AUTHOR INDEX-Volume 56, 1960

Aalsbersberg, W. IJ. and Mackor, E. L. The Polarographic Reduction of Aromatic	PAGE
Hydrocarbon Positive Ions and Proton Complexes	1351
Addison, C. C. and Coldrey, J. M. Influence of Surface Reactions on the Inter-	
face Between Liquid Sodium and Molten Sodium Chloride+Calcium	0.40
Chloride Mixtures	840 776
Allen, C. R., Brook, A. J. W., and Caldin, E. F. Measurement of the Rates of	770
Fast Reactions at Temperatures Down to —120°C	788
Allen, J. K. and Bevington, J. C. Further Study of the Nature of the End-Groups	
in Polymers Prepared Using Dibenzoyl Peroxide as Initiator	1762
Ambrose, D., Cox, J. D., and Townsend, R. The Critical Temperatures of Forty Organic Compounds	1452
Apers, D. J. and Maddock, A. G. The Chemical Effects of Radiative Thermal	1.02
Neutron Capture. Part 6: Potassium Chlororhenite, Isotope Effects and	
the Annealing Process	498
Arotsky, J. and Symons, M. C. R. Ionic Conductivity in Concentrated Oleums. Ash, R. and Grove, D. M. Low Pressure Gas Flow in Consolidated Porous Media.	1426
Part 1: Flow Through a Porous Ceramic	1357
Ashworth, A. J. and Everett, D. H. The Solubility of Low-Molecular-Weight	
Hydrocarbons in Non-Volatile Liquids	1609
Bailey, B. E. and Jenkins, A. D. The Mechanism of Termination in the Polymer- ization of Acrylonitrile	903
Baird, M. H. I. The Stability of Inverse Bubbles	213
Baldwin, R. R., Corney, N. S. and Walker, R. W. The Inhibition of the Hydrogen+	
Oxygen Reaction by Methane.	802
— Doran, P. and Mayor L. The Second Limit of the Hydrogen+Oxygen Reaction in Boric-Acid-Coated Vessels	93
and Mayor, L. The Slow Reaction Between Hydrogen and Oxygen in Boric-	73
Acid-Coated Vessels	80
and Mayor, L. The Mechanism of the Hydrogen+Oxygen Reactions in	102
Aged Boric-Acid-Coated Vessels	103
Distributions and Intrinsic Viscosities	907
Jenkins, A. D. and Wayne, R. P. The Coupling of Polymers. Part 2: Vinyl	
Polymers and Block Copolymers	932
Barnard, J. A. The Pyrolysis of isoPropanol	72
and Hughes, H. W. D. The Pyrolysis of Ethanol	55 64
Barr, L. W., Hoodless, I. M., Morrison, J. A. and Rudham, R. Effects of Gross	0-
Imperfections on Chloride Ion Diffusion in Crystals of Sodium Chloride	
and Potassium Chloride	697
Barrer, R. M. and Rees, L. V. C. Self-Diffusion of Alkali Metal Ions in Analcite	709
Barrett, Jack and Baxendale, J. H. The Photolysis of Liquid Water. Barrow, R. F. Dissociation Energies of the Gaseous Monohalides of Boron,	37
Aluminium, Gallium, Indium and Thallium	952
Basu, S. See Chandra, A. K., and	
See Chowdhury, M., and	
Batt, L. and Gowenlock, B. G. A Kinetic Study of the Decomposition of Mono-	<0 .
meric Nitrosomethane	682
— and Gowenlock, B. G. Decomposition Rates of Trans-Dimeric C-Nitroso Compounds in Solution	1022
Bawn, C. E. H. and Verdin, D. The Reactions of αα-Diphenyl-β-Picryl Hydrazyl	1022
with Inorganic Ions	519
— and Verdin, D. Molecular Dissociation Processes in Solution. Part 5.	815
Baxendale, J. H. See Barrett, Jack, and	
Becconsall, J. K., Clough, S. and Scott, G. Electron Magnetic Resonance of Phenoxy Radicals	459
Beck, W. H., Dobson, J. V. and Wynne-Jones, W. F. K. The Potentials of the	100
Marauraua Sulphoto/Maraury Electrodo	1177

	PAGE
Beevers, R. B. and White, E. F. T. Physical Properties of Vinyl Polymers. Part 1:	IAGE
Dependence of the Glass-Transition Temperature of Polymethyl- methacrylate on Molecular Weight	744
—— and White, E. F. T. Physical Properties of Vinyl Polymers. Part 2: The Glass-transition Temperature of Block and Random Acrylonitrile+Methyl Methacrylate Copolymers	1529
White, E. F. T. and Brown, L. Physical Properties of Vinyl Polymers. Part 3: X-Ray Scattering in Block, Random and Graft Methyl Methacrylate+	1547
Acrylonitrile Copolymers	1535
Bell, R. P. and McDougall, A. O. Hydration Equilibria of Some Aldehydes and Ketones	1281
Bengough, W. I. and Thomson, R. A. M. The Addition of Bromotrichloromethane to Vinyl Acetate. Part 1: The Products of the Photochemical and	1201
Benson, D. and Sutcliffe, L. H. The Reaction Between Lead (IV) and Cerous (III)	407
Acetates in Acetic Acid Beronius, P. and Lamm, O. A New Method for Kinetic Studies of the Iodine Exchange Partners Propries and Increasing Iodides	246
Exchange Between Organic and Inorganic Iodides Betts, J. J. and Pethica, B. A. The Properties of Ionized Monolayers. Part 4: Surface Fugacities and Standard Heats of Adsorption for Three Alkyl	1793
Sodium Sulphates	1515
Bewley, D. K. Heat of Reaction Between Ferrous Ammonium Sulphate and Hydrogen Peroxide in Aqueous Solution	1629
