

COMMUNICATIONS TO PROCEEDINGS: INDEX OF AUTHORS, 1962

The following index relates to Scientific Communications published in *Proceedings of The Chemical Society*, 1962.

A

- Abel**, E. W., and **Willey**, G. Novel synthesis of a trimeric P-N ring system, 308.
Abrahamsson, S., **Bergström**, S., and **Samuelsson**, B. Absolute configuration of prostaglandin, F_{2-1} , 332.
Acheson, R. M., and **Vernon**, J. M. New type of 1,2-shift, 277.
Addison, C. C., and **Johnson**, B. F. G. Dichloronitrosylnickel, 305.
Aggarwal, R. C., and **Onyszchuk**, M. Co-ordination of germanium tetrafluoride with nitrogen, phosphorus, oxygen, and sulphur donors, 20.
Allan, J. T., **Robinson**, M. G., and **Scholes**, G. Effect of alkali on the reducing species produced in the radiolysis of aqueous solutions, 381.
Allen, A. D., and **Cook**, C. D. Tris(*tri-p*-fluorophenylphosphine)platinum(0), 218.
Amphlett, C. B., and **McDonald**, L. A. Ion-sieve properties of zirconium phosphate, 276.
Anet, F. A. L., and **Muchowski**, J. M. Fourteen-membered hydrogen-bonded dimers of some *meta*-substituted phenols, 219.
Angyal, S. J., **Gorin**, P. A. J., and **Pitman**, M. Stereospecific epimerisation of cyclolts, 337.
Arakawa, H. See **Nakazaki**, M., 151.
Arden, E. A., and **Phillips**, L. Reduction and oxidation of nitric oxide in the system diethyl peroxide-nitric oxide: reactions of HNO , 354.
Asher, J. D. M., and **Sim**, G. A. Stereochemistry of iso-photosantonic lactone, 111.
Asher, J. D. M., and **Sim**, G. A. Stereochemistry of α -santonin, 335.
Asher, J. D. M., **Robertson**, J. M., **Sim**, G. A., **Bartlett**, M. F., **Sklar**, R., and **Taylor**, W. I. Structure of hunterburnine, 72.
Aubert, C. C. See **Morgan**, L. R., jun., 73.
Avramoff, M., and **Springzak**, Y. α -Hydroperoxy-esters, 150.
Ayres, D. C. See **Pettit**, G. R., 357.
Ayscough, P. B., and **Wilson**, R. Electron-spin resonance spectra of ketals of benzophenone, 229.

B

- Bacon**, R. G. R., and **Hill**, H. A. O. Copper-catalysed nucleophilic aromatic substitutions effected in organic solvents, 113.
Bacon, R. G. R., **Hanna**, W. J. W., **Munro**, D. J., and **Stewart**, D. Dehydrogenation of amines to imines, 113.
Baddeley, G., and **Brocklehurst**, K. Reactions of hydroxylamine and its *O*-methyl derivative with carvone, 145.
Bain, P. J., **Blackman**, E. J., **Cummings**, W., **Hughes**, S. A., **Lynch**, E. R., **McCall**, E. B., and **Roberts**, R. J. Homolytic aromatic substitution by radicals derived from sulphonyl halides, 186.
Ballard, R. E., **McCaffery**, A. J., and **Mason**, S. F. New criterion for the absolute configuration of dihedral metal complexes, 331.
Bamford, C. H., and **Finch**, C. A. Activated initiation of vinyl polymerisation by metal carbonyls, 110.
Banister, A. J., and **Hazell**, A. C. α -Sulphanuric chloride, 282.
Banks, R. E., **Birchall**, J. M., **Haszeldine**, R. N., **Simm**, J. M., **Sutcliffe**, H., and **Umfreville**, J. H. New syntheses of hexafluorobenzene, 281.

