

# INDEX OF AUTHORS, 1973

## A

- Abe, K., Onda, M., and Okuda, S.** Studies on morphine alkaloids. Part X. Some reactions of 14 $\beta$ -bromocodeine derivatives with various substituents at C-6, 316.
- Abis, Luigi, and Giordano, Claudio.** A new stereospecific synthesis of 5,6-dihydro-4*H*-1,3-thiazines by polar 1,4-cycloaddition of thioamidoalkyl ions to olefins. Configurational and conformational nuclear magnetic resonance analysis of the products, 771.
- Abraham, E. M.** See **Kasturi, T. R.**, 2468.
- Abraham, Raymond J., Barnett, Graham H., and Smith, Kevin M.** Synthesis and properties of thallium(III) porphyrin chelates, 2142.
- Abraham, Raymond J., and Monasterios, Jose R.** Polar addition of olefins. Part I. Stereochemistry of the halogenation of *cis*- and *trans*-2-t-butylstyrene. Rotational isomerism of the products, 1446.
- Acheson, R. Morrin, and Nisbet, Donald F.** Addition reactions of heterocyclic compounds. Part LII. Further adducts from substituted 2-methylquinolines and dimethyl acetylenedicarboxylate, 1338.
- Acheson, R. Morrin, and Verlander, Michael S.** Addition reactions of heterocyclic compounds. Part LIII. Reactions of benzimidazoles with propiolic esters, 2348.
- Achmatowicz, Selim, Barton, Derek H. R., Magnus, Philip D., Poulton, Gerald A., and West, Peter J.** Photochemical transformations. Part XXX. Photolysis of thiobenzoic acid *O*-esters. Part I. Photolysis of *O*-cholesteryl thiobenzoate, 1567.
- Ackrell, J., and Boulton, A. J.** Furazans and furazan oxides. Part II. Preparation and tautomerism of some acyl furoxans; examples of steric hindrance to conformational mobility in alicyclic six-membered rings, 351.
- Adamson, George W., Cowell, Jeanne, Lynch, Michael F., Town, William G., and Yapp, A. Margaret.** Analysis of structural characteristics of chemical compounds in a large computer-based file. Part IV. Cyclic fragments, 863.
- Adamson, George W., Creasey, Susan E., Eakins, John P., and Lynch, Michael F.** Analysis of structural characteristics of chemical compounds in a large computer-based file. Part V. More detailed cyclic fragments, 2071.
- Agasimundin, Y. S., and Siddappa, S.** A convenient method for the synthesis of baicalein (5,6,7-trihydroxyflavone) and 4'-methylgamatin (4-methoxy-3-methyl-7-phenylfuro[3,2-*g*][1]benzopyran-5-one), 503.
- Ager, Ernest, Chivers, Geoffrey E., and Suschitzky, Hans.** Polyhalogeno-aromatic compounds. Part XXVI. Photochemistry of pentachloropyridine and some derivatives, 1125.
- Ager, Ernest, and Suschitzky, Hans.** Polyhalogeno-aromatic compounds. Part XXV. Quaternisation of polyhalogen pyridines and reactions of the pyridinium salts, 2839.
- Ager, Ian, Barton, Derek H. R., Greig, David G. T., Lucente, Gino, Sammes, Peter G., Taylor, Michael V., Hewitt, Graham H., Looker, Brian E., Mowatt, Ann, Robson, Caroline A., and Underwood, William G. E.** Transformations of penicillins. Part V. Reactions of olefin and acetylene derivatives with the sulphenic acid intermediates from penicillin S-oxides, 1187.
- Ahmad, Saboor.** See **Donnelly, Dervilla M. X.**, 1737.
- Ahmed, Munir, Ashby, John, Ayad, Mehdi, and Meth-Cohn, Otto.** The direct Bradsher reaction. Part I. Synthesis of thiophen analogues of linear polycyclic hydrocarbons, 1099.
- Akhtar, M. Humayoun.** See **Lown, J. William**, 683.
- Akima, Toshio.** See **Sato, Takeo**, 891.
- Albert, Adrien.** 1,2,3-Triazoles. Part II. 4-Amino-5-aminomethyl-1,2,3-triazoles, 1634.
- The Dimroth rearrangement. Part XV. Catalysis by methylamine salts. Preparation of 7-methylamino- and 6,7-dihydro-7-imino-*v*-triazolo[4,5-*d*]pyrimidines via 4-ethoxymethyleneamino-1,2,3-triazoles, 2659.
- Albert, Adrien, and McCormack, John J.** Pteridine studies. Part XLV. Addition of sodium hydrogen sulphite and other nucleophilic agents to pteridin-4-one and related compounds, 2630.
- Albert, Adrien, and Mizuno, Hatsuhiko.** Pteridine studies. Part XLIII. Reactions of pteridine with some Michael reagents. Part XLIV. Self-condensation of some methylpteridines, and reactions with other nucleophiles, 1615, 1974.
- Albert, Adrien, and Pendergast, William.** *v*-Triazolo[4,5-*d*]pyrimidines (8-azapurines). Part XII. Cleavage of the pyrimidine ring in 8-azapurines by some active methylene reagents and eventual closure to give *v*-triazolo[4,5-*b*]pyridines. Part XIII. Reaction of 8-azapurines with bifunctional nucleophiles, 1620, 1625.
- Cleavage of pyrimidines and fused pyrimidines by active methylene reagents with closure to give pyridine derivatives, 1794.
- Albert, Adrien, and Taguchi, Hiroyasu.** 1,2,3-Triazoles. Part I. Some 4-aminotriazole-5-carbaldehydes, 1629.
- v*-Triazolo[4,5-*d*]pyrimidines (8-azapurines). Part XIV. Synthesis of 6-unsubstituted 8-azapurines from ring *N*-alkylated 4-amino-1,2,3-triazole-5-carbaldehydes, 2037.
- Alexander, Richard, and Davies, D. I.** Free-radical reactions of halogenated bridged polycyclic compounds. Part XV. The reaction of methyl-lithium with some chlorine-substituted norbornenes and norbornadienes, 83.
- Ali, S. A., Powell, J. W., and Whalley, W. B.** The chemistry of fungi. Part LXVII. Synthesis of di-*O*-methylcitromycinone and related pyrano[3,2-*e*][1]benzopyran-4,5-diones, 173.
- Ali, Y.** See **Hough, Leslie**, 287.
- Allan, A. R.** See **Lockhart, J. C.**, 577.

- Allan**, Robin D., **Barton**, Derek H. R., **Girijavallabhan**, Moopil, **Sammes**, Peter G., and **Taylor**, Michael V. Transformations of penicillins. Part IV. On the trapping of sulphenic acids from penicillins with thiols, 1182.
- Allen**, John, **Boar**, Robin B., **McGhie**, James F., and **Barton**, Derek H. R. Nitrite photolysis in the presence of oxygen. An improved synthesis of 32-oxygenated lanostanes, 2402.
- Allen**, R. M., and **Kirby**, G. W. Iodination of thebaine and synthesis of 9-substituted indolinocodeinone derivatives, 363.
- Al-Rawi**, Jasim M. A., and **Elvidge**, John A. Heterocyclic syntheses with malonyl chloride. Part X. 2-Aryl- and -alkyl-thio-7-chloropyrano[3,4-*e*][1,3]oxazine-4,5-diones from thiocyanates, and their behaviour with amines, 2432.
- Al-Rhadi**, Adnan K. See **Brimacombe**, John S., 1295.
- Alvarez**, Miguel A. See **González**, Antonio G., 2637.
- Aly**, Nawal F. See **Baddar**, Fawzi G., 2448.
- Ames**, Donald E., **Hansen**, Kristian J., and **Griffiths**, Nigel D. Synthesis of 4,5-bridged carbazoles, 2818.
- Amith**, Drorah. See **Bien**, Shlomo, 1089.
- Anderson**, B. F. See **Vijayan**, Kalyani, 484.
- Anderson**, David J., **Gilchrist**, Thomas L., **Gymer**, Geoffrey E., and **Rees**, Charles W. Reactive intermediates. Part XXII. Formation of 2*H*-azirines by oxidation of *N*-aminophthalimide in the presence of alkynes, 550.
- Anderson**, Norman S., **Dolan**, Timothy C. S., and **Rees**, David A. Carrageenans. Part VII. Polysaccharides from *Eucheuma spinosum* and *Eucheuma cottonii*. The covalent structure of *γ*-carrageenan, 2173.
- Annunziata**, Rita, **Cinquini**, Mauro, and **Colonna**, Stefano. Mechanism and stereochemistry of nucleophilic substitutions in alkoxy-sulphonium salts, 1231.
- Ansell**, Martin F., and **Mahmud**, S. Aleem. Friedel-Crafts reactions of alkenones with benzene, 2789.
- Archer**, John G., **Barker**, Alan J., and **Smalley**, Robert K. 1,2,3-Benzotriazin-4-ones and related systems. Part II. Thermolytic decomposition of substituted 1,2,3-benzotriazin-4-ones and isatoic anhydrides, 1169.
- Armarego**, Wilfred L. F., and **Milloy**, Beverley A. Quinazolinones. Part XIX. Reduction of 2-amino-5,6,7,8-tetrahydroquinazoline-4-carboxylic acid and 1,2,5,6,7,8-hexahydro-2-oxoquinazoline-4-carboxylic acid, 2814.
- Arnold**, B. J., **Mellows**, S. M., and **Sammes**, P. G. Photochemical reactions. Part I. A new route to tetrahydrodopodophyllotoxin, taiwanin E, and related compounds, 1266.
- Ashby**, John, **Ayad**, Mehdi, and **Meth-Cohn**, Otto. The direct Bradsher reaction. Part II. Synthesis of pyrylium and thiopyrylium salts, 1104.
- Ashby**, John. See also **Ahmed**, Munir, 1099.
- Ashton**, David S., **Tedder**, John M., **Walton**, John C., **Nechvatal**, Anthony, and **Stoddart**, Ian K. Free radical substitution in aliphatic compounds. Part XXVI. The gas-phase bromination of halogenocycloalkanes, 846.
- Asomaning**, W. A., **Eaborn**, C., and **Walton**, D. R. M. Simple methods of preparing substituted deuterio-benzenes and  $\alpha$ -deuteriotoluenes of high isotopic purity, 137.
- Atherton**, Frank R., and **Lambert**, Robert W. Nitrenes generated from nitro-compounds by various phosphorus reagents in heterocyclic synthesis. A convenient route to substituted 3*H*-azepines, 1079.
- Atkins**, P. R., **Glue**, S. E. J., and **Kay**, I. T. Heterocyclic syntheses with isothiocyanatoformic esters and their derivatives, 2644.
- Atkinson**, Robert S., **Brimage**, David R. G., **Davidson**, R. Stephen, and **Gray**, Elizabeth. Use of tertiary amino-groups as substituents to stabilise compounds towards attack by singlet oxygen, 960.
- Au**, T. Y., **Cheung**, H. T., and **Sternhell**, S. New corynanthé alkaloids from *Strychnos angustiflora*, 13.
- Ayad**, Mehdi. See **Ahmed**, Munir, 1099, and **Ashby**, John, 1104.
- Ayres**, Barry E., **Kabli**, Reda A., and **McOmie**, John F. W. Biphenylenes. Part XXVIII. Synthesis of some benzo-[*b*]-, naphtho[2,3-*b*]-, and anthra[2,3-*b*]-derivatives of biphenylene, 2267.
- Ayres**, David C., and **Harris**, John A. Lignans and related phenols. Part XIV. Selective oxidation of aryltetrahydronaphthalenes, 2059.
- Azizullah**, and **Grimshaw**, James. Electrochemical reactions. Part XII. Reduction of the 1,3-dibromides, *endo*-2,*endo*-6- and *exo*-2,10-dibromobornane, 425.