Bigot, J. A. and van Krevelen, D. W. The Molar Refraction of Di-aromatic Systems Binns, E. H., Squire, K. H. and Wood, L. J. The Distribution of Phenol Between Toluene and Water and Between Toluene and Aqueous Solutions of	322
Sodium Phenate	1770
Bird, C. L. See <i>Bradley</i> , R. S., <i>Bird</i> , C. L., and <i>Jones</i> , F. Black, W. de, Jongh, J. G. V., Overbeek, J. Th. G. and Sparnaay, M. J. Measurements of Retarded van der Waals' Forces	1597
Blank, M. and Roughton, F. J. W. The Permeability of Monolayers to Carbon Dioxide	1832
Blauer, G. Polymerization of Methacrylic Acid at pH 4 to 11. Bloom, H., Davis, F. G. and James, D. W. Molten Salt Mixtures. Part 4: The Surface Tension and Surface Heat Content of Molten Salts and Their Mixtures.	606
Bond, G. C. and Newham, J. Catalysis on Metals of Group 8. Part 5: The Kinetics of the Hydrogenation of Cyclopropane and of Methylcyclopropane . —— and Newham, J. Catalysis on Metals of Group 8. Part 6: The Hydrogen-	1179 1501
ation of Methylenecyclopropane and Methylenecyclobutane over Platinum Catalysts	1851
Booth, G. H. and Tiller, A. K. Polarization Studies of Mild Steel in Cultures of Sulphate-Reducing Bacteria	1689
Bradbury, E. M., Elliott, A. and Fraser, R. D. B. Infra-Red Dichroism and Crystallinity in Polyethylene and Polyethylene Suberate	1117
Bradley, R. S., Bird, C. L. and Jones, F. The Vapour Pressures and Heats of Sub- limation of Some Disperse Dyes	23
Brand, J. C. D. and Watson, J. K. G. The Infra-Red Spectrum of Propynal. Brennan, D. and Fletcher, P. C. The Atomization of Hydrogen on Platinum, Gold and Carbon, and of Oxygen on Platinum.	1582 1662
Bridge, N. K. Effect of Wavelength on the Flash Photolysis of Quinones — and Reed, M. Effect of Oxygen and Metal Ions on the Flash Photolysis of	1001
Ouinones	1796
Bromley, J. and Strickland-Constable, R. F. Role of Nucleation Processes in the Reactions Between Carbon Monoxide and Nickel Brook, A. J. W. See Allen, C. R., Brook, A. J. W. and Caldin, E. F.	1492
Brook, J. H. T. and Glazebrook, R. W. Free Radical Reactions in Hydrocarbon Mixtures	1014
Brown, D. W. See Florin, R. E., Wall, L. A., and Brown, L. See Beevers, R. B., White, E. F. T., and Brown, L. See Beevers, R. B., White, E. F. T., and Brown, A. D. Solvent Effects in Vibrational Spectroscopy	767
Buckingham, A. D. Solvent Effects in Vibrational Spectroscopy Butler, John D. Semi-Conducting Properties of Vanadium Pentoxide and the	753
Catalytic Oxidation of Sulphur Dioxide	1842
Caldin, E. F. See Allen, C. R., Brook, A. J. W., and	
Campbell, J. S., Moss, R. L. and Kemball, C. The Adsorption of Iodine on	1421

AUTHOR INDEX—VOLUME 56, 1960	1887
	PAGE
 Carson, A. W., Flanagan, T. B. and Lewis, F. A. Absorption of Hydrogen by Palladium/Platinum Alloys. Part 1: Electrical Resistance as a Function of Hydrogen Content, and One-Atmosphere Isobars. — Flanagan, T. B. and Lewis, F. A. Adsorption of Hydrogen by Palladium/ 	363
Platinum Alloys. Part 2: Kinetic Studies of Absorption from Acidic Solutions	371
—— Flanagan, T. B. and Lewis, F. A. Absorption of Hydrogen by Palladium/ Platinum Alloys. Part 3: Some Thermodynamic Factors	1332
Flanagan, T. B. and Lewis, F. A. Proton Transfer Between Pd/H and Pd/Pt/H	
Electrodes. Part 1: Equilibrium Hydrogen Electrodes. — Flanagan, T. B. and Lewis, F. A. Proton Transfer Between Pd/H and Pd/Pt/H	1311
Electrodes. Part 2: Incomplete Polarization of Proton Transfer. Carter, H. V., McClelland, B. J. and Warhurst, E. Studies of Organo-Alkali Metal Complexes. Part 2: The Rates of Reaction with Organic Halides in	1324
Solution	343
plexes. Part 4: Absorption Spectra in the Visible Region Cattanach, J. and Long, L. H. The Pyrolysis of Mercury Dimethyl. Part 3: The	455
Effect of Added Nitrogen, Ethane and Azomethane	1286 632
Chantry, G. W. and Woodward, L. A. Raman Intensities: Vibrational Amplitudes	
and Force Fields of Tetrahalides of Group 4b	1110
Aromatic Hydrocarbons. Part 1: Benzene, Toluene and o-Xylene Chowdhury, M. and Basu, S. Charge Transfer Interaction Between Tetrachloro	794
Phthalic Anhydride and Aromatics	335
vestigation of Adsorbed Molecules and the Infra-Red Spectrum of	504
Formic Acid on Silica-Supported Nickel. Cleaver, D., Collinson, E. and Dainton, F. S. The Radiation Chemistry of Liquid	534
Ammonia	1640
Coatsworth, K., Collinson, E. and Dainton, F. S. Radical and Molecular Yields in Acidified Deuterium Oxide.	1008
Coldrey, J. M. See Addison, C. C., and	
Collinson, E. See Cleaver, D., Collinson, E. and Dainton, F. S. —— See Coatsworth, K., Collinson, E. and Dainton, F. S.	