- Bardsley**, W. G. See **Saxton**, J. E., 148.
Barrow, R. F. See **Richards**, W. G., 297; **Travis**, D. N., 64.
Bartlett, M. F. See **Asher**, J. D. M., 72.
Bartlett, N. Xenon hexafluoroplatinate(v), $Xe^+[PtF_6]^-$, 218.
Bartlett, N., and **Lohmann**, D. H. Dioxygenyl hexafluoroplatinate(v) $O_2^+[PtF_6]^-$, 115.
Bartlett, N., **Jha**, N. K., and **Trotter**, J. Osmium oxide pentafluoride $OsOF_5$, 277.
Bartlett, R. K., **Turner**, H. S., **Warne**, R. J., **Young**, M. A., and **McDonald**, W. S. An unusual formation of a boron-hydrogen bond, 153.
Barton, D. H. R., and **Serebryakov**, E. P. Convenient procedure for the decarboxylation of acids, 309.
Barton, D. H. R., **Gardner**, J. N., **Petterson**, R. C., and **Stamm**, O. A. An unusual reaction product from diphenylketen and ethoxyacetylene, 21.
Barton, D. H. R., **Kirby**, G. W., **Taylor**, J. B., and **Thomas**, G. M. Multiple labelling experiments in the biosynthesis of amaryllidaceae alkaloids, 179.
Barton, D. H. R., **Kirby**, G. W., and **Taylor**, J. B. Origin of methylenedioxy-groups in Nature, 340.
Barton, D. H. R., **Miki**, T., **Pinhey**, J. T., and **Wells**, R. J. Synthetic studies in the geigerin series, 112.
Bastús, J., and **Castells**, J. Pyrazolines from tetracyanoethylene, 216.
Battersby, A. R., and **McCaldin**, D. J. Biosynthesis of narcotine, 365.
Battersby, A. R. See **Wildman**, W. C., 180.
Beckwith, A. L. J., and **Evans**, G. W. Mechanism of the reactions of peresters catalysed by copper salts, 63.
Bell, T. N., **Pullman**, B. J., and **West**, B. O. Perfluoroalkyl-bismuth and -thallium compounds, 224.
Bennett, J. E. See **Evans**, A. G., 226.
Bennett, M. J., **Gerloch**, M., **McCleverty**, J. A., and **Mason**, R. Molecular structure of dihydridodi- π -cyclopentadienyl-molybdenum, 357.
Bergström, S. See **Abrahamsson**, S., 332.
Bernal, I., and **Hockings**, E. F. Pentacyanonitrosylferrate(II) anion, 361.
Bickel, A. F. See **Gersmann**, H. R., 279.
Billinge, B. H. M., and **Gowenlock**, B. G. Dual mechanism in the pyrolysis of di-isopropylmercury, 24.
Birch, A. J., and **Smith**, M. Addition of Grignard reagents to $\alpha\beta$ -unsaturated ketones catalysed by copper salts, 356.
Birch, A. J., **Graves**, J. M. H., and **Stansfield**, F. Convenient synthesis of some tropone derivatives, 282.
Birchall, J. M. See **Banks**, R. E., 281.
Birtwistle, J. S., **Case**, D. E., **Dutta**, P. C., **Halsall**, T. G., **Mathews**, G., **Sabel**, H. D., and **Thaller**, V. Cascarinill, 329.
Blackburn, G. M., **Neilson**, A. H., and **Lord Todd**. Structure of xylindein, 327.
Blackman, E. J. See **Bain**, P. J., 186.
Bladon, P., and **Sleigh**, T. Alkaline hydrolysis of 3-acetoxy- $5\alpha,8\alpha$ -epidoxysteroga-3,6,22-triene, 183.
Bladon, P., **McMeekin**, W., and **Williams**, I. A. Photochemistry of hecogenin derivatives: a novel cyclisation reaction of c-seco-steroids, 225.
Books, S. M., **Brown**, B. R., and **Todd**, A. H. Biosynthesis of extended quinones, 117.
Bott, R. W., **Eaborn**, C., **Feeling**, E. R. A., and **Webster**, D. E. Improved platinum catalyst for hydrogenation of an olefin, 337.
Boulton, A. J., and **Katritzky**, A. R. New heterocyclic rearrangement, 257.

- Breuer, S. W. See Wildman, W. C., 180.
 Brickman, M., Johnson, S., and Ridd, J. H. Substituent effects of the -NH_3^+ and the -NMe_3^+ group in nitration, 228.
 Brignell, P. J. See Bullock, E., 122.
 Brocklehurst, K. See Baddeley, G., 145.
 Brown, A. C. R., and James, D. G. L. Kinetic study of the addition of the ethyl radical to conjugated dienes, 81.
 Brown, S. R. See Bocks, S. M., 117.
 Bryan, R. F. See Kretzinger, R. H., 177.
 Buckingham, A. D. Prediction of a stable, planar molecule, $\text{N}(\text{BF}_3)_3$, 351.
 Büchi, G., and Loewenthal, H. J. E. Synthesis of epicyclo-colorenone and stereochemistry of cyclocolorenone, 280.
 Bullock, E., Gregory, B., Johnson, A. W., Brignell, P. J., Eisner, U., and Williams, H. Two novel rearrangement reactions, 122.
 Bunyan, P. J., and Cadogan, J. I. G. Deoxygenation of aromatic *C*-nitroso-compounds: a new cyclisation reaction, 78.
 Burton, J. S., Overend, W. G., and Williams, N. R. Synthesis of L-hamamelose and its epimer, 181.
 Buxton, G. V., and Williams, R. J. Photochemical decompositions of aqueous solutions of oxyanions of chlorine and chlorine dioxide, 141.