## B

- Bacon**, R. G. R., and **Karim**, Amna. Metal ions and complexes in organic reactions. Part XV. Copper-catalysed substitutions of aryl halides by phthalimide ion. Part XVI. Extension of copper-catalysed Gabriel reactions to vinylic halides and to analogues of phthalimide salts, 272, 278.
- Badanyan**, S. O., **Bentley**, R. K., **Jenkins**, J. K., **Jones**, Sir Ewart R. H., and **Thaller**, V. Natural acetylenes. Part XXXVII. Polyacetylenes from the Campanulaceae plant family. Tetrahydropyranyl and open chain C<sub>14</sub> polyacetylenic alcohols from *Campanula pyramidalis* L. and *Campanula medium* L., 145.
- Badar**, Yasmeen, **Lockley**, William J. S., **Toube**, Trevor P., **Weedon**, Basil C. L., and **Valadon**, L. R. Guy. Natural and synthetic pyrrol-2-ylpolyenes, 1416.
- Baddar**, Fawzi G., **Fahmy**, Amin F. M., and **Aly**, Nawal F. 2,3-Benzoxazin-1-ones. Part I. Reactions of aluminium chloride, sulphuric acid, and hydrazine hydrate with 4-aryl-2,3-benzoxazin-1-ones, 2448.
- Badger**, Rodney J., **Brown**, Desmond J., and **Lister**, John H. Purine studies. Part VIII. Formation of alkylthio-purines from 4,5-diaminopyrimidine- and purine-thiones by means of orthoester-anhydride mixtures, 1906.
- Bailey**, A. Sydney, and **Buckley**, Alan J. Further examination of the reactions of simple indoles with arene-sulphonyl azides, 1602.
- Some reactions of 3-diazo-1-methyl-2-*p*-tolylsulphonyliminoindoline and of 2-arylsulphonylimino-1-methylindolines, 1943.
- Bailey**, A. Sydney, **Buckley**, Alan J., and **Seager**, John F. Further examination of the reactions between arene-sulphonyl azides and tetrahydrocarbazoles, 1809.
- Bailey**, Joseph, and **Elvidge**, John A. Synthesis and some properties of dyes containing the pyrano[2,3-*d*]pyrimidine nucleus, 823.
- Baird**, David B., **Baxter**, Ian, **Cameron**, Donald W., and **Phillips**, William R. Intramolecular amination of *p*-benzoquinones: formation of 1,2,3,5-tetrahydrobenzo-[1,2-*b*:4,5-*b'*]dipyrroles and 1,2,3,4-tetrahydropyrido-[2,3-*g*]quinolines, 832.

- Baker, Jennifer, Jarman, Michael, and Stock, John A.** Synthesis of 2'- and 3'-*O*-acyluridines, 665.
- Balasubramanian, K. K.** See **Lakshminarayana, P.**, 998.
- Baldwin, Derek, Hanson, James R., and Holtom, Ann M.** Aromatization of some steroidal enediols, 1704.  
Reactions of derivatives of steroidal 3,4,5- and 3,5,6-triols with hydrobromic acid, 2687.
- Ballantine, James A., Ferrito, Victor, Hassall, Cedric H., and Jenkins, Malcolm L.** The biosynthesis of phenols. Part XXIV. Arugosin C, a metabolite of a mutant of *Aspergillus rugulosus*, 1825.
- Ballard, John M., Hough, Leslie, Richardson, Anthony C., and Fairclough, Peter H.** Surochemistry. Part XII. Reaction of sucrose with sulphuryl chloride, 1524.
- Ballardie, Francis, Capon, Brian, Sutherland, J. Derek G., Cocker, David, and Sinnott, Michael.** A simple general synthesis of 2,4-dinitrophenyl glycopyranosides, 2418.
- Balmain, Alan, and Connolly, Joseph D.** Minor diterpenoid constituents of *Andrographis paniculata* Nees, 1247.
- Balucani, D.** See **Jacquignon, P.**, 734.
- Banks, Ronald E., Carson, Philip A., and Haszeldine, Robert N.** *N*-Fluoro-compounds. Part VI. Preparation and some reactions of perfluoro-*NN'*-difluoropiperazine; cross-linking of a nitroso rubber, 1111.
- Banks, Ronald E., Choudhury, Dilip R., and Haszeldine, Robert N.** Nitroxide chemistry. Part IV. Reaction of bistrifluoromethyl nitroxide with aldehydes. Part V. Reactions between bistrifluoromethyl nitroxide and alkylbenzenes; mechanism of formation of carbonyl compounds, 80, 1092.
- Banks, Ronald E., Haszeldine, Robert N., and Producers, Alan.** Polyfluorocyclopentadienes. Part VII. Synthesis of perfluoronorborene and perfluoronorborene from perfluorocyclopentadiene, 596.
- Banks, Ronald E., Parker, A. J., Sharp, M. J., and Smith, G. F.** *N*-Fluoro-compounds. Part V. Photochemical reactions of perfluoro-*N*-fluoromorpholine, and a re-investigation of its thermal decomposition; preparation and properties of perfluoromorpholin-*N*-oxyl, 5.
- Bannister, Brian.** Modifications of lincomycin involving the carbohydrate portion. Part III. The 7-*O*-methyl and 6-de-(1-hydroxyethyl) analogues, 1676.
- Banthorpe, Derek V., Fitton, Harry, and Lewis, Jack.** Isomerisation and addition reactions of some monoterpene-tricarbonyliron complexes, 2051.
- Barker, Alan J.** See **Archer, John G.**, 1169.
- Barker, John M., and Huddleston, Patrick R.** Thienyl analogues of the alkaloids. Part II. 3-Thienyl analogues of ephedrine and  $\psi$ -ephedrine, 1200.
- Barker, S. Alan.** See **Kennedy, John F.**, 488, 2293.
- Barley, G. C., Jones, Sir Ewart R. H., Thaller, V., and Hodge, R. A. V.** Natural acetylenes. Part XXXIX. Synthesis of methyl [1,9-<sup>14</sup>C]-, [9-<sup>14</sup>C]-, and [10-<sup>3</sup>H]-crepenynate, methyl [9-<sup>14</sup>C]- and [10-<sup>3</sup>H]-linoleate, and methyl [9-<sup>14</sup>C]- and [10-<sup>3</sup>H]-oleate, 151.
- Barlow, Michael G., Haszeldine, Robert N., and Dingwall, John G.** Valence-bond isomer chemistry. Part IV. The valence-bond isomers of pentakis(pentafluoroethyl)pyridine, 1542.
- Barlow, Michael G., Haszeldine, Robert N., Morton, William D., and Woodward, David R.** Valence-bond isomer chemistry. Part V. Hexafluorobicyclo[2.2.0]hexa-2,5-diene and its derivatives as dipolarophiles, 1798.
- Barnett, Graham H., Hudson, Mervyn F., McCombie, Stuart W., and Smith, Kevin M.** Synthesis of oxophlorins (oxyporphyrins) from magnesium and zinc porphyrin chelates, 691.
- Barnett, Graham H.** See also **Abraham, Raymond J.**, 2142.
- Barot, Nandkishor R., and Elvidge, John A.** Heterocyclic imines and amines. Part XVI. 2,6-Diaminopyrazine and its 1-oxide from iminodiacetonitrile, 606.
- Barrow, Kevin D., Barton, Derek H. R., Chain, Sir Ernest, Ohnsorge, Ulrich F. W., and Sharma, Ram P.** Fusiococcin. Part III. The structure of fusiococcin H, 1590.
- Bartley, J. P.** See **Briggs, Lindsay H.**, 806.
- Barton, Derek H. R., Blair, Ian A., Magnus, Philip D., and Norris, Robert K.** The chemistry of trisulphenamides [N(SR)<sub>3</sub>]. Part I. Preparation, thermal decomposition, and reactions of tribenzenesulphenamide [N(SPh)<sub>3</sub>]. Part II. Reactions of tribenzenesulphenamide with electron-rich molecules, 1031, 1037.
- Barton, Derek H. R., Bolton, Michael, Magnus, Philip D., Marathe, Keshav G., Poulton, Gerald A., and West, Peter J.** Photochemical transformations. Part XXXII. Photolysis of thiobenzoic acid *O*-esters. Part III. Photolysis of *O*-phenethyl thiobenzoates and other thiobenzoates, 1574.
- Barton, Derek H. R., Bolton, Michael, Magnus, Philip D., and West, Peter J.** Photochemical transformations. Part XXXIII. Photolysis of thiobenzoic acid *O*-esters. Part IV. Photolysis of *O*-phenethyl thiobenzoate derivatives and the formation of thioketones, 1580.
- Barton, Derek H. R., Chavis, Claude, Kaloustian, Moses K., Magnus, Philip D., Poulton, Gerald A., and West, Peter J.** Photochemical transformations. Part XXXI. Photolysis of thiobenzoic acid *O*-esters. Part II. General methods for the preparation of thiobenzoic acid *O*-esters, 1571.
- Barton, Derek H. R., Coates, I. H., and Sammes, P. G.** Transformation of penicillin. Part III. A new route to 2,2-dimethyl-6 $\beta$ -phenylacetamidopenam-3 $\alpha$ -ol *S*-oxide and its esters; *o*-nitrobenzoate as a protecting group for alcohols and phenols, 599.
- Barton, Derek H. R., Coll, John C., McGarrity, John F., and Widdowson, David A.** Some dehydrogenation reactions of steroidal arylhydrazones, 1565.
- Barton, Derek H. R., Gunatilaka, Abeysinghe A. L., Letcher, Roy M., Lobo, Awa M. F. T., and Widdowson, David A.** Phenol oxidation and biosynthesis. Part XXII. The alkaloids of *erythrina lysistemon*, *E. abysinica*, *E. poeppigiana*, *E. fusca*, and *E. lithosperma*; the structure of erythratidine, 874.
- Barton, Derek H. R., Hesse, Robert H., Pechet, Maurice M., and Tewson, Timothy J.** Synthesis of 12-fluoro-corticosteroids, 2365.
- Barton, Derek H. R.** See also **Achmatowicz, Selim**, 1567, **Ager, Ian**, 1187, **Allan, Robin D.**, 1182, **Allen, John**, 2402, **Barrow, Kevin D.**, 1590, and **Boar, Robin B.**, 654.
- Bashir, Naz, and Gilchrist, Thomas L.** Formation of fused azetinones by photolysis and pyrolysis of triazinones. *N*-Aminonaphth[2,3-*b*]azet-2(1*H*)-one and *N*-1-adamantylbenzazet-2(1*H*)-one, 868.
- Bassi, Pietro, and Tonellato, Umberto.** Reactivity of vinyl sulphonic esters. Part XIV. Addition of trinitrobenzenesulphonyl hypohalites to acetylene derivatives to give  $\beta$ -halogenovinyl sulphonates, 669.