Cook, M. A., Pack, D. H. and McEwan, W. S. Promotion of Shock Initiation of Detonation by Metallic Surfaces	1028
Copp, J. L. and Findlay, T. J. V. Thermodynamics of Binary Systems Containing Amines. Part 4	13
Corney, N. S. See Baldwin, R. R., Corney, N. S. and Walker, R. W.	1.5
Cox, J. D. The Second Virial Coefficients, Latent Heats of Vaporization and Heats of Formation of the Lutidines	959
Creighton, J. A. See <i>Woodward</i> , L. A., Creighton, J. A. and Taylor, K. A. Cross, L. H., Roberts, H. L., Goggin, P. and Woodward, L. A. Molecular Vibra-	
tions of Sulphur Chloride Pentafluoride. Part 1: Infra-Red and	945
Raman Spectra Cullis, C. F. and Khokhar, B. A. The Inhibiting Influence of Aliphatic Amines on	
the Explosive Oxidation of Acetaldehyde	1235 1211
—— See Coatsworth, K., Collinson, E., and —— Ivin, K. J. and Walmsley, D. A. G. The Heats of Polymerization of Some	
Cyclic and Ethylenic Compounds	1784
David, H. G. and Hamann, S. D The Chemical Effects of Pressure. Part 6: The Electrical Conductivity of Several Liquids at High Shock Pressures	1043
Davies, D. W. Self-Consistent Molecular Orbital Calculations on π-Electron Systems. Part 1: The Electronic Spectrum of Borazine	1713
Davies, J. T. and Mayers, G. R. A. Studies on the Interfacial Viscosities of Mono-	691
Davies, Mansel and Thomas, G. H. The Lattice Energies, Infra-Red Spectra, and Possible Cyclization of Some Dicarboxylic Acids	185
and Williams, Graham. Dielectric Studies of Alkyl Ammonium Salts in Non-Polar Solvents	
Davis, F. G. See <i>Bloom, H., Davis, F. G.</i> and <i>James, D. W.</i> Decroly, P. See <i>Mandel, M.</i> and	1619

	PAGE
de Jongh, J. G. V. See Black, W., de Jongh, J. G. V., Overbeek, J. Th. G. and Sparnaay, M. J.	IAGE
Devanathan, M. A. V. and Selvaratnam, M. Mechanism of the Hydrogen-Evolution Reaction on Nickel in Alkaline Solutions by the Determination of the	
Degree of Coverage Dewhurst, D. J. Concentration Polarization in Plane Membrane-Solution Systems Dickens, P. G., Schofield, D. and Walsh, J. Recombination of Atoms at Surfaces.	1820 599
Part 8: The Three-Dimensional Diffusion Equation	225
Pressures up to 10 atm Djordjevic, S. and Hills, G. J. Ionic Self-Diffusion Coefficients in Molten Sodium	668
Carbonate Dobson, J. V. See Beck, W. H., Dobson, J. V. and Wynne-Jones, W. F. K. Doran, P. See Baldwin, R. R., Doran, P. and Mayor, L.	269
Dunn, J. R., Scanlan, J. and Watson, W. F. Corrigendum. Stress Relaxation During Thermal Oxidation of Vulcanized Natural Rubber. Edwards, J. W., Kington, G. L. and Mason, R. The Thermodynamic Properties of Ferrocene. Part 1: The Low-Temperature Transition in Ferrocene	1392
Crystals Eley, D. D. and Spivey, D. I. The Semiconductivity of Organic Substances.	660
Part 6: A Range of Proteins	1432
Entwistle, E. R. Some Reactions of Ferric Salts in Vinyl Polymerizations Everett, D. H. See Ashworth, A. J., and	284
Feates, F. S. The Effects of γ Radiation upon Electrode Systems. Part 1: Platinum Electrodes in Pure Water and Aqueous Sulphuric Acids	1671
—— and Knight, B. The Effects of γ Radiation upon Electrode Systems. Part 2: Aqueous Redox Systems. Feeney, J. and Sutcliffe, L. H. The Nuclear Magnetic Resonance Spectra of Some	1680
Fluorinated Cyclohexanes Figgis, B. N. Magnetic Properties of Transition Metal Ions in Asymmetric	1559
Ligand Fields. Part 1: Cubic Field A and E Terms. Findlay, T. J. V. See Copp, J. L., and	1553
Flanagan, T. B. See Carson, A. W., Flanagan, T. B. and Lewis, F. A. Fletcher, P. C. See Brennan, D., and	
Florin, R. E., Wall, L. A. and Brown, D. W. Free Radicals in Gamma-Irradiated Polystyrenes	1304
Flory, P. J. Élasticity of Polymer Networks Cross-Linked in States of Strain . Fraser, R. D. B. See <i>Bradbury</i> , E. M., Elliott, A., and	722
Frey, H. M. New Experimental Tests of the Theories of Unimolecular Reactions. The Addition of Methylene to Cyclobutane and the Decomposition of	51
Excited Methylcyclobutane Fujita, H., Kishimoto, A. and Matsumoto, K. Concentration and Temperature	1201
Dependence of Diffusion Coefficients for Systems Polymethyl Acrylate and n-Alkyl Acetates	424
Galwey, A. K. and Jacobs, P. W. M. The Thermal Decomposition of Ammonium Perchlorate in the Presence of Carbon George, W. O. See Long, D. A., and	581
Gimblett, F. G. R. The Hydrolysis of Polyphosphonitrilic Chloride Gel. Part 1: Some Studies in Aqueous Acetone at 25°C	528
Glazebrook, R. W. See Brook, J. H. T., and Goggin, P. See Cross, L. H., Roberts, H. L., Goggin, P. and Woodward, L. A.	