C

- Cadogan, J. I. G., and Cameron-Wood, M. Reduction of nitro-compounds, by triethyl phosphite: a new cyclisation reaction, 361.
 Cadogan, J. I. G. See Bunyan, P. J., 78.
 Calvert, B. J., and Hobson, J. D. Reaction of tropine with benzoyl chloride and alkali: a novel hydrogen transfer reaction, 19.
 Cameron-Wood, M. See Cadogan, J. I. G., 361.
 Capon, B., Hills, K., and Shaw, R. A. Kinetics and mechanism of the reaction of hexachlorocyclotriphosphazatriene with piperidine in toluene, 390.
 Case, R., Jones, E. R. H., Schwartz, N. V., and Whiting, M. C. Geometry of binuclear iron carbonyl complexes, $(\text{RC}\equiv\text{CR'})_2\text{Fe}_2(\text{CO})_8$, 256.
 Case, D. E. See Birtwistle, J. S., 329.
 Castells, J. See Bastús, J., 216.
 Cavill, G. W. K., and Whitfield, F. B. Synthesis of the enantiomer of natural dolichodial, 380.
 Chapman, D., Lloyd, D. R., and Prince, R. H. Infrared and nuclear magnetic resonance studies of α -amino-polycarboxylic acids in aqueous solution, 336.
 Charlton, T. L., and Trotter, J. Intermolecular charge-transfer bonds in *m*-bromonitrobenzene, 221.
 Christensen, B. W., and Kjær, A. Absolute configuration of *threo*- $\alpha\beta$ -dihydroxy- α -methylbutyric acid, 307.
 Ciampolini, M. See Sacconi, L., 255.
 Clay, P. G., McCargo, M., Scholes, G., Weiss, J. J., and Whiston, J. Radiation-induced formation of hydroperoxides from olefinic compounds, 22.
 Closs, G. L. Carbon-13 splitting in proton magnetic resonance spectra of alkylcyclopropenes, 152.
 Clyne, M. A. A., and Thrush, B. A. Dissociation energy of the NH radical, 227.
 Cole, S. J. See Harding, M. M., 178.
 Collinson, E., Dainton, F. S., Smith, D. R., and Tazuké, S. Evidence for the unit negative charge on the "hydrogen atom" formed by the action of ionising radiation on 8 aqueous systems, 140.
 Conway, B. E., and Dzieciuch, M. Significance of the critical potential in the Kolbe reaction, 121.
 Cook, C. D. See Allen, A. D., 218.
 Cook, R. J., Rowlands, J. R., and Whiffen, D. H. Electron-spin resonance spectrum of the radical $\cdot\text{CHF}\text{CO}\cdot\text{NH}_2$, 252.
 Coombe, R. G., and Watson, T. R. Unique carbohydrate portion of the cardiac glycoside, gomphoside, 214.
 Cooper, R. D. G., Jackman, L. M., and Weedon, B. C. L. Stereochemistry of capsorubin and synthesis of its optically inactive epimers, 215.
 Cotton, F. A. See Kretzinger, R. H., 177.
 Cottrell, T. L., and Matheson, A. J. Rotational-vibrational energy transfer, 17.

- Craig, J. C., and Moyle, M. Synthesis of acetylenes from enol phosphates, 149.
 Craig, J. C., and Moyle, M. Reaction of sodamide with $\alpha\beta$ -acetylenic acids and their derivatives, 283.
 Crispin, D. J., and Whitehurst, J. S. Total synthesis of oestrone, 356.
 Crowley, K. J. 2,3-Secoiridopelane in nature, 27.
 Crowley, K. J. Photochemical synthesis of β -pinene, 245.
 Crowley, K. J. Synthesis of cyclobutenes by photoisomerisation, 334.
 Cummings, W. See Bain, P. J., 186.

D

- Dainton, F. S., and Sills, S. A. Rates of some reactions of hydrogen atoms in water at 25°C , 223.
 Dainton, F. S. See Collinson, E., 140.
 da Silva, J. J. R. F. See Irving, H., 250.
 de Boer, E., and van der Meij, P. H. Negative and positive ions of 1,6-diphenylhexatriene, 139.
 Delpiere, G. R., and Lamchen, M. Rearrangement caused by reduction with hydriodic acid, 118.
 de Mayo, P., Takeshita, H., and Sattar, A. B. M. A. Photochemical synthesis of 1,5-diketones and their cyclisation: a new annulation process, 119.
 Dixon, P. S. See Matsuoka, M., 304.
 Dodd, J. W., Hopton, F. J., and Hush, N. S. Electronic spectra of azabenzeno anions, 61.
 Donbrow, M. See Packter, A., 220.
 Dutta, P. C. See Birtwistle, J. S., 329.
 Dzieciuch, M. See Conway, B. E., 121.

E

- Eaborn, C. See Bott, R. W., 337.
 Edmunds, I. G. See Manojlovich, Lj. M., 302.
 Eglington, G., Raphael, R. A., and Willis, R. G. Synthesis of benzocyclobutene from cyclo-octane derivatives, 334.
 Eisner, U. See Bullock, E., 122.
 Elad, D. Light-induced addition of formamide to esters of maleic, fumaric, and acetylenedicarboxylic acid, 225.
 Evans, A. G., Evans, J. C., Owen, E. D., Tabner, B. J., and Bennett, J. E. Catalytic action of anionic catalysts, 226.
 Evans, A. G., Evans, J. C., and Tabner, B. J. Catalytic action of anionic catalysts, 338.
 Evans, G. W. See Beckwith, A. L. J., 63.
 Evans, J. C. See Evans, A. G., 226, 338.
 Evans, M. B., and Saville, B. Nucleophilic displacements by thioanions on trisulfides, 18.
 Evans, R. J. D., and Landor, S. R. Absolute configuration of 1-chloro-3,4,4-trimethylpent-1,2-diene, 182.
 Eytón, W. B., Ollis, W. D., Sutherland, I. O., Jackman, L. M., Gottlieb, O. R., and Magalhães, M. T. Dalbergiones: a new group of natural products, 301.

F

- Fales, H. M. See Wildman, W. C., 180.
 Feeley, T. M. D. See O'Colla, P. S., 68.
 Ferguson, G., Sim, G. A., and Robertson, J. M. Stereochemistry of glauconic acid, 385.
 Field, B. Ö., and Hardy, C. J. Tetranitratozirconium(IV): a new volatile complex, 76.
 Filler, R., Gorelic, L., and Tagui-Khan, B. New aspects of the Meerwein arylation route to α -amino-acids, 117.
 Finch, C. A. See Bamford, C. H., 110.
 Finegold, H. Signs of nuclear resonance coupling constants in saturated aliphatic systems, 213.
 Fitzsimmons, B. W., Hewlett, C., and Shaw, R. A. Conversion of alkoxyphosphazenes into 1,3,5-triazines, 340.
 Forrester, A. R., and Thomson, R. H. Stable radicals derived from azo-1-pyridine 1-oxides, 360.
 Foster, A. B., Inch, T. D., Lehmann, J., Thomas, L. F., Webber, J. M., and Wyer, J. A. Absolute configuration of mycarose, 254.
 Frey, H. M., and Stevens, I. D. R. Formation of methylene by the photolysis of diazirine (cyclodiazomethane), 79.