- Battersby, Alan R., Evans, David A., Gibson, Keith H., McDonald, Edward, and Nixon, Leon.** Biosynthesis of porphyrins and related macrocycles. Part I. Synthesis of  $^{14}\text{C}$ -labelled pyrromethanes, 1546.
- Battersby, Alan R., Hodgson, Gordon L., Ihara, Masataka, McDonald, Edward, and Saunders, John.** Biosynthesis of porphyrins and related macrocycles. Part III. Rational syntheses of  $[\beta\text{-}^{13}\text{C}]$ -,  $[\gamma\text{-}^{13}\text{C}]$ -, and  $[\delta\text{-}^{13}\text{C}]$ -protoporphyrin-IX: assignment of the  $^{13}\text{C}$  nuclear magnetic resonance signals from the *meso*-carbon atoms of protoporphyrin-IX dimethyl ester, 2923.
- Battersby, Alan R., Hunt, Eric, McDonald, Edward, and Moron, Jaqueline.** Biosynthesis of porphyrins and related macrocycles. Part II. Synthesis of  $\delta$ -amino- $[\text{5-}^{13}\text{C}]$ laevulinic acid and  $[\text{11-}^{13}\text{C}]$ porphobilinogen: incorporation of the latter into protoporphyrin-IX, 2917.
- Battersby, Alan R., Kelsey, John E., Staunton, James, and Suckling, Keith E.** Studies of enzyme-mediated reactions. Part III. Stereoselective labelling at C-2 of tyramine: stereochemistry of hydroxylation at saturated carbon, 1609.
- Batty, J. W., Howes, P. D., and Stirling, C. J. M.** Elimination-addition. Part XXI. Addition-dealkylation reactions of acetylenic sulphonium salts with oxygen, sulphur, and nitrogen nucleophiles. Part XXII. Addition of enolates to allenic sulphonium salts; a new general furan synthesis, 59, 65.
- Baxter, Ian, and Phillips, William R.** Reactions between 2,5-di-*t*-butyl-1,4-benzoquinone and certain primary aliphatic amines, 268.  
Synthesis and some reactions of 4-hydroxy-2-methoxycarbonylquinoline-5,8-quinone, 2374.
- Baxter, Ian.** See also **Baird, David B.**, 832, and **Giles, Robin G. F.**, 493.
- Bearder, John R., and MacMillan, Jake.** Fungal products. Part IX. Gibberellins  $\text{A}_{16}$ ,  $\text{A}_{36}$ ,  $\text{A}_{37}$ ,  $\text{A}_{41}$ , and  $\text{A}_{42}$  from *Gibberella fujikuroi*, 2824.
- Beddows, Clifford G., and Wilson, Donald V.** Synthesis and reactions of 2-(5-amino-4-carbamoylimidazol-1-yl)-2-deoxy-D-glucose, an analogue of a naturally occurring imidazole nucleoside, 2345.
- Begley, Michael J., and Whittaker, Norman.** Chemical and X-ray studies of a [1,4]diazepino[7,1-*a*]isoquinolin-2-one, a Schmidt reaction product from 3-ethyl-1,6,7,11b-tetrahydro-9,10-dimethoxy-4*H*-benzo[*a*]quinolizin-2(3*H*)-one, 2830.
- Behzadi, Afarin, and Owen, Leonard N.** Cytotoxic compounds. Part XVIII. Some 2-aryl-2-(aryltio)ethanols, 1-aryl-2-(aryltio)ethanols, and their methanesulphonates, 2733.
- Bell, Alan M., Clark, Ian M., Denny, William A., Jones, Sir Ewart R. H., Meakins, G. Denis, Müller, Wilhelm E., and Richards, Eva E.** Microbiological hydroxylation of steroids. Part IX. Hydroxylation of diketones and keto-alcohols derived from  $5\alpha$ -androstane with the fungi *Rhizopus arrhizus* and *Rhizopus circinnans*. Steroidal 18- and 19-proton magnetic resonance signals, 2131.
- Bell, Stephen L., Chambers, Richard D., Gribble, Michael Y., and Maslakiewicz, Jerzy R.** Reactions involving fluoride ion. Part IX. Syntheses involving octafluoroisobutene, 1716.
- Bellino, Aurora.** See **Piozzi, Franco**, 1164.
- Bennett, Peter, Donnelly, John A., Meaney, David C., and O'Boyle, Peter.** Homoallylic rearrangement of spiro cyclopropyl carbinols, 688.
- Bentley, Kenneth W.** See **Heaney, Harry**, 1840.
- Bentley, R. K., Jones, Sir Ewart R. H., Ross, R. A. M., and Thaller, V.** Natural acetylenes. Part XXXVI. Polyacetylenes from the Lobeliaceae plant family. A  $\text{C}_{14}$  enediyne triol from *Lobelia cardinalis* L., 140.
- Bentley, R. K.** See also **Badanyan, S. O.**, 145.
- Bentley, T. W., Johnstone, R. A. W., and Neville, A. F.** Aspects of mass spectra of organic compounds. Part XI. Rearrangements in benzoylhydrazines, 449.
- Ber, Menuha.** See **Bien, Shlomo**, 1089.
- Bergmann, Felix, Rahat, Miriam, and Lichtenberg, Dov.** 6-Methylthiopurin-8-ones. A study of their tautomerism and their reactions with electrophilic reagents, 1225.
- Bergmann, Felix.** See also **Lichtenberg, Dov**, 789, 2445, and **Reichman, Uri**, 793, 2647.
- Bersohn, Malcolm.** An algorithm for finding the synthetically important rings of a molecule, 1239.
- Bethell, Geoffrey S., and Ferrier, Robert J.** The relayed introduction of alkylthio-groups into carbohydrate derivatives: a novel synthesis of amictose, 1400.
- Bettòlo, G. B. Marini.** See **Monarche, Franco Delle**, 2725.
- Beylis, Peter.** See **Perold, Guido W.**, 638, 643.
- Bhacca, Norman S.** See **Connolly, Joseph D.**, 865.
- Bhatt, Tarochan S.** See **Coombs, Maurice M.**, 1251.
- Bhattacharya, Amitava.** See **Nasipuri, Dhanonjoy**, 1451.
- Bianchi, Giorgio, De Micheli, Carlo, Gandolfi, Remo, Grünanger, Paolo, Finzi, Paolo Vita, and de Pava, Orso Vajna.** Isoxazoline derivatives. Part VI. Regioselectivity in the 1,3-dipolar cycloaddition of nitrile oxides to  $\alpha\beta$ -unsaturated ketones, 1148.
- Bien, Shlomo, Amith, Drorah, and Ber, Menuha.** Synthesis of convicine (6-amino-5- $\beta$ -D-glucopyranosyloxyuracil), 1089.
- Biggi, Gino, and Pietra, Francesco.**  $\sigma$ -Complex formation and aromatic substitution with thiolates and nitroaryl thioethers, 1980.
- Billett, Eric H., and Fleming, Ian.** The intramolecular reaction between a diazoalkane group and an ester group: the first example, 1658.
- Billett, Eric H., Fleming, Ian, and Hanson, Steven W.** The intramolecular reaction between a diazoalkane group and an ester group: a search for other examples, 1661.
- Binder, Michael, Tamm, Christoph, Turner, W. B., and Minato, Hitoshi.** Nomenclature of a class of biologically active mould metabolites: the cytochalasins, phomins, and zygosporins, 1146.
- Birch, Arthur J., Chamberlain, Kevin B., Haas, Michael A., and Thompson, David J.** Organometallic complexes in synthesis. Part IV. Abstraction of hydride from some tricarbonylcyclohexa-1,3-dieneiron complexes and reactions of the complexed cations with some nucleophiles, 1882.
- Birch, Arthur J., Chamberlain, Kevin B., and Thompson, David J.** Organometallic complexes in synthesis. Part VI. Some oxidative cyclisations of tricarbonylcyclohexadieneiron complexes, 1900.
- Birch, Arthur J., and Dastur, Khurshid P.** Reactions of cyclohexadienes. Part XIII. Catalytic conversion of 1-methoxycyclohexa-1,4-dienes into 1-methoxycyclohexa-1,3-dienes, 1650.
- Birch, Arthur J., and Hutchinson, Ewen G.** Reactions of cyclohexadienes. Part XIV. Addition reactions of dienamines and electrophilic olefins, 1757.