Goggin, P. L. and Woodward, L. A. Raman Spectrum of the Dimethyl Thallic Ion and the Nature of the Undissociated Part of Dimethyl Thallic Hydroxide	1501
in Solution Gold, V. The Rates of Acid-Catalyzed Reactions in Water+Deuterium Oxide Mixture	1591 255
Goldsmith, B. J. and Muir, J. Surface Ion Effects in the Dielectric Properties of Adsorbed Water Films	1656
Gowenlock, B. G. See Batt, L., and Grant, D. H., Vance, E. and Bywater, S. Thermal Depolymerization of Poly-	1030
Methylstyrene in Solution Griffith, J. S. Octahedral Complexes. Part 2: The Calculation of Spin-Orbit	1697
Coupling Energies	193
Studies of the Effect of Environmental Changes on the Ultra-Violet Spectrum of Iodide Ions	1125
— and Symons, M. C. R. Solvation Spectra. Part 4: The Effect of Complexing on the Ultra-Violet Spectrum of Iodide Ions	1752

AUTHOR INDEX—VOLUME 56, 1960	1889
	PAGE
Gross, P., Hayman, C., Levi, D. L. and Wilson, G. L. The Heats of Formation of Metal Halides. Niobium and Tantalum Pentachlorides	318
Grove, D. M. See Ash, R., and Guggenheim, E. A. Activity Coefficients and Osmotic Coefficients of 2:2- Electrolytes	1152
—— Sociation and Supersociation	1159 846
Haly, A. R. The Propagation of Excitation Energy in Keratin Hamann, S. D. See David, H. G., and Hardwick, R., Mosher, H. S. and Passailaigue, P. Photochromotropic Behaviour of	1252
2- (2', 4'-Dinitrobenzyl)-Pyridine Hart, P. M. G. and Sebba, F. Heats of Chemisorption of CO ₂ , CO and H ₂ on Zinc	44
Oxides with and without Valency Induction Hatton, J. V. and Richards, R. E. Spin-Spin Coupling Constants in Proton Resonance Spectra of Acetylenes	551 315
Hayman, C. See Gross, P., Hayman, C., Levi, D. L. and Wilson, G. L. Helle, J. N. See Schapink, F. W., Oudeman, M., Leu, K. W., and Heymer, G. See Kubaschewski, O., and	
Hill, R. A. W. and Welsh, J. N. (Mrs.) Effects of Recrystallization and Storage on the Thermal Decomposition of Potassium Permanganate	1059
Hills, G. J. See <i>Djordjevic</i> , S., and Hind, R. K., McLaughlin, E. and Ubbelohde, A. R. Structure and Viscosity of Liquids. Camphor+Pyrene Mixtures	328
	331
 Hoodless, I. M. See Barr, L. W., Hoodless, I. M., Morrison, J. A. and Rudham, R. Horrocks, J. K. and McLaughlin, E. Thermal Conductivity of Simple Molecules in 	
the Condensed State Howard, J. R. (Miss), Nancollas, G. H. and Purdie, N. The Precipitation of Silver Chloride from Aqueous Solutions. Part 6: Kinetics of Dissolution	206
of Seed Crystals	278 761
Hudson, G. H., McCoubrey, J. C. and Ubbelohde, A. R. Vapour Diffusion Coefficients and Collision Parameters for Cyclic Molecules	1144
Hughes, H. W. D. See Barnard, J. A., and Hummel, R. W. The Radiolysis of Liquid Methyl Acetate with 60Co Gamma Radiation	234
 Hyde, A. J. A Second Approximation to the Angular Distribution Function for the Scattering of Light by Macromolecules in good Solvents. Iredale, T. and White, J. W. The Electronic States of Monohalogen Sub- 	591
stituted Naphthalenes	1719
of Anthracene in Fluid Solutions	1635
James, D. W. See <i>Bloom</i> , H., <i>Davis</i> , F. G., and James, J. F. Profiles of the Lines of the $^2\Sigma^{-2}\Pi$ Band of the C—H Radical at 3900 Å.	1265
Jenkins, A. D. See Bailey, B. E., and —— See Bamford, C. H., and —— See Bamford, C. H., Jenkins, A. D. and Wayne, R. P.	