G

- Gardner, J. N. See Barton, D. H. R., 21.
 Gear, J. R. See Spenser, I. D., 228.
 Gerloch, M. See Bennett, M. J., 357.
 Gersmann, H. R., Nieuwenhuis, H. J. W., and Bickel, A. F. α -Hydroperoxides of ketones and esters by autoxidation in alkali media, 279.
 Gil-Av, E., and Nurok, D. Separation of diastereo-isomers by gas-liquid chromatography, 146.
 Göschke, R. See Hendrickson, J. B., 383.
 Gorelic, L. See Filler, R., 117.
 Gorin, P. A. J. See Angyal, S. J., 337.
 Gottlieb, O. R. See Eyton, W. B., 301.
 Gowenlock, B. G. See Billinge, B. H. M., 24.
 Grant, I. J., Hamor, T. A., Robertson, J. M., and Sim, G. A. Structure of chimonanthine, 148.
 Graves, J. M. H. See Birch, A. J., 282.
 Gray, P. See Thynne, J. C. J., 141, 295.
 Green, B. See Pettit, G. R., 357.
 Green, M., and Hudson, R. F. Mechanism of reaction of carbonyl chloride with alkyl phosphinates, 217.
 Green, M., and Hudson, R. F. Stereochemistry of the transition state of a displacement at a phosphoryl centre, 307.
 Green, M. L. H., and Nagy, P. L. I. A novel reaction: abstraction of a hydride ion from some σ -bonded iron-alkyl complexes, 74.
 Greenwood, N. N., Storr, A., and Wallbridge, M. G. H. Vibrational frequencies of trimethylamine-gallane and -trideuterogallane, 249.
 Gregory, B. See Bullock, E., 122.
 Gritten, R. J., and Patmore, E. L. Free-radical reactions of co-ordination compounds: pentane-2,4-dione chelates, 328.
 Groth, P., and Hassel, O. X-Ray investigation of the 1:1 molecular compound, dinitrogen tetroxide-1,4-dioxan, 379.

H

- Haake, P. Kinetic evidence for association in displacements at platinum(II), 278.
 Hague, D. N., and Prince, R. H. Metal-metal conjugation in Group IVB organometallic systems, 300.
 Hall, D., Rae, A. D., and Waters, T. N. Structure of *NN'*-ethylenebis(acetylacetoneimino)copper(II), 143.
 Hall, L. D., and Hough, L. Proton magnetic resonance spectra of 2,3,4-tri-O-acetyl-1,6-anhydro-D-hexopyranoses: a long-range coupling, 382.
 Halsall, T. G. See Birtwistle, J. S., 329.
 Hamor, T. A. See Grant, I. J., 148.
 Hanna, W. J. W. See Bacon, R. G. R., 113.
 Harding, M. M., and Cole, S. J. Crystal and molecular structure of di(histidino)zinc(II) pentahydrate, 178.
 Hardy, C. J. See Field, B. O., 76.
 Hassel, O. See Groth, P., 379.
 Haszeldine, R. N. See Banks, R. E., 281.
 Hatchard, C. G. See Parker, C. A., 147, 386.
 Hazel, A. C. See Banister, A. J., 282.
 Henbest, A. B., and McCullough, J. J. Steric control in addition to 4-methylcyclopentene, 74.
 Hendrickson, J. B., Rees, R., and Göschke, R. Total synthesis of the calycanthaceous alkaloids: chimonanthine, 383.
 Hewlett, C. See Fitzsimmons, B. W., 340.
 Hight, R. J. See Wildman, W. C., 180.
 Hill, H. A. O. See Bacon, R. G. R., 113.
 Hills, K. See Capon, B., 390.
 Hobson, J. D. See Calvert, B. J., 19.
 Hockings, E. F. See Bernal, I., 361.
 Holloway, J. H., and Peacock, R. D. Simple preparation of xenon tetrafluoride, 389.
 Holmes, J. L. Kinetics of the reaction between nitric oxide and hydrogen iodide and the dissociation energy $D(H-NO)$, 75.
 Hoper, P. See Pettit, G. R., 357.
 Hopton, F. J. See Dodd, J. W., 61.
 Hough, L. See Hall, L. D., 382.
 Hudson, R. F. See Green, M., 217, 307.
 Hughes, S. A. See Bain, P. J., 186.
 Hush, N. S. See Dodd, J. W., 61.

I

- Inch, T. D. See Foster, A. B., 254.
 Irving, H., and da Silva, J. J. R. F. Contributions of π -bonding to the stabilities of metal complexes in solution, and a correlation with Hammett's σ -factor, 250.
 Ito, M. See Kosower, E. M., 25.

J

- Jackman, L. M. See Cooper, R. D. G., 215; Eyton, W. B., 301.
 James, D. G. L. See Brown, A. C. R., 81.
 Jeffs, P. W. Alkaloids of the Amaryllidaceae. Part X. Biosynthesis of haemanthamine, 80.
 Jha, N. K. See Bartlett, N., 277.
 Johnson, A. W. See Bullock, E., 122.
 Johnson, B. F. G. See Addison, C. C., 305.
 Johnson, S. See Brickman, M., 228.
 Jones, E. R. H. See Case, R., 256.
 Jones, J. I., and McDonald, W. S. New aluminium-nitrogen system, 366.
 Jones, K., and Lappert, M. F. Aminostannanes, stannylamines, and stannazanes, 358.
 Joshi, K. K., and Pauson, P. L. Tricarbonyl- π -pyrrolyl-manganese, 326.