- Birch, Arthur J., and Lehman, Peter G. Metal-ammonia reduction of aromatic nitrogen heterocycles. Part I. Reductive alkylation of quinoline and some methyl derivatives, 2754.
- Birch, Arthur J., and Williamson, David H. Organometallic complexes in synthesis. Part V. Some tricarbonyliron derivatives of cyclohexadienecarboxylic acids, 1892.
- Birchall, J. Michael, and Clark, Michael T. Rearrangements of diphenylamine derivatives. Part V. Rearrangements of 4-substituted *N*-acyldiphenylamines and related reactions, 1259.
- Birchall, J. Michael, Clark, Michael T., and Thorpe, D. H. Rearrangements of diphenylamine derivatives. Part IV. Rearrangements of *N*-aroyldiphenylamines catalysed by aluminium chloride, 442.
- Birchall, J. Michael, Fields, Roy, Haszeldine, Robert N., and Kendall, Norman T. Cyclopropane chemistry. Part III. Thermal decomposition of some halogenopolyfluorocyclopropanes, 1773.
- Birchall, J. Michael, Haszeldine, Robert N., and Roberts, David W. Cyclopropane chemistry. Part II. Cyclopropanes as sources of difluorocarbene, 1071.
- Birchall, J. Michael, Haszeldine, Robert N., and Woodfine, Howard. Polyfluoroarenes. Part XVIII. Some reactions of 2,3,4,5,6-pentafluorobiphenyl and related compounds, 1121.
- Bird, P. G., and Irwin, W. J. Preparation, mass spectra, and acid-catalysed rearrangement of aryl-substituted azetidines, 2664.
- Bishop, Derek C. See Glover, Edward E., 842, 2595.
- Black, Donald K., Fomum, Zacharias T., Landor, Phyllis D., and Landor, Stephen R. Allenes. Part XXVIII. Synthesis of antibiotic lactols and an allenic ester by Claisen rearrangement of prop-2-ynyl vinyl ethers, 1349.
- Black, Rona. See Miller, J. Allen, 603.
- Blackburn, G. M., Buckingham, J., Fenwick, R. G., Taussig, P., and Thompson, M. H. Photochemical binding of anthracene and other aromatic hydrocarbons to deoxyribonucleic acid with attendant loss of tritium, 2809.
- Blair, I. See Landor, S. R., 473.
- Blair, Ian A. See Barton, Derek H. R., 1031, 1037.
- Blenkinsopp, John. See Jones, D. Neville, 2602.
- Block, Elliott, and Stevenson, Robert. The irradiation of 2-methylbenzophenone in the presence of dienophiles, 308.
- Bloodworth, A. J., and Serlin, J. Organometallic oxides, alkoxides, and peroxides. Part IV. Reaction of phenylmercury(II) alkoxides, oxide, and hydroxide with organic isocyanates, 261.
- Boar, Robin B., Hawkins, David W., McGhie, James F., and Barton, Derek H. R. Some applications of nickel boride as a desulphurising agent. An improved route to triterpene 2-enes, 654.
- Boar, Robin B., Lewis, Dennis A., and McGhie, James F. Isolation and some reactions of lanosterol. A synthesis of agnosterol, 1583.
- Boar, Robin B. See also Allen, John, 2402.
- Bock, Klaus, Pedersen, Christian, and Rasmussen, Poul. Reactions of acylated pentoses and acylated methyl pentosides with dibromomethyl methyl ether. Preparation of bromo-deoxy-pentoses, 1456.
- Bolton, Michael. See Barton, Derek H. R., 1574, 1580.
- Bonini, Bianca F., Lunazzi, Lodovico, Maccagnani, Gaetano, and Mazzanti, Germana. Sulphines. Part V. Configurational assignment and interconversion barriers for *syn*- and *anti*-isomers of aromatic sulphines, 2314.
- Bonnett, R., Godfrey, J. M., Math, V. B., Scopes, P. M., and Thomas, R. N. Circular dichroism of some vitamin B<sub>12</sub> derivatives, 252.
- Bonnett, Raymond, Brown, Roger F. C., and Smith, Roy G. Isoindole, 1432.
- Bonnett, Raymond, and McDonagh, Antony F. The meso-reactivity of porphyrins and related compounds. Part VI. Oxidative cleavage of the haem system. The four isomeric biliverdins of the IX series, 881.
- Boom, Jacques H. van, de Rooy, Jan F. M., and Reese, Colin B. The synthesis of oligoribonucleotides. Part X. Preparation of 2',3'-cyclic phosphates of ribonucleosides and diribonucleoside phosphates *via* phosphotriester intermediates, 2513.
- Borthwick, Alan D., Foxton, Michael W., Gray, Brian V., Gregory, Gordon I., Seale, Peter W., and Warburton, William K. Some 2-nitrothiazoles, 2769.
- Bosworth, Nigel, and Magnus, Philip D. Studies on terpenes. Part II. Elaboration of 9-methyl-6-*p*-tolyl-7-oxatricyclo[4.3.0.0<sup>3,2</sup>]nonane into (+)-(1*R*,3*S*)-3-isopropenyl-1-*p*-tolylcyclopentane-1-carboxylic acid, a model for sesquiterpene synthesis, 76.
- An  $\alpha$ -sulphonyl dianion and its *E1cB* elimination, 2319.
- Bosworth, Nigel, Magnus, Philip D., and Moore, Richard. Nucleophilic displacement by hydrogen carbonate anion, and its implications in the oxidation of alkyl toluene-*p*-sulphonates with dimethyl sulphoxide-sodium hydrogen carbonate, 2694.
- Boulton, A. J. See Ackrell, J., 351.
- Bowden, Bruce, Cookson, Richard C., and Davis, Harry A. Sequential Claisen and Cope rearrangements: the propenyl ether and acetate of 3-methylhept-6-en-1-yn-3-ol, 2634.
- Bowden, F. L., Dronsfield, A. T., Haszeldine, Robert N., and Taylor, D. R. Organophosphorus chemistry. Part XIV. Reaction of phosphorodiamidous chlorides with sulphonamides: a new route to diazadiphosphetidines, 516.
- Bowie, John H., and Nussey, Brian. Thermal rearrangements of 2,3-diphenyl-2*H*-azirine, 1693.
- Bowman, Edward R. See McKennis, Herbert, jun., 2046.
- Bowman, R. E., Brunt, K. D., Godfrey, K. E., Kruszynska, L., Reynolds, A. A., Thrift, R. I., Waite, D., and Williamson, W. R. N. Syntheses of flufenamic acid metabolites I and II and other *N*-arylanthranilic acids, 1.
- Bowman, R. E., Evans, D. D., Guyett, J., Nagy, H., Weale, J., and Weyell, D. J. 1,3,4,5-Tetrahydrobenz[*cd*]indoles and related compounds. Part III, 438.
- Bowman, R. E., Evans, D. D., Guyett, J., Weale, J., and White, A. C. 1,3,4,5-Tetrahydrobenz[*c,d*]indoles and related compounds. Part IV. Attempted syntheses of lysergic acid, 760.
- Bowman, Robert M., Collins, James F., and Grundon, Michael F. Quinoline alkaloids. Part XIV. Asymmetric synthesis by the peroxyacid-olefin reaction. The absolute stereochemistry of balfouridine, isobalfouridine, and related compounds, and the biosynthesis of isomeric dihydrofuro- and dihydropyrano-derivatives, 626.
- Bowman, Robert M., Gray, Gerald A., and Grundon, Michael F. Quinoline alkaloids. Part XV. Reactions of a quinoline isoprenyl epoxide with hydride reagents. Asymmetric synthesis and stereochemistry of lunacridine and related *Lunasia* alkaloids, 1051.