Jennings, K. R. and Linnett, J. W. Emission Spectra of Flames Supported by Active Nitrogen	1737 638
Jones, F. See <i>Bradley</i> , R. S., <i>Bird</i> , C. L., and Jones, W. J. and Sheppard, N. Rotational Freedom of HCl and the Methyl Halides in Solution as shown by the Contours of Infra-Red Absorption	
Bands	625
Iodide Ion in Aqueous Solution Kay, D. A. R. and Taylor, J. Activities of Silica in the Lime+Alumina+Silica System	1273 1372
Kemball, C. See Campbell, J. S., Moss, R. L., and —— See Logan, S. R., and —— See Moss, R. L., and	

	PAGE
Kemball, C. and Woodward, I. The Theoretical Interpretation of the Distributions	
of Deutero-Propanes Formed by Exchange between Propane and	
Deuterium on Metal Catalysts.	138
Kerker, M., Bowman, H. E. and Matijević, E. The Transference Number of Phos-	1000
phoric Acid by the Moving Boundary Method	1039
Kewley, R., Murty, K. S. R. and Sugden, T. M. The Microwave Spectrum of	1732
Sulphur Chloride Pentafluoride	1/34
Kington, G. L. See Edwards, J. W., Kington, G. L. and Mason, R.	
Kipling, J. J. and Wilson, R. B. Adsorptive Properties of Polymer Carbons.	
Part 1: Comparative Data	557
— and Wilson, R. B. Adsorptive Properties of Polymer Carbons. Part 2:	
Determinations of Pore Sizes	562
Kirk, A. D. and Knox, J. H. The Pyrolysis of Alkyl Hydroperoxides in the Gas	4000
Phase	1296
Kishimoto, A. See Fujita, H., Kishimoto, A. and Matsumoto, K.	
Kitchener, J. A. See Lagos, A. E., and	
—— See Schenkel, J. H., and Knight, B. See Feates, F. S., and	
Knox, J. H. The Gaseous Products from the Oxidation of Propane at 318°C.	1225
See Kirk, A. D., and	1225
Konvalinka, J. A. See Scholten, J. J. F., Konvalinka, J. A. and Zwietering, P.	
—— See Scholten, J. J. F., Zwietering, P. and de Boer, J. H.	
Krupka, R. M. and Laidler, K. J. The Influence of pH on the Rates of Enzyme	
Reactions. Part 5: The Case of Several Enzyme-Substrate Inter-	
mediates	1467
— and Laidler, K. J. The Influence of pH on the Rates of Enzyme Reactions.	1 455
Part 6: Reactions Catalyzed by Acetylcholinesterase.	1477
Kubaschewski, O. and Heymer, G. Heats of Formation of Transition-Metal Aluminides	473
Lagos, A. E. and Kitchener, J. A. Diffusion in Polystyrenesulphonic Acid Ion-	7/3
Exchange Resins	1245
Laidler, K. J. See Krupka, R. M., and	12.0
Lamm, O. Diffusion Coefficients and Friction in a General Two-Component	
Fluid	767
Lamm, O. See Beronius, P., and	
Leu, K. W. See Schapink, F. W., Oudeman, M., Lue, K. W. and Helle, J. N.	
Levi, D. L. See Gross, P., Hayman, C., Levi, D. L. and Wilson, G. L.	
Levine, P. L. and Weale, K. É. The Palladium+Hydrogen Equilibrium at High	257
Pressures and Temperatures	357
Linnett, J. W. See Jennings, K. R., and	
Livingston, R. See Jackson, G., Livingston, R. and Pugh, A. C.	
Logan, S. R. and Kemball, C. The Catalytic Decomposition of Ammonia on	
Evaporated Metal Films	144
Long, D. A. and George, W. O. Spectroscopic Study of the Pyruvate Ion	1570
— and Seibold, E. A. Root-Mean-Square Amplitudes of Vibration in Some	
Group 4 Tetrahalides	1105
— See Cattanach, J., and	
Louise, Karl D. The Dissociation Constants of o-Cresol in Water at Elevated	1622
Temperatures McAuley, A. and Nancollas, G. H. Complex Formation in Solutions of Copper	1633
Oxalate	1165
McCarthy, R. L. and Maclachlan, A. Transient Benzyl Radical Reactions Pro-	1105
duced by High-Energy Radiation	1187
McClelland, B. J. See Carter, H. V., McClelland, B. J. and Warhurst, E.	
McCoubrey, J. C. See <i>Hudson</i> , G. H., and	
—— See Hudson, G. H., McCoubrey, J. C. and Ubbelohde, A. R.	