K

- Kader, A. T., and Stirling, C. J. M. New procedure for the protection of amino-groups, 363.
 Katritzky, A. R., and Ridgewell, B. J. Mechanism of electrophilic hydrogen exchange in pyridine derivatives, 114.
 Katritzky, A. R. See Boulton, A. J., 257.
 Kettle, S. F. A., and Khan, I. A. Nonacarbonyl(vinylsilicon)-tricobalt, 82.
 Khan, I. A. See Kettle, S. F. A., 82.
 Kiang, A. K., and Smith, G. F. Reactions of corymine, an alkaloid isolated from *Hunteria corymbosa* (Apocynaceae), 298.
 Kirby, G. W. See Barton, D. H. R., 179, 340.
 Kjær, A. See Christensen, B. W., 307.
 Kloosterziel, H. See ter Borg, A. P., 359.
 Kopple, K. D., and Miller, R. R. Reactions of cobalt(III) tetrammines with chromium(II), 306.
 Kosower, E. M., and Ito, M. A stereochemical factor in cyclopropyl conjugation, 25.
 Kretzinger, R. H., Bryan, R. F., and Cotton, F. A. Crystal and molecular structure of di-(L-histidino)zinc(II) dihydrate, 177.

L

- Lack, R. See Shoppee, C. W., 65.
 Lamchen, M. See Delpierre, G. R., 118.
 Landor, P. D., and Landor, S. R. Formation of indenes, dimethylenecyclobutanes, and rubrenes from aromatic tertiary acetylenic alcohols, 77.
 Landor, S. R. See Evans, R. J. D., 182; Landor, P. D., 77.
 Lapidot, A., Pinchas, S., and Samuel, D. Infrared method of isotopic analysis of oxygen in oxy-acids and their derivatives, 109.
 Lappert, M. F. See Jones, K., 358.
 Lehmann, J. See Foster, A. B., 254.
 Lloyd, D. R. See Chapman, D., 336.
 Loewenthal, H. J. E., and Malhotra, S. K. Total synthesis of (\pm)-gibberic acid, 230.
 Loewenthal, H. J. E. See Büchi, G., 280.
 Lohmann, D. H. See Bartlett, N., 115.
 Long, F. A. See Schulze, J., 364.
 Lynch, E. R. See Bain, P. J., 186.
 Lyons, L. E., and Mackie, J. C. Calculation of photoelectric thresholds and electron affinities of molecular crystals, 71.

M

- McCaffery, A. J.**, and **Mason, S. F.** Structure of (—)-trioxalatocobalt(III), 388.
McCaffery, A. J. See **Ballard, R. E.**, 331.
McCaldin, D. J. See **Battersby, R. A.**, 365.
McCall, E. B. See **Bain, P. J.**, 186.
McCapra, F., **Scott, A. I.**, **Sim, G. A.**, and **Young, D. W.** Structure and stereochemistry of gibberellic acid, 185.
McCargo, M. See **Clay, P. G.**, 22.
McCleverty, J. A. See **Bennett, M. J.**, 357.
McCullough, J. J. See **Henbest, H. B.**, 74.
McDonald, L. A. See **Amphlett, C. B.**, 276; **Bartlett, R. K.**, 153; **Jones, J. I.**, 366.
McDowell, C. A., **Paulus, K. F.**, and **Rowlands, J. R.** Electron-spin resonance spectra of some diazine radical anions, 60.
Mackie, J. C. See **Lyons, L. E.**, 71.
McLauchlan, K. A., and **Whiffen, D. H.** Determination of the relative signs of proton spin coupling constants from double-quantum spectra, 144.
McMeekin, W. See **Bladon, P.**, 225.
Maddock, A. G., and **Pearson, R. M.** Influence of pre-irradiation treatment on the chemical effects of the $^{35}\text{Cl}(n, p)^{35}\text{S}$ reaction in alkali chloride crystals, 275.
Magalhães, M. T. See **Eyton, W. B.**, 301.
Maitlis, P. M., and **Stone, F. G. A.** Convenient new synthesis of the hydrocarbon reported to be octaphenyl cubane, 330.
Malhotra, S. K. See **Loewenthal, H. J. E.**, 230.
Manojlovich, Lj. M., and **Edmunds, I. G.** Hydrogen bonding in crystalline 4,4'-dihydroxythiobenzophenone monohydrate, 302.
Marko, L. Kinetics and mechanism of homogeneous aldehyde hydrogenation with cobalt carbonyl as catalyst, 67.
Mason, R. See **Bennett, M. J.**, 357.
Mason, S. F. New criterion for magnetic-dipole-allowed electronic transitions in polyatomic molecules, 137.
Mason, S. F. Absolute configuration of calycanthine, 362.
Mason, S. F. See **Ballard, R. E.**, 331; **McCaffery, A. J.**, 388.
Matheson, A. J. See **Cottrell, T. L.**, 17.
Mathews, G. See **Birtwistle, J. S.**, 329.
Matsuoka, M., **Dixon, P. S.**, **Stefani, A. P.**, and **Szwarc, M.** Structure of the transition state in the disproportionation and combination of ethyl radicals, 304.
Miller, B. Ease of displacement of thiol and oxide anions from methyl groups: carbon basicities of anions of oxygen and sulphur, 303.
Miller, J. M. See **Wallace, T. J.**, 384.
Miller, R. R. See **Kopple, K. D.**, 306.
Miki, T. See **Barton, D. H. R.**, 112.
Mishra, H. C., and **Symons, M. C. R.** Unusual valency states of chromium and manganese in oleum, 23.
Morantz, D. J., **White, B. G.**, and **Wright, A. J. C.** Stimulated light emission in organic molecules, 26.
Morgan, L. R., jun., and **Aubert, C. C.** Oxidation of anthranilic acid by manganese dioxide, 73.
Morrison, G. A. See **Paul, I. C.**, 352.
Morrison, I. G., and **Pauson, P. L.** Displacement of ferrocene substituents by protons, 177.
Moyle, M. See **Craig, J. C.**, 149, 283.
Muchowski, J. M. See **Anet, F. A. L.**, 219.
Munro, D. J. See **Bacon, R. G. R.**, 113.