- Bowman, Robert M., Grundon, Michael F., and James, Kevin J.** Quinoline alkaloids. Part XVI. 2,2-Dimethylpyranoquinolines from base-catalysed rearrangement of isoprenyl epoxides. Synthesis and biogenesis of flindersine, 1055.
- Bowman, W. R., Gretton, W. R., and Kirby, G. W.** Hydroxylation of phenylalanine by *Pseudomonas* sp.: measurement of an isotope effect following the NIH shift, 218.
- Boyce, Clive B. C., Webb, Shirley B., Phillips, Lawrence, and Worthington, Paul A.** Determination of stereochemistry of vinyl phosphates from proton nuclear magnetic resonance chemical shifts, 2881.
- Boyd, Gerhard V.** Synthesis and transformations of phthalanilydeneammonium salts, 1731.
- Boyd, Gerhard V., and Heatherington, Kenneth.** Synthesis and reactions of 2-dialkylaminofurans, 2523.  
Ring transformations of 2-morpholinofurans and *N*-(2,3-dihydro-2-furylidene)morpholinium salts, 2532.
- Boyle, F. T., and Jones, Richard A. Y.** Azole *N*-oxides. Part III. Thermal rearrangements of 1-methoxy-pyrazole 2-oxides. Part IV. Deoxygenation and side-chain substitution reactions of some 1-methoxy-pyrazole 2-oxides, 167, 170.
- Bradamante, S., Buttero, P. Del, and Maiorana, S.** Reactions of prop-2-yne-1-sulphonyl chloride with  $\alpha$ -morpholinostyrene, 612.
- Bradamante, Silvia, and Pagani, Giorgio.** Cyclic sulphones. Part XV. Benzo- and dibenzo-thiopyran SS-dioxides, 'active methylene' compounds in substitution and condensation reactions, 163.
- Bramley, Robert K., Caldwell, Joseph, and Grigg, Ronald.** Site specificity of [3,3] sigmatropic rearrangements of 3-allyl- and 3-(prop-2-ynyl)-3*H*-indoles, 1913.
- Bratt, Jack, and Suschitzky, Hans.** Polyhalogeno-aromatic compounds. Part XXVII. Reactions of polyhalogenopyridines and their *N*-oxides with benzenethiols, with nitrite, and with trialkyl phosphites, and of pentachloropyridine *N*-oxide with magnesium, 1689.
- Brennan, M. P. J., and Brettle, R.** Anodic oxidation. Part XI. Carbon anodes in electrosyntheses based on carboxylate ions, 257.
- Brettle, R., Hydes, P. C., Seddon, D., Sutton, J. R., and Tooth, R.** Synthesis and stereochemistry of some 3-substituted 2-methylbut-2-enoic acid derivatives, 345.
- Brettle, R.** See also Brennan, M. P. J., 257.
- Brewster, David, Myers, Malcolm, Ormerod, Joseph, Otter, Philip, Smith, Alan C. B., Spinner, Margaret E., and Turner, Stephen.** Prostaglandin synthesis: design and execution, 2796.
- Briggs, Lindsay H., Bartley, J. P., and Rutledge, P. S.** Degradation of the lanosterol side-chain, 806.
- Brimacombe, John S., Doner, Landis W., Rollins, Anthony J., and Al-Radhi, Adnan K.** Syntheses of derivatives of L-tolyposamine and L-forosamine, 1295.
- Brimacombe, John S., Minshall, Jonathan, and Tucker, Leslie C. N.** Nucleophilic displacement reactions in carbohydrates. Part XXII. Formation of 1,4-anhydro-pyranoses from 1-*O*-acetyl-6-deoxy-2,3-*O*-isopropylidene-4-*O*-methylsulphonyl- $\alpha$ -L-manno- and -talo-pyranose with sodium azide, 2691.
- Brimage, David R. G., and Davidson, R. Stephen.** Photo-reactions of polycyclic aromatic hydrocarbons with *N*-arylglycines, 496.
- Brimage, David R. G., Davidson, R. Stephen, and Steiner, Peter R.** Use of heterocyclic compounds as photosensitisers for the decarboxylation of carboxylic acids, 526.
- Brimage, David R. G.** See also Atkinson, Robert S., 960.
- Brook, Peter R., and Duke, A. Jonathan.** Stereospecific ring-contraction of 7,7-dichlorobicyclo[3.2.0]hept-2-en-6-ols with base, 1013.
- Brooke, G. M., and Quasem, Md. Abul.** Partially fluorinated heterocyclic compounds. Part XI. The reactions of lithium pentafluorobenzenethiolate with acetylenic compounds giving benzo[*b*]thiophen derivatives and/or olefins, 429.
- Brooks, Gerald, Shah, Munawer A., and Taylor, Giles A. Keten.** Part XII. Addition reactions of ketens with azo-compounds, 1297.
- Brooks, J. Robin, Harcourt, David N., and Waigh, Roger D.** Cyclisation of *N*-(prop-2-ynyl)benzylamines. Part II. Synthesis of 1,2-dihydro-3-phenylisoquinolines and an isopavine derivative, 2588.
- Brown, Allan G.** See Harnden, Michael R., 333.
- Brown, Desmond J.** See Badger, Rodney J., 1906.
- Brown, George R.** Synthesis of 2,3-dihydrothiazolo[3,2-*c*]pyrimidines, 2022.
- Brown, Peter.** See Kasturi, T. R., 2468.
- Brown, P. Margaret, Moir, Michael, Thomson, Ronald H., King, Trevor J., Krishnamoorthy, Velagalety, and Seshadri, Tiruvenkaia R.** Tingenone and hydroxytingenone, triterpenoid quinone methodes from *Euonymus tingens*, 2721.
- Brown, Roger F. C.** See Bonnett, Raymond, 1432.
- Browne, John W., Denny, William A., Jones, Sir Ewart R. H., Meakins, G. Denis, Morisawa, Yasu, Pendlebury, Anthony, and Pragnell, John.** Microbiological hydroxylation of steroids. Part VII. The pattern of dihydroxylation of mono-oxo-5 $\alpha$ -androstanes and -5 $\alpha$ -estrans with the fungus *Rhizopus nigricans*, 1493.
- Brundish, Derek E., and Wade, Roy.** Synthesis of [3,5-<sup>3</sup>H<sub>2</sub>-tyr<sup>23</sup>]- $\beta$ -corticotrophin-(1-24)-tetracosapeptide, 2875.
- Brunt, K. D.** See Bowman, R. E., 1.
- Brunwin, David M., and Lowe, Gordon.** Total synthesis of nuclear analogues of 7-methylcephalosporin, 1321.
- Buchanan, G. L., Raphael, R. A., and Taylor, R.** A convenient stereoselective synthesis of *syn*-bishomoquinone (tricyclo[5,1,0,0<sup>3,5</sup>]octane-2,6-dione), 373.
- Buchanan, George L., and Young, Graham A. R.** Bridged ring systems. Part XVII. The mechanism of a trans-annular acylation. Part XVIII. A total synthesis of ( $\pm$ )-guaiol, 732, 2404.
- Buckingham, J.** See Blackburn, G. M., 2809.
- Buckley, Alan J.** See Bailey, A. Sydney, 1602, 1809, 1943.
- Buggle, Katherine, Donnelly, John A., and Maher, Lorcan J.** Reactions of indane-1,3-diones with 1,4-naphthoquinones, 1006.
- Bukhari, S. T. K.** See Hough, Leslie, 287.
- Burger, Barend V., du Plessis, Eberhard, Garbers, Christoph F., and Merwe, Johannes P. van der.** Diels-Alder reactions. Part I. The dienophilic properties of *cis*- and *trans*- $\beta$ -formylcrotonic acid and their derivatives, 581.
- Burger, Barend V., du Plessis, Eberhard, Garbers, Christoph F., and Pachler, Klaus G. R.** Diels-Alder reactions. Part II. Condensation of methyl *trans*- $\beta$ -formylcrotonate with dienols and their acetates, 584.