— and Singh, Narinder Mohan. The Viscosity of Some Fluorocarbons in the	40.5
Vapour Phase	486
McDougall, A. O. See Bell, R. P., and	
McEwan, W. S. See Cook, M. A., Pack, D. H., and MacLachlan, A. See McCarthy, R. L., and	
McLaughlin, E. and Ubbelohde, A. R. Pre-Freezing Phenomena in Molten Metals	988
—— See Hind. R. K., McLaughlin, E. and Ubbelohde A. R.	700
—— See Hind, R. K., McLaughlin, E. and Ubbelohde, A. R. —— See Horrocks, J. K., and	
Mackle, H., Mayrick, R. G. and Rooney, J. J. Measurement of Heats of Vapor-	
ization by the Method of Gas-Liquid Chromography	115
Mackor, E. L. See Aalbersberg, W. IJ., and	

AUTHOR INDEX—VOLUME 56, 1960	1891
	PAGE
Maddock, A. G. See Apers, D. J., and	
— and Müller, H. The Chemical Effects of Radiative Thermal Neutron Capture. Part 7: Calcium Bromate	509
Maidanik, G. The Flow of Fluids through Capillaries, Powder Beds and Porous	
Media	118
Formamide	29
Mason, R. See Edwards, J. W., Kington, G. L., and Mathias, A. and Warhurst, E. Studies of Organo-Alkali Metal Complexes.	
Part 3: The Arrhenius Parameters of Reactions with Organic Halides	348
Mathur, R. M. Diamagnetism of the Methylene Group and Molecular Structure. Matijević, E. See Kerker, M., Bowman, H. E., and	325
Matsumoto, K. See Fujita, H., Kishimoto, A., and	
Mayers, G. R. A. See <i>Davies</i> , J. T., and Mayor, L. See <i>Baldwin</i> , R. R., and	
—— See Baldwin, R. R., Doran, P., and	
Mayrick, R. G. See Mackle, H., Mayrick, R. G. and Rooney, J. J. Morrison, J. A. See Barr, L. W., Hoodless, I. M., Morrison, J. A. and Rudham, R.	
Morton, J. R. and Stark, D. S. The Dissociation Pressures of Titanium and	
Zirconium Deuterides as Functions of Composition and Temperature. Mosher, H. S. See <i>Hardwick</i> , R. Mosher, H. S. and Passailauigyue, P.	351
Moss, R. L. See Campbell, J. S., Moss, R. L. and Kemball, C.	
and Kemball, C. The Catalytic Decomposition of Cyclohexylamine and	154
Allied Reactions on Evaporated Platinum Films	154
Tungsten	1487
Muir, J. See Goldsmith, B. J., and Müller, H. See Maddock, A. G., and	
Murty, K. S. R. See Kewley, R., Murty, K. S. R. and Sugden, T. M.	
Mysels, K. J. See Scholten, P. C., and Nancollas, G. H. See Howard, J. R. (Miss), Nancollas, G. H. and Purdie, N.	
—— See McAuley, A., and	
Newham, J. See <i>Bond</i> , G. C., and Ottewill, R. H. and Rastogi, M. C. The Stability of Hydrophobic Sols in the	
Presence of Surface-Active Agents. Part 2: The Stability of Silver	
Iodide Sols in the Presence of Cationic Surface-Active Agents and Rastogi, M. C. The Stability of Hydrophobic Sols in the Presence of	866
Surface-Active Agents. Part 3: An Examination by Microelectro-	
phoresis of the Behaviour of Silver Iodide Sols in the Presence of Cationic Surface-Active Agents	880
Rastogi, M. C. and Watanabe, A. The Stability of Hydrophobic Sols in the	
Presence of Surface-Active Agents. Part 1: Theoretical Treatment . Oudeman, M. See Schapink, F. W., Oudeman, M., Leu, K. W. and Helle, J. N.	854
Overbeek, J. Th. G. See Black, W., de Jongh, J. G. V., Overbeek, J. Th. G. and	
Sparnaay, M. J.	310
Overend, J. The Equilibrium Bond Lengths in Acetylene and HCN. Pack, D. H. See Cook, M. A., Pack, D. H. and McEwan, W. S.	310
Padley, P. J. The Origin of the Blue Continuum in the Hydrogen Flame	449
Padmini, P. R. K. L., Rao, K. Subba and Rao, B. Ramachandra. Study of Molar Sound Velocity in Liquids	1404
Page, F. M. The Ferric-Thiosulphate Reaction. Part 3: The Mechanism of	200
the Reaction	398
The Experimental Technique and Interpretation	1742
Palmer, T. F. See <i>Cundall, R. B.</i> , and Parsons, R. Hydrogen Evolution on Platinum Electrodes. The Heats of Activation	
for the Component Reactions	1340
Partington, E. J., Rowlinson, J. S. and Weston, J. F. The Gas-Liquid Critical Temperatures of Binary Mixtures. Part 1	479
Passailaigue. P. See <i>Hardwick. R., Mosher. H. S.</i> , and	
Pethica, B. A. See <i>Betts</i> , J. J., and Pilpel, N. Complex Formation and Emulsion Stability	893
Pratt. J. N. The Thermodynamic Properties of Silver-Palladium Alloys	975
Pritchard, J. and Tompkins, F. C. Surface Potential Measurements. The Adsorption of Hydrogen by Group 1B Metals	540
Pugh, A. C. See Jackson, G., Livingston, R., and	240
Pullin, A. D. E. See Clarke, J. K. A., and Purdia N. See Howard I. R. (Misc.) Nancollas G. H. and	
Purdié, N. See Howard, J. Ř. (Miss), Nancollas, G. H., and Randić, M. and Simpson, D. M. A "Missing" Frequency of Propane	1

	PAGE
Rao, K. Subba. See Padmini, P. R. K. L., Rao, K. Subba and Rao, B. Ramachandra	
Ramachandra, B. See Padmini, P. R. K. L., Rao, K. Subba, and	
Rastogi, M. C. See Ottewill, R. H., and	
—— See Ottewill, R. H., Rastogi, M. C. and Watanabe, A	
Raz, B. See Jortner, J., Raz, B. and Stein, G.	