N

- Nagy, P. L. I.** See **Green, M. L. H.**, 74.
Nakazaki, M., and **Arakawa, H.** Absolute configuration of the asymmetric centre at position 11 of santonin, 151.
Neilson, A. H. See **Blackburn, G. M.**, 327.
Nieuwenhuis, H. J. W. See **Gersmann, H. R.**, 279.
Norman, R. O. C., and **Radda, G. K.** Aromatic hydroxylation: the electrophilic character of the hydroxyl radical, and its significance in biological hydroxylation, 138.
Nurok, D. See **Gil-Av, E.**, 146.

O

- O'Colla, P. S.**, **O'Donnell, J. J.**, and **Feeley, T. M. D.** Action of Fenton's reagent on acidic polysaccharides, 68.

- O'Donnell, J. J.** See **O'Colla, P. S.**, 68.
Ollis, W. D. See **Eyton, W. B.**, 301.
Onyszchuk, M. See **Aggarwal, R. C.**, 20.
Orioli, P. L., and **Vaska, L.** Structure of hydridobromo-carbonyltris(triphenylphosphine)osmium(II), 333.
Orioli, P. L. See **Sacconi, L.**, 255.
Overend, W. G. See **Burton, J. S.**, 181.
Owens, E. D. See **Evans, A. G.**, 226.

P

- Packter, A.**, and **Donbrow, M.** Ion-pair formation in aqueous solutions of organic electrolytes, 220.
Paoletti, P. See **Sacconi, L.**, 255.
Parker, C. A., and **Hatchard, C. G.** Delayed fluorescence from solutions of anthracene and phenanthrene, 147.
Parker, C. A., and **Hatchard, C. G.** Sensitised anti-Stokes delayed fluorescence, 386.
Parkin, J. E., **Poole, H. G.**, and **Raynes, W. T.** Inversion doublet interactions in formaldehyde, 248.
Patmore, E. L. See **Gritter, R. J.**, 328.
Paul, I. C., **Sim, G. A.**, and **Morrison, G. A.** Structures of atrovenetin and herqueinone, 352.
Paulus, K. F. See **McDowell, C. A.**, 60.
Pauson, P. L. See **Joshi, K. K.**, 326; **Morrison, I. G.**, 177.
Pauwels, P. J. S. See **Pettit, G. R.**, 357.
Peacock, R. D. See **Holloway, J. H.**, 389.
Pearson, B. D. Effect of solvent on the electronic absorption spectrum of *p*-nitro aniline, 78.
Pearson, R. M. See **Maddock, A. G.**, 275.
Peeling, E. R. A. See **Bott, R. W.**, 337.
Petterson, R. C. See **Barton, D. H. R.**, 21.
Pettit, G. R., **Green, B.**, **Hofer, P.**, **Ayres, D. C.**, and **Pauwels, P. J. S.** Hydrogenolysis of the benzyl-oxygen bond by boron trifluoride-sodium borohydride, 357.
Phillips, L., and **Shaw, R.** Gas-phase reaction of chlorine monoxide with hydrocarbons: chlorination by the ClO^{\cdot} radical, 294.
Phillips, L. See **Arden, E. A.**, 354.
Pidcock, A., **Richards, R. E.**, and **Venanzi, L. M.** Nuclear-spin coupling constants and π -bonding in platinum complexes, 184.
Pinchas, S. See **Lapidot, A.**, 109.
Pinhey, J. T. See **Barton, D. H. R.**, 112.
Pitman, M. See **Angyal, S. J.**, 337.
Pollitt, R. J., and **Saunders, B. C.** Deuterium exchange in *m*-dinitrobenzene, 176.
Poole, H. G. See **Parkin, J. E.**, 248.
Prince, R. H. See **Chapman, D.**, 336; **Hague, D. N.**, 300.
Probnér, H. See **Wallace, T. J.**, 384.
Pullman, B. J. See **Bell, T. N.**, 224.

Q

- Quinn, C. M.**, and **Roberts, M. W.** Surface-potential measurements during the oxidation and subsequent reduction of nickel and iron films, 246.