- Burger**, Barend V., and **Garbers**, Christoph F. Diels–Alder reactions. Part III. Condensation of methyl *trans*- $\beta$ -formylcrotonate with retinol acetate, with a note on the structure and stereochemistry of kitol, 590.
- Burnett**, Raymond D., and **Kirk**, David N. Some observations on the preparation of 2-hydroxy-steroid 4-en-3-ones, 1830.
- Burrell**, Raymond A., **Cox**, John M., and **Savins**, Eric G. Quinoxaline precursors of fungitoxic benzimidazolyl-carbamates: syntheses and photochemically-induced transformations, 2707.
- Butler**, Richard N., **Lambe**, Terence M., **Tobin**, James C., and **Scott**, Francis L. Stable heterocyclic primary nitroso-amines, 1357.
- Buttero**, Paola Del, and **Maiorana**, Stephano. 2-Halogeno-3-morpholinotietan 1,1-dioxides. Syntheses, configurations, and conformations, 2540.

## C

- Cabr e**, Franciso R. Mas. See **Koomen**, Gerrit J., 1934.
- Cadogan**, J. I. G., and **Molina**, G. A. A simple and convenient deamination of aromatic amines, 541.
- Cahnmann**, Hans J. See **Nishinaga**, Akira, 757.
- Cainelli**, G., **Cardillo**, G., **Contento**, M., **Trapani**, G., and **Ronchi**, A. Umani. Synthesis of compounds containing the isoprene unit: condensation of 3-methylbut-3-enoic and 3-methylbut-2-enoic acids with carbonyl compounds, 400.
- Calder**, Alan, **Forrester**, Alexander R., and **Hepburn**, Stuart P. Nitroxide radicals. Part XII. Decomposition of *ortho*-, *meta*-, and *para*-halogenophenyl *t*-butyl nitroxides, 456.
- Caldwell**, Joseph. See **Bramely**, Robert K., 1913.
- Callott**, Henry J., **Johnson**, Alan W., and **Sweeney**, Anthony. Additions to porphins involving the formation of new carbon–carbon bonds, 1424.
- Cameron**, Donald W. See **Baird**, David B., 832.
- Campbell**, Malcolm M., and **Evgenios**, D. M. Reactions of thioketones. Part II. Thio-ozonide formation in some nucleophilic reactions of thioketones with amines and with benzenethiol. Part III. Reactions of chloramine  $\tau$  with aliphatic and aromatic thioketones, 2862, 2866.
- Capon**, Brian. See **Ballardie**, Francis, 2418.
- Capozzi**, Giuseppe, **Melloni**, Giovanni, and **Modena**, Giorgio. 1,2-Sulphur shift in the acid-catalysed cyclisation of *o*-arylthiophenyl-substituted carbinols to thioxanthen derivatives, 2250.
- Cardillo**, G. See **Cainelli**, G., 400.
- Carpio**, Humberto, **Crabb e**, Pierre, and **Fried**, John H. Synthesis of 2',2'-difluoro-6,7-dihydro-16-methylenecyclopropa[6,7]progesterone analogues, 227.
- Carruthers**, W., **Evans**, N., and **Pooranamoorthy**, R. 1,7-Dimethylchrysene. Photocyclisation of 1,6-diarylhexa-1,3,5-trienes, 44.
- Carruthers**, W., and **Qureshi**, M. I. Bridge fission in the bicyclo[4,2,1]nonan-9-one series, 51.
- Carruthers**, William, and **Pellatt**, Martin G. 1,3,12,14-Tetramethyldibenzo[*a,i*]dithieno[3,4-*e*;3',4'-*m*]cyclohexadecene. Reactions of the bis-ylide from 2,5-dimethylthiophen-3,4-diylbis(methylenetriphenylphosphonium chloride) with 2,5-dimethylthiophen-3,4-dicarbaldehyde and with *o*-phthalaldehyde, 1136.
- Carruthers**, William, and **Pooranamoorthy**, Ratnam. 1,6-Diacetylnaphthalene, 1181.
- Carruthers**, William, and **Whitmarsh**, David. 1,4,6-Tri-methylantracene and 1,4,6-trimethylfluorene. N.m.r. spectra of methylfluorenes, 1511.
- Carson**, Philip A. See **Banks**, Ronald E., 1111.
- Casy**, Alan F. See **Jones**, Alan J., 2576.
- Cattanach**, Christopher J., **Cohen**, Aaron, and **Heath-Brown**, Basil. Studies in the indole series. Part VII. Indolo-[1,7-*ab*][1]benzazepines and related compounds, 1041.
- Cattel**, L., **Grove**, John Frederick, and **Shaw**, D. New metabolic products of *Aspergillus flavus*. Part III. Biosynthesis of asperentin, 2626.
- Cavaleiro**, Jos e A. S., **Gonsalves**, Antonio M. d'A. Rocha, **Kenner**, George W., and **Smith**, Kevin M. Pyrroles and related compounds. Part XXII. Syntheses of pyrromethanes and a tripyrrane, 2471.
- Cavaleiro**, Jos e A. S., **Kenner**, George W., and **Smith**, Kevin M. Pyrroles and related compounds. Part XXIII. Protoporphyrin-I, 2478.
- Cavaleiro**, Jos e A. S., and **Smith**, Kevin M. Transformation of chlorins into bile pigment analogues, 2149.
- Chadwick**, Derek J., **Chambers**, John, **Hargraves**, H. Edwin, **Meakins**, G. Denis, and **Snowden**, Roger L. Preparation of substituted furan- and thiophen-2-carbaldehydes and -2-[<sup>3</sup>H]carbaldehydes, and of 2-furyl ketones, 2327.
- Chadwick**, Derek J., **Chambers**, John, **Meakins**, G. Denis, and **Snowden**, Roger L. Convenient preparations of deuterium-substituted furan-, thiophen-, and *N*-methylpyrrole-2-carboxylic acids, and of tetradeuterio-furan, 201.
- Esters of furan-, thiophen-, and *N*-methylpyrrole-2-carboxylic acids. Bromination of methyl furan-2-carboxylate, furan-2-carbaldehyde, and thiophen-2-carbaldehyde in the presence of aluminium chloride, 1766.
- Chain**, Sir Ernest. See **Barrow**, Kevin D., 1590.
- Chakrabarti**, Jiban K., **Goulding**, Ronald W., and **Todd**, Alec. *s*-Triazines. Part I. Synthesis and reactions of dihalogeno-heteroaryl-*s*-triazines, 2499.
- Chamberlain**, Kevin B. See **Birch**, Arthur J., 1882, 1900.
- Chambers**, John. See **Chadwick**, Derek J., 201, 1766, 2327.
- Chambers**, M. R. See **Jones**, J. R., 248.
- Chambers**, Richard D., and **Gribble**, Michael Y. Reactions involving fluoride ion. Part VI. Reactions of tetrafluoroethylene with pentafluoropyridine and tetrafluoropyridazine. Part VII. Reactions of polyfluoroethylenes with pentafluoropyridine and tetrafluoropyridazine, 1405, 1411.
- Chambers**, Richard D., **Gribble**, Michael Y., and **Marper**, Eric. Reactions involving fluoride ion. Part VIII. Syntheses from perfluorocycloalkenes, 1710.
- Chambers**, Richard D. See also **Bell**, Stephen L., 1716.
- Chambers**, Virginia E. M., **Denny**, William A., **Evans**, John M., **Jones**, Sir Ewart R. H., **Kasal**, Alexander, **Meakins**, G. Denis, and **Pragnell**, John. Microbiological hydroxylation of steroids. Part VIII. The pattern of monohydroxylation of diketones and keto-alcohols derived from 5 $\alpha$ -androstane with cultures of the fungus *Rhizopus nigricans*, 1500.
- Chan**, Wai-Shing, and **Hui**, Wai-Haan. Further C<sub>32</sub> triterpenoids from *Neolitsea pulchella*, 490.
- Chan**, Wilfred R., **Gibbs**, John A., and **Taylor**, David R. Triterpenoids from *Trichilia havanensis* Jacq. Part I. The acetates of havenensin and trichilenone, new tetracarbocyclic tetranortriterpenes, 1047.

