search for Radiation accompanying the Scattering of comparatively Slow Electrons at the Surface of Incandescent Solids, 652.
- Rutherford (Sir Ernest), Ward (F. A. B.) and Wynn-Williams (C. E.) A New Method of Analysis of Groups of Alpha-Rays, I, 211.
- Schwabe (M.) *See* Rosenhead and Schwabe.
- Shaw (R.) and Butler (J. A. V.) The Behaviour of Electrolytes in Mixed Solvents, II, 519.

- Sidgwick (N. V.), Worboys (W. J.) and Woodward (L. A.) Colorimetric Investigations of Indicators in presence of Neutral Salts, 537.
- Slow combustion of ethane (Bone and Hill), 434.
- Sorption of carbon tetrachloride (Allmand and Chaplin), 235, 252.
- Spectroscopy of auroral green line radiation (McLennan and Ireton), 31.
- Spectrum (Finch and Thompson), 314.
- Spectrum of bismuth (McLennan and others), 579.
- Spectrum of indium (McLennan and Allin), 208.
- Spectrum of lithium vapour (France), 354.
- Spectrum of phosphorus hydride (Pearse), 328.
- Spectrum of thallium III (McLennan and Allin), 43.
- Spectrum of thallium, Zeeman effect (McLennan and Durnford), 48.
- Stark components in helium (Langstroth), 70.
- Synthetic triglycerides, structure (Bhattacharya and Hilditch), 468.
- Taylor (G. I.) The Application of Osborne Reynolds' Theory of Heat Transfer to Flow through a Pipe, 25.
- Thallium spectral lines (McLennan and Durnford), 48.
- Thallium, spectrum of (McLennan and Allin), 43.
- Thompson (H. H.) *See* Finch and Thompson.
- Triglycerides, structure (Bhattacharya and Hilditch), 468.
- Turnbull (R.) *See* McLennan and Turnbull.
- Tyndall (A. M.) and Powell (C. F.) The Mobility of Ions in Pure Gases, 162.
- Vaidya (B. K.) Geometrical Inversion in Light, 299.
- Walton (E. T. S.) *See* Cockcroft and Walton.
- Ward (F. A. B.) *See* Rutherford and others.
- Woodward (L. A.) *See* Sidgwick and others.
- Worboys (W. J.) *See* Sidgwick and others.
- Wynn-Williams (C. E.) *See* Rutherford and others.
- Xenon, absorption of light (McLennan and Turnbull), 266.