R

- Radda, G. K.** See **Norman, R. O. C.**, 138.
Rae, A. D. See **Hall, D.**, 143.
Raphael, R. A. See **Eglington, G.**, 334.
Raynes, W. T. See **Parkin, J. E.**, 248.
Rees, R. See **Hendrickson, J. B.**, 383.
Reuben, J., **Tzalmona, A.**, and **Samuel, D.** Direct measurement of the ^{17}O -proton spin-spin coupling in water, 353.
Richards, R. E., and **White, J. W.** Relative couplings between free radicals and hydrogen and fluorine nuclei by the Overhauser effect, 119.
Richards, R. E. See **Pidcock, A.**, 184.
Richards, W. G., and **Barrow, R. F.** Rotational analysis of the $\text{A}^3\pi_0^+ \rightarrow \text{X}^1\Sigma^+$ system of the chlorine molecule, 297.
Ridd, J. H. See **Brickman, M.**, 228.
Ridgeowell, B. J. See **Katritzky, A. R.**, 114.
Roberts, M. W. See **Quinn, C. M.**, 246.

- Roberts, R. J. See Bain, P. J., 186.
 Robertson, A. V. See Shoppee, C. W., 65.
 Robertson, J. M. See Asher, J. D. M., 72; Ferguson, G., 385; Grant, I. J., 148; Scott, C. C., 355; Sutherland, S. A., 222.
 Robinson, M. G. See Allan, J. T., 381.
 Rowe, J. M. Crystal structure of the π -allylic complex $[\text{PdCl}(\text{C}_5\text{H}_5)]_2$, 66.
 Rowlands, J. R. See Cook, R. J., 252; McDowell, C. A., 60.

S

- Sabel, H. D. See Birtwistle, J. S., 329.
 Sacconi, L., Orioli, P. L., Paoletti, P., and Ciampolini, M. Existence of tetrahedral nickel(II) chelates, 255.
 Samuel, D. See Lapidot, A., 109; Reuben, J., 353.
 Samuelsson, B. See Bergström, S., 332.
 Satchell, D. P. N., and Wardell, J. L. Direct comparison of proton availability in dual-acid systems, 296.
 Sattar, A. B. M. A. See de Mayo, P., 119.
 Saunders, B. C. See Pollitt, R. J., 176.
 Saville, B. Novel reactions in the synthesis of new organo-sulphur compounds, 18.
 Saville, B. See Evans, M. B., 18.
 Saxton, J. E., Bardsley, W. G., and Smith, G. F. Structure of calycanthidine, 148.
 Scholes, G. See Allan, J. T., 381; Clay, P. G., 22.
 Schriesheim, A. See Wallace, T. J., 384.
 Schulze, J., and Long, F. A. Evidence for carbon-1 protonation of 1-nitro-4,6,8-trimethylazulene, 364.
 Schwartz, N. V. See Case, R., 256.
 Scott, A. I. See McCapra, F., 185.
 Scott, C. C., Sim, G. A., and Robertson, J. M. Occurrence of *N*(*b*)-epimeric quaternary alkaloids in *Hunteria eburnea*: hunterburnine α - and β -methiodide, 355.
 Serebryakov, E. P. See Barton, D. H. R., 309.
 Shaw, G., and Wilson, D. V. Synthesis of *N*-(5-amino-1- β -D-ribofuranosyl-4-imidazolylcarbonyl)-L-aspartic acid 5'-O-phosphate, 115.
 Shaw, R. See Phillips, L., 294.
 Shaw, R. A. See Capon, B., 390; Fitzsimmons, B. W., 340.
 Shoppee, C. W., Lack, R., and Robertson, A. V. Structure of diginin and dignigenin, 65.
 Sills, S. A. See Dainton, F. S., 223.
 Sim, G. A. See Asher, J. D. M., 72, 111, 335; Ferguson, G., 385; Grant, I. J., 148; McCapra, F., 185; Paul, I. C., 352; Scott, C. C., 355; Sutherland, S. A., 222.
 Simm, J. M. See Banks, R. E., 281.
 Simons, J. P. See Yarwood, A. J., 62.
 Sklar, R. See Asher, J. D. M., 72.
 Sleigh, T. See Bladon, P., 183.
 Smith, D. R. See Collinson, E., 140.
 Smith, G. F. See Kiang, A. K., 298; Saxton, J. E., 148.
 Smith, M. See Birch, A. J., 356.
 Spenser, I. D., and Gear, J. R. Biosynthesis of berberine, 228.
 Sprinzak, Y. See Avramoff, M., 150.
 Stamm, O. A. See Barton, D. H. R., 21.
 Stansfield, F. See Birch, A. J., 282.
 Stefani, A. P. See Matsuoka, M., 304.
 Stevens, I. D. R. See Frey, H. M., 79.
 Stewart, D. See Bacon, R. G. R., 113.
 Stirling, C. J. M. See Kader, A. T., 363.
 Stock, L. M., and Suzuki, J. Electron magnetic resonance spectrum of 2-t-butylsemiquinone and 2-t-[β - ^{13}C]-butylsemiquinone: a model for carbon-carbon hyperconjugation, 136.
 Stone, F. G. A. See Maitlis, P. M., 330.
 Stone, T. J., and Waters, W. A. Electron-spin resonance spectra of transient aryloxy and arylamino free radicals, 253.
 Storr, A. See Greenwood, N. N., 249.
 Stuart, A., and Wood, H. C. S. Biosynthesis of xanthopterin, 151.
 Sutcliffe, H. See Banks, R. E., 281.
 Sutherland, I. O. See Eyton, W. B., 301.
 Sutherland, S. A., Sim, G. A., and Robertson, J. M. Structure of gedunin, 222.

- Suzuki, J. See Stock, L. M., 136.
 Symons, M. C. R. See Mishra, H. C., 23.
 Szwarc, M. See Matsuoka, M., 304.