- Chapman**, Norman B., **Clarke**, Kenneth, **Gore**, Brian A., **Manolis**, Antonios, **Porter**, Harry, and **Sutton**, Terrence M. Pharmacologically active benzo[*b*]thiophen derivatives. Part X. 2-(5- and 7-hydroxy-3-benzo[*b*]thienyl)ethylamines and related compounds, 750.
- Charon**, Daniel, and **Szabó**, Ladislás. Synthesis and acidic degradation of 3-deoxy-ketoaldonic acids, 1175.
- Chatterje**, Rabindra M. See **Gupta**, Arun K. Das, 1802.
- Chauhan**, M. S., **Dean**, F. M., **McDonald**, S., and **Robinson**, M. S. Spirans. Part IX. Dimers and trimers of *o*-quinone methides, 359.
- Chauhan**, M. S., **Dean**, F. M., **Matkin**, D., and **Robinson**, M. L. Spirans. Part VIII. 1,2-Naphthoquinone 1-methide and its spiro-dimer in chroman syntheses, 120.
- Chavis**, Claude. See **Barton**, Derek H. R., 1571.
- Cheung**, H. T. See **Au**, T. Y., 13.
- Chin**, Wah J., **Corbett**, R. Edward, **Heng**, Ching K., and **Wilkins**, Alistair L. Lichens and fungi. Part XI. Isolation and structural elucidation of a new group of triterpenes from *Sticta coronata*, *S. colensoi*, and *S. flavicans*, 1437.
- Chippendale**, K. E., **Iddon**, B., and **Suschitzky**, Hans. Condensed thiophen ring systems. Part X. Synthesis and reactions of 2-aryl-1*H*-[1]benzothieno[2,3-*b*]pyrroles and 2-aryl-1*H*-[1]benzothieno[3,2-*b*]pyrroles. Part XI. Synthesis of 2-aryl[1]benzothieno[3,2-*b*]pyrazoles and 2-aryl[1]benzothieno[2,3-*c*]pyrazoles, 125, 129.
- Chivers**, Geoffrey E. See **Ager**, Ernest, 1125.
- Chou**, Teh-Chang. See **Marchand**, Alan P., 1948.
- Choudhury**, Dilip R. See **Banks**, Ronald E., 80, 1092.
- Choudhury**, Swadesh R. Roy. See **Nasipuri**, Dhanonjoy, 1451.
- Cinquini**, Mauro. See **Annunziata**, Rita, 1231.
- Claes**, Paul, **Vlietinck**, Arnold, **Roets**, Eugene, **Vanderhaeghe**, Hubert, and **Toppet**, Suzanne. Preparation and deoxygenation of 6-*epi*-penicillin S-oxides, 932.
- Claes**, Paul. See also **Vlietinck**, Arnold, 937.
- Claisse**, John A., **Foxton**, Michael W., **Gregory**, Gordon I., **Sheppard**, Alan H., **Tiley**, Edward P., **Warburton**, William K., and **Wilson**, Michael J. Some 5-unsubstituted acetylenic and vinylic 1,2,4-oxadiazoles, 2241.
- Clark**, Ian M. See **Bell**, Alan M., 2131.
- Clark**, Michael T. See **Birchall**, J. Michael, 442, 1259.
- Clarke**, Kenneth, **Gregory**, Derek N., and **Scrowston**, Richard M. Naphthol[1,2-*b*]thiophen. Part I. Preparation and electrophilic substitution, 2956.
- Clarke**, Kenneth, **Hughes**, C. G., and **Scrowston**, Richard M. 1,2-Benzisothiazoles. Part IV. Preparation of the 3-methyl derivative from *o*-mercaptoacetophenone oxime: a re-examination, 356.
- Clarke**, Kenneth, **Scrowston**, Richard M., and **Sutton**, Terrence M. Substitution reactions of benzo[*b*]thiophen derivatives. Part VI. Reactions of 4-methoxybenzo[*b*]thiophen and its 3-methyl derivative. Part VII. Reactions of 4-hydroxybenzo[*b*]thiophen, its 3-methyl derivative, and related compounds, 623, 1196.
- Clarke**, Kenneth. See also **Chapman**, Norman B., 750.
- Clarke**, S., **Hider**, R. C., and **John**, D. I. *N*-Phthaloylation of chloro- and hydroxy-2-amino-acids, 230.
- Clegg**, Andrew S., **Denny**, William A., **Jones**, Sir Ewart R. H., **Meakins**, G. Denis, and **Pinhey**, John T. Microbiological hydroxylation of steroids. Part X. 1 $\beta$ ,11 $\alpha$ -Dihydroxylation of 3 $\beta$ -hydroxy-5 $\alpha$ -pregnan-20-one and the hydroxylation of other 20-oxo-5 $\alpha$ -pregnanes with the fungus *Aspergillus ochraceus*, 2137.
- Coates**, I. H. See **Barton**, Derek H. R., 599.
- Cocker**, David. See **Ballardie**, Francis, 2418.
- Cocker**, Wesley, **Crowley**, Kevin J., and **Srinivasan**, Krishnaswamy. The chemistry of terpenes. Part XVI. Some oxidation products of  $\beta$ -pyronene, 2485.
- Coêlho**, José Sidney de Barros. See **Monache**, Franco Delle, 2725.
- Cohen**, Aaron. See **Cattanach**, Christopher J., 1041.
- Cohen**, Keith F., **Kazlauskas**, Rymantas, and **Pinhey**, John T. A general method for removal of a 4-methyl group from triterpenoids. Synthesis of 4 $\beta$ -demethylglycyrrhetic acid, 2076.
- Coll**, John C. See **Barton**, Derek H. R., 1565.
- Collins**, E., and **Shannon**, P. V. R. Dimethylallylation products of phloroacetophenone; a convenient one-stage synthesis of deoxyhumulones, 419.
- Collins**, J. F., **Gray**, G. A., **Grundon**, M. F., **Harrison**, D. M., and **Spyropoulos**, C. G. Quinoline alkaloids. Part XIII. A convenient synthesis of furoquinoline alkaloids of the dictamnine type, 94.
- Collins**, J. F., and **Grundon**, M. F. Absolute configuration of aromatic oxygenated isoprenoid derivatives: formation of 3-hydroxy-4,4-dimethyl-4-butyrolactone by ozonolysis and a study of its stereochemistry, 161.
- Collins**, James F. See **Bowman**, Robert M., 626.
- Collins**, Malcom, and **Laws**, Derek R. J. Chemistry of hop constituents. Part XXXIX. A novel alkenylation reaction giving hop constituents and related compounds, 2013.
- Collins**, Peter M., and **Whitton**, Brian R. The photochemistry of ketones derived from carbohydrates. Part IV. Photochemical additions of 2,3-dimethylbut-2-ene to 1,5-anhydrohexenuloses, 1470.
- Colonna**, Stefano. See **Annunziata**, Rita, 1231.
- Colvin**, Ernest W., **Malchenko**, Swiatoslaw, **Raphael**, Ralph A., and **Roberts**, James S. Total synthesis of ( $\pm$ )-trichodermin, 1989.
- Conant**, Ray. See **Gent**, Patricia A., 1858.
- Conlon**, Michael, **Johnson**, Alan W., **Overend**, William R., **Rajapaksa**, Dayananda, and **Elson**, Clive M. Structure and reactions of cobalt corroles, 2281.
- Connolly**, Joseph D., **Henderson**, Robert, **McCrinkle**, Robert, **Overton**, Karl H., and **Bhacca**, Norman S. Tetranortriterpenoids. Part XV. Base-induced fragmentation of some swietenine derivatives, 865.
- Connolly**, Joseph D., and **Taylor**, David A. H. Tetranortriterpenoids. Part XIV. The structure of niasin, a limonoid from *Khaya nyasica*; a correction, 686.
- Connolly**, Joseph D., and **Thornton**, Ian M. S. *ent*-Kaurene diterpenoids from *Solenostoma triste* (Nees) K. Müll (hepaticae), 736.
- Connolly**, Joseph D., **Thornton**, Ian M. S., and **Taylor**, David A. H. Tetranortriterpenoids. Part XVI. Partial syntheses of andirobin, methyl angolensate, mexicanolide, and 1-deoxymexicanolide, 2407.
- Connolly**, Joseph D. See also **Balmain**, Alan, 1247.
- Connor**, J. A., and **Lloyd**, J. P. Reaction between monolefins and ferrocenylcarbene complexes of chromium; formation of 3-amino- and 5-amino-pent-1-enes, 17.
- Contento**, M. See **Cainelli**, G., 400.
- Cook**, David C., and **Lawson**, Alexander. Action of 2-phenyl- $\Delta^2$ -oxazolin-5-one on 2-alkyl- $\Delta^2$ -thiazolines, 465.
- Cook**, Kenneth L., and **Waring**, Anthony J. Preparation and properties of a series of alkyl-4,4-dimethylcyclohexa-2,5-dienones, and related cyclohexenones and cyclohexanones, 529.