Read, B. E. A Light-Scattering Study of Preferential Adsorption in the System	202
Benzene+Cyclohexane+Polystyrene	382
Reed, M. See Bridge, N. K., and Rees, L. V. C. See Barrer, R. M., and	
Richards, R. E. See Hatton, J. V., and	
Richardson, F. D. See Stubbles, J. R., and	
Roberts, H. L. See Cross, L. H., Roberts, H. L., Goggin, P. and Woodward, L. A.	
Roberts, J. P. and Wheeler, C. Diffusion of Zinc in Polycrystalline Zinc Oxide .	570
Robinson, N. A Light-Scattering Study of Lecithin	1260
Rooney, J. J. See Mackle, H., Mayrick, R. G., and	
Roughton, F. J. W. Diffusion through Membranes followed by Diffusion with	1005
Rapid Irreversible Immobilization in Another Medium	1085
—— See Blank, M., and Powlinger I.S. See Bartington F. I. Bowlinger I.S. and Wester I.F.	
Rowlinson, J. S. See Partington, E. J., Rowlinson, J. S. and Weston, J. F. Rudham, R. See Barr, L. W., Hoodless, I. M., Morrison, J. A., and	
Schapink, F. W., Oudeman, M., Leu, K. W. and Helle, J. N. The Adsorption of	
Thiourea on a Mercury-Electrolyte Interface	415
Schenkel, J. H. and Kitchener, J. A. A Test of the Derjaguin-Verwey-Overbeek	
Theory with a Colloidal Suspension	161
Schofield, D. See Dickens, P. G., Schofield, D, and Walsh, J.	
Scholten, J. J. F., Konvalinka, J. A. and Zwittering, P. Chemisorption of Nitrogen	
on Iron Catalysts in Connection with Ammonia Systhesis. Part 2:	262
The Rate-Determining Step in Ammonia Synthesis	262
Scholten, P. C. and Mysees, K. J. Random Walk Theory of Electrodiffusion Scott, G. See <i>Becconsall</i> , J. A., Clough, S., and	994
Sebba, F. See Hart, P. M. G., and	
Seibold, E. A. See Long, D. A., and	
Selvaratnam, M. See Devanathan, M. A. V., and	
Sheppard, N. See Jones, W. J., and	
Sherwood, J. N. and Thomson, S. J. The Diffusion of Anthracene-9-C-14 in	
Single Crystals of Anthracene	1443
Simons, J. P. The Influence of Light on the Diels-Alder Reaction between	201
Anthracene and Maleic Anhydrine	391
Singh, Narinder Mohan. See McCoubrey, J. C., and	
Skinner, H. A. and Snelson, A. The Heats of Combustion of the Four Isomeric	
Butyl Alcohols	1776
Smith, E. B. and Walkley, J. Correlation of Solubility Relations of Stannic Iodide,	
Iodine, Sulphur and Phosphorus	220
and Walkley, J. The Partial Molal Volume and Entropy of Solution of	1276
Stannic Iodide	1276
Smith, J. A. S. See <i>Jones</i> , D. W., and Snelson, A. See <i>Skinner</i> , H. A., and	
Snowdon, P. N. and Turner, J. C. R. The Soret Effect in some 0.01 Normal	
Aqueous Electrolytes	1409
— and Turner, J. C. R. The Concentration Dependence of the Soret Effect.	1812
Sobhanadri, J. A Method of Evaluating Relaxation Time from Microwave	
Measurements at a Single Frequency	340
— Dielectric Relaxation and Dipole-Dipole Interaction .	965
Sparnaay, M. J. See Black, W., de Jongh, J. G. V., Overbeek, J. Th. G., and Spivey, D. I. See Eley, D. D., and	
Squire, K. H. See Binns, E. H., Squire, K. H. and Wood, L. J.	