T

- Tabner, B. J. See Evans, A. G., 226, 338.
 Takeshita, H. See de Mayo, P., 119.
 Taqui-Khan, B. See Filler, R., 117.
 Taylor, J. B. See Barton, D. H. R., 179, 340.
 Taylor, W. I. Recognition of a general reaction of indoles, 247.
 Taylor, W. I. See Asher, J. D. M., 72.
 Tazuké, S. See Collinson, E., 140.
 ter Borg, A. P., Kloosterziel, H., and van Meurs, N. 1,5-Transannular shift of hydrogen in cycloheptatriene and related compounds, 359.
 Thaller, V. See Birtwistle, J. S., 329.
 Thomas, G. M. See Barton, D. H. R., 179.
 Thomas, L. F. See Foster, A. B., 254.
 Thomson, R. H. See Forrester, A. R., 360.
 Thrush, B. A., and Zwolenik, J. J. Absorption spectrum of the tropyl (cycloheptatrienyl) radical, 339.
 Thrush, B. A. See Clyne, M. A. A., 227.
 Thynne, J. C. J., and Gray, P. Chlorine atom abstraction by methyl radicals from methyl chloroformate, 141.
 Thynne, J. C. J., and Gray, P. Reactions of methoxyl radicals with methyl formate; comparisons between alkoxy and alkyl, 295.
 Todd, A. H. See Blackburn, G. M., 327; Bocks, S. M., 117.
 Travis, D. N., and Barrow, R. F. Internuclear distance in gaseous Cu_2 , 64.
 Trimm, D. L., and Williams, R. J. Nitrogen-forming reactions in the decomposition of hydrazoic acid solutions, 142.
 Trotter, J. See Bartlett, N., 277; Charlton, T. L., 221.
 Turner, H. S., and Warne, R. J. Tetrameric borazynes: a new boron-nitrogen ring system, 69.
 Turner, H. S. See Bartlett, R. K., 153.
 Tzalmona, A. See Reuben, J., 353.

U

- Ulbricht, T. L. V. Mechanism of nucleoside synthesis: pyrimidine O - \longrightarrow *N*-glycosyl rearrangement, 298.
 Umfreville, J. H. See Banks, R. E., 281.

V

- van der Meij, P. H. See de Boer, E., 139.
 van Meurs, N. See ter Borg, A. P., 359.
 Vaska, L. See Orioli, P. L., 333.
 Venanzi, L. M. See Pidcock, A., 184.
 Vernon, J. M. See Acheson, R. M., 277.
 Vos, A. See Wiegers, G. A., 387.

W

- Wallace, T. J., Miller, J. M., Probyn, H., and Schriesheim, A. Oxidation of RS^- ions by electron-accepting species, 384.
 Wallbridge, M. G. H. See Greenwood, N. N., 249.
 Wardell, J. L. See Satchell, D. P. N., 296.
 Warne, R. J. See Bartlett, R. K., 153; Turner, H. S., 69.
 Waters, T. N. See Hall, D., 143.
 Waters, W. A. See Stone, T. J., 253.
 Watson, T. R. See Coombe, R. G., 214.
 Webber, J. M. See Foster, A. B., 245.
 Webster, D. E. See Bott, R. W., 337.
 Weedon, B. C. L. See Cooper, R. D. G., 215.
 Weiss, J. J. See Clay, P. G., 22.
 Wells, R. J. See Barton, D. H. R., 112.
 West, B. O. See Bell, T. N., 224.
 Wheatley, P. J., and Wittig, G. Structure of pentaphenyl-phosphorus, -arsenic, and -antimony, 251.

- Whiffen, D. H. See Cook, R. J., 252; McLauchlan, K. A., 144.
- Whiston, J. See Clay, P. G., 22.
- White, B. G. See Morantz, D. J., 26.
- White, J. W. See Richards, R. E., 119.
- Whitehurst, J. S. See Crispin, D. J., 356.
- Whitfield, F. B. See Cavill, G. W. K., 380.
- Whitham, G. H. Solvolysis of the toluene-*p*-sulphonate of 3*α*-hydroxymethyl-*β*-norcholest-5-ene, 330.
- Whiting, M. C. See Case, R., 256.
- Wiegers, G. A., and Vos, A. Comparison of the bond lengths in (NSF)₃, (NSCl)₃, and α -(NSOCl)₃, 387.
- Wildman, W. C., Fales, H. M., Hightet, R. J., Breuer, S. W., and Battersby, A. R. Biosynthesis in the amaryllidaceae: evidence for intact incorporation of norbelladine into lycorine, crinamine, and belladine, 180.
- Willey, G. See Abel, E. W., 308.
- Williams, H. See Bullock, E., 122.
- Williams, I. A. See Bladon, P., 225.
- Williams, N. R. See Burton, J. S., 181.
- Williams, R. J. See Buxton, G. V., 141; Trimm, D. L., 142.
- Willis, R. G. See Eglinton, G., 334.
- Wilson, D. V. See Shaw, G., 115.
- Wilson, R. See Ayscough, P. B., 229.
- Wittig, G. See Wheatley, P. J., 251.
- Wright, A. J. C. See Morantz, D. J., 26.
- Wood, H. C. S. See Stuart, A., 151.
- Wyer, J. A. See Foster, A. B., 245.

Y

- Yarwood, A. J., and Simons, J. P. Production of CF, CCl, and CBr through the decomposition of energised halogenomethyl radicals, 62.
- Young, D. W. See McCapra, F., 185.
- Young, M. A. See Bartlett, R. K., 153.

Z

- Zwolenik, J. J. See Thrush, B. A., 339.