Stark, D. S. See Morton, J. R., and	
Steele, D. and Whiffen, D. H. The Force Field of Hexafluorobenzene	5
— and Whiffen, D. H. The Force Fields of the Infra-Red Active Classes of	
1, 4-Difluorobenzene and 1, 2, 4, 5-Tetrafluorobenzene	8
— and Whiffen, D. H. Infra-Red Absorption Intensities in 1, 4-Diffuorobenzene	
and 1, 2, 3, 4, 5-Tetrafluorobenzene	177
Stein, G. See <i>Jortner</i> , J., Raz, B., and —— and Treinin, A. Absorption Spectra of Anions in Solution. Part 3: Ionic	
Effects	1393
Strickland-Constable, R. F. See Bromley, J., and	1373
Stubbles, J. R. and Richardson, F. D. Equilibria in the System Molybdenum+	
Sulphur+Hydrogen	1460

AUTHOR INDEX—VOLUME 56, 1960	1893
	PAGE
Subrahmanyam, S. V. Ultrasonic Behaviour of Aqueous Solutions of Cadmium Halides.	971
Sugden, T. M. See Kewley, R., Murty, K. S. R., and Sutcliffe, L. H. See Benson, D., and —— See Feeney, J., and	
Symons, M. C. R. See Arotsky, J., and —— See Griffiths, T. R., and	
Taylor, J. See Kay, D. A. R., and	
Taylor, K. A. See Woodward, L. A., Creighton, J. A., and	
Thomas, G. H. See <i>Davies</i> , <i>Mansel</i> , and Thomas, P. H. Some Approximations in the Theory of Self-Heating and Thermal	
Explosion	833
Thomson, R. A. M. See Bengough, W. I., and	-
Thomson, S. J. See Sherwood, J. N., and	
Tiller, A. K. See <i>Booth, G. H.</i> , and Tipper, C. F. H. and Williams, R. K. The Effect of Sulphur Dioxide on the Com-	
bustion of Some Inorganic Compounds. Part 1: The Carbon Monoxide	
+Sulphur Dioxide+Oxygen System	1805
Tompkins, F. C. See Gundry, P. M., and —— See Pritchard, J., and	
Townsend, R. See Ambrose, D., Cox, J.D., and	
Treinin, A. See Stein, G., and	
Turner, J. C. R. See Snowdon, P. N., and Tyrrell, H. J. V. Some Problems Associated with the Definition of the Heat	
of Transfer for Binary Liquid Systems	770
Ubbelohde, A. R. See Hind, R. K., McLaughlin, E., and	
—— See Hudson, G. H., McCoubrey, J. C., and —— See McLaughlin, E., and	
Vance, S. See Grant, D. H., Vance, E. and Bywater, S.	
Van Krevelen, D. W. See <i>Bigot</i> , J. A., and	
van Voorst Vader, F. Adsorption of Detergents at the Liquid-Liquid Interface. Part 1	1067
Adsorption of Detergents at the Liquid-Liquid Interface. Part 2	1078
Verdin D. Molecular Dissociation Processes in Solution. Part 6	823
— See Bawn, C. E. H., and Vlček, A. A. A Possible Structure of μ -Peroxocomplexes of Cobalt	1137
Vratney, F. and Honig, J. M. The Thermal Decomposition of Praseodymium	110,
Nitrate	1051
Sodium Chloride Lattice	305
Walker, R. W. See Baldwin, R. R., Corney, N. S., and	
Walkley, J. See Smith, E. B., and Wall, L. A. See Florin, R. E., Wall, L. A. and Brown, D. W.	
Walmsley, D. A. G. See Dainton, F. S., Ivin, K. J., and	
Walrafen, G. E. and Young, T. F. The Structures of Oleums	1419
Walsh, J. See <i>Dickens</i> , P. G., Schofield, D., and Ward, I. M. Nuclear Magnetic Resonance Studies of Polyethylene Terephthalate	
and Related Polyesters	648
Warhurst, E. See Carter, H. V., McClelland, B. J., and	
—— See Mathias, A., and Watanabe, A. See Ottewill, R. H. Rastogi M. C. and	
Watson, J. K. G. See Brand, J. C. D., and	
Wayne, R. P. See Bamford, C. H., Jenkins, A. D., and	
Weale, K. E. See Levine, P. L., and Wolch J. N. (Mrs.) See Hill R. A. W. and	
Welsh, J. N. (Mrs.). See Hill, R. A. W., and Weston, J. F. See Partington, E. J., Rowlinson, J. S., and	
Weston, J. F. See <i>Partington, E. J., Rowlinson, J. S.</i> , and Wheeler, C. See <i>Roberts, J. P.</i> , and	
Whiffen, D. H. See Steele, D., and White, E. F. T. See Beevers, R. B., and	
—— See Beevers, R. B., White, E. F. T. and Brown, L.	
White, J. W. See <i>Iredale</i> , T., and	
Whittle, E. See Charles, S. W., and Williams, G. See Davies, Mansel, and	
Williams, R. K. See Tipper, C. F. H., and	
Wilson, G. L. See Gross, P., Haymen, C., Levi, D. L., and	
Wilson, R. B. See <i>Kipling</i> , J. J., and	
Wood, L. J. See Binns, E. H., Squire, K. H., and Woodward, I. See Kemball, C., and	
Woodward, L. A. See Chantry, G. W., and	

Woodward I A See Creek I H Deboute H I Comin D and	PAGE
Woodward, L. A. See Cross, L. H., Roberts, H. L., Goggin, P., and	
—— See Goggin, P. L., and	
Creighton, J. A. and Taylor, K. A. The Raman Spectrum of the Osmiamate	
Ion	1267
Wyatt, P. A. H. The Constitution of 80-100 % Aqueous Sulphuric Acid: A	
Case of Overlapping Equilibria	490
Wyn Roberts, M. The Interaction of Krypton, Oxygen and Hydrogen with Iron	
Films	128
Wynne-Jones, W. F. K. See Beck, W. H., Dobson, J. V., and	
Young, T. F. See Walrefen, G. E., and	
Zwietering, P. See Scholten, J. J. F., Konvalinka, J. A., and	