- Cooke**, Burgess J. A. See **Shoppee**, Charles W., 1026.
- Cookson**, Richard C., and **Hughes**, Norman W. 1,5-Dienes from allylic alcohols and carbonyl compounds by successive Claisen rearrangement, Wittig reaction, and Cope rearrangement: an attempted synthesis of 'propylure', 2738.
- Cookson**, Richard C., and **Rogers**, Nigel R. Synthesis of unsaturated aldehydes by sequential Claisen and Cope rearrangements, 2741.
- Cookson**, Richard C. See also **Bowden**, Bruce, 2634.
- Coombs**, Maurice M., and **Bhatt**, Tarochan S. Potentially carcinogenic cyclopenta[*a*]phenanthrenes. Part VI. 1,2,3,4-Tetrahydro-17-ketones, 1251.
- Coombs**, Maurice M., and **Hall**, Maureen. Potentially carcinogenic cyclopenta[*a*]phenanthrenes. Part VII. Ring-D diols and related compounds, 1255.
- Coombs**, Robert V., **Koletar**, Judit, **Danna**, Robert, **Mah**, Henry, and **Galantay**, Eugene. Synthesis of 9-methyl-19-norsteroids, 2095.
- Cooper**, G., and **Irwin**, W. J. Mechanism of the reaction between pyrrole esters and styrene oxide, 911.
- Corbett**, R. Edward. See **Chin**, Wah J., 1437.
- Cowell**, Jeanne. See **Adamson**, George W., 863.
- Cowie**, James S., **Landor**, Phyllis D., and **Landor**, Stephen R. Allenes. Part XXIV. Preparation of  $\alpha$ -allenic alcohols from the mono-*O*-tetrahydropyran-2-yl derivatives of butyne-1,4-diols, 720.
- Cox**, John M. See **Burrell**, Raymond A., 2707.
- Cox**, M. R., **Koch**, H. P., and **Whalley**, W. B. The chemistry of fungi. Part LXVIII. Absolute configuration of 2-isopropyl-2-methyl-succinic and -glutaric acids: some resultant stereochemical corrections, 174.
- Coy**, David H., **Haszeldine**, Robert N., **Newlands**, Michael J., and **Tipping**, Anthony E. Polyfluoroalkyl derivatives of nitrogen. Part XXXVIII. Reaction of *N*-bromobistrifluoromethylamine with allyl chloride; preparation of *NN*-bistrifluoromethylprop-2-enylamine. Part XXXIX. Preparation of *NN*-bistrifluoromethylamino-substituted allenes. Part XL. Reaction of trifluoronitrosomethane with *NN*-bistrifluoromethylamino-substituted allenes, 1062, 1066, 1561.
- Crabbé**, Pierre, **García**, Gustavo A., and **Ruís**, Carlos. Synthesis of novel bicyclic prostaglandins by photochemical cycloaddition reactions, 810.
- Crabbé**, Pierre. See also **Carpio**, Humberto, 227, and **Guzmán**, A., 91.
- Crane**, R. I., **Hedden**, P., **MacMillan**, J., and **Turner**, W. B. Fungal products. Part IV. The structure of heveadride, a new nonadride from *Helminthosporium heveae*, 194.
- Creasey**, Susan E. See **Adamson**, George W., 2071.
- Cremlyn**, Richard J. W., **Leonard**, David, and **Motwani**, Ramesh. Sulphonylhydrazides and related compounds. Part XIII. Some sulphanilohydrazides, 500.
- Cresp**, Terry M., and **Sargent**, Melvyn V. Synthesis of unsaturated sulphur compounds containing seventeen- and twenty-one-membered rings, 1786.  
Synthesis and paratropicity of heteroatom-bridged [17]-annulenes, 2961.
- Cresp**, Terry M., **Sargent**, Melvyn V., **Elix**, J. A., and **Murphy**, D. P. H. Formylation and bromination *ortho* to the hydroxy-group of 2-carbonyl-substituted phenols in the presence of titanium(IV) chloride, 340.
- Croisy**, A. See **Jacquignon**, P., 734.
- Crombie**, Leslie, **Dewick**, Paul M., and **Whiting**, Donald A. Biosynthesis of rotenoids. Chalcone, isoflavone, and rotenoid stages in the formation of amorphenin by *Amorpha fruticosa* seedlings, 1285.
- Crombie**, Leslie, **Freeman**, Peter W., and **Whiting**, Donald A. A new synthesis of rotenoids. Application to 9-demethyl-munduserone, mundeserone, rotenonic acid, dalpanol, and rotenone, 1277.
- Cross**, Brian E., and **Markwell**, Roger E. Rearrangements of the gibbane skeleton during reactions with 2,3-dichloro-5,6-dicyanobenzoquinone, 1476.
- Cross**, Brian E., and **Zammitt**, Leslie J. Pigments of *Ghomonia erythrostoma*. Part II. Epierythrostominol and epiideoxyerythrostominol, 2975.
- Crossley**, R., **Downing**, A. P., **Nógrádi**, M., **de Oliveira**, A. Braga, **Ollis**, W. D., and **Sutherland**, I. O. Conformational behaviour of medium-sized rings. Part I. 5,6,11,12-Tetrahydrodibenzo[*a,e*]cyclo-octene (1,2,5,6-dibenzocyclo-octa-1,5-diene) and heterocyclic analogues, 205.
- Crowley**, Kevin J., **Erickson**, Karen L., **Eckell**, Albrecht, and **Meinwald**, Jerrold. Photochemical transformations of  $\alpha$ -phellandrene, 2671.
- Crowley**, Kevin J. See also **Cocker**, Wesley, 2485.
- Crump**, Douglas R., **Williams**, Dudley H., and **Pelc**, Bohumil. (2*S*)-Hydroxyvitamin D<sub>4</sub>, 2731.
- Cusack**, Noel J., **Hildick**, Brian J., **Robinson**, David H., **Rugg**, Peter W., and **Shaw**, Gordon. Purines, pyrimidines, and imidazoles. Part XL. A new synthesis of a D-ribofuranosylamine derivative and its use in the synthesis of pyrimidine and imidazole nucleosides, 1720.

## D

- d'Albuquerque**, Ivan Leôncio. See **Monarche**, Franco Delle, 2725.
- Dalziel**, William, **Hesp**, Barrie, **Stevenson**, Karen M., and **Jarvis**, John A. J. The structure and absolute configuration of the antibiotic aphidicolin: a tetracyclic diterpenoid containing a new ring system, 2841.
- Danna**, Robert. See **Coombs**, Robert V., 2095.
- Dare**, Derek L., **Entwistle**, Ian D., and **Johnstone**, Robert A. W. Synthesis of 3-substituted furans and the formation of 3-(4,8,12-trimethyltridecyl)furan, 1130.
- Darias**, José. See **González**, Antonio G., 2637.
- Dart**, E. C. See **Davies**, David I., 433.
- Dastur**, Khurshid P. See **Birch**, Arthur J., 1650.
- Dave**, V., and **Whitehurst**, J. S. Robinson annulation of 2-hydroxymethylene-ketones. A new route to spiro-diketones, 393.
- Davidson**, R. Stephen. See **Atkinson**, Robert S., 960, and **Brimage**, David R. G., 496, 526.
- Davies**, A. R., **Dronsfield**, A. T., **Haszeldine**, Robert N., and **Taylor**, D. R. Organophosphorus chemistry. Part XIII. The reaction of phosphorus trichloride with primary aromatic amines, 379.
- Davies**, David G., **Hodge**, Philip, and **Yates**, Paul. Chemistry of quinones. Part II. Some base-catalysed reactions of alkylanthraquinones. Part III. Cleavage of the methyl ethers of some naturally occurring hydroxy-anthraquinones, 850, 2299.
- Davies**, D. I. See **Alexander**, Richard, 83.

- Davies, David I., and Pearce, Desmond J. A.** Reaction of norbornadiene with a mixture of 1,1-dichloroethylene, sulphuric acid, and boron trifluoride-ether complex, 2559.
- Davies, David I., Pearce, Desmond J. A., and Dart, E. C.** Addition of thiols to some 5-substituted norborn-2-enes, 433.
- Davies, John S., Hassall, Cedric H., and Hopkins, Keith H.** Amino-acids and peptides. Part XIV. Modification of peptides by amino-acid insertion, 2614.
- Davies, Richard V., Hatam, Natiq A. R., and Whiting, Donald A.** Stereoselective total syntheses of the norlignan derivatives ( $\pm$ )-tri-*O*-methylsequirin-B and ( $\pm$ )-tri-*O*-methylsequirin-C, 2359.
- Davis, Harry A.** See **Bowden, Bruce**, 2634.
- Davis, Michael, Homfield, Enno, and Srivastava, K. S. Lal.** The chemistry of 2,1-benzisothiazoles. Part VI. Quaternary salts and their decomposition by base to *o*-aminobenzaldehydes, 1863.
- Davis, Michael, Paproth, Terry G., and Stephens, Laurence J.** The chemistry of 2,1-benzisothiazoles. Part VII. Reaction of  $\alpha$ -substituted *o*-toluidines with thionyl chloride. A one-stage synthesis of 2,1-benzisothiazole-3-carboxylic acid, 2057.
- Deady, Leslie W., Pirzada, Nassim H., and Topsom, Ronald D.** Synthesis of some tetrahydro-2- and 3-benzazepines, and of hexahydro-3-benzazocine, 782.
- Dean, F. M.** See **Chauhan, M. S.**, 120, 359.
- Dean, Francis M., Goodchild, John, and Hill, Andrew W.** Pyranopyran derivatives related to citromyctin, and their sulphurization to give derivatives of 1-oxa-6,6-dithia(6a-*S*<sup>IV</sup>)pentalene and 1,6,6a-trithia(6a-*S*<sup>IV</sup>)pentalene, 1022.
- De Delal, Ila.** See **Nasipuri, Dhanonjoy**, 1754.
- De Kimpe, Norbert.** See **Rompuy, Ludo**, 2503.
- Del Buttero, P.** See **Bradamante, S.**, 612.
- de Lima, Oswaldo Gonçalves.** See **Monache, Franco Delle**, 2725.
- Della, Ernest W., and Kendall, Michael.** Lengthening the chain of a dicarboxylic acid by one carbon atom, 2729.
- de Márquez, Lilia Albert.** See **Herz, Josef E.**, 2633.
- De Micheli, Carlo.** See **Bianchi, Giorgio**, 1148.
- de Montellano, P. Ortiz.** See **Guzmán, A.**, 91.
- Denny, Ronald C.** See **McKennis, Herbert, jun.**, 2046.
- Denny, William A.** See **Bell, Alan M.**, 2131, **Browne, John W.**, 1493, **Chambers, Virginia E. M.**, 1500, and **Clegg, Andrew S.**, 2137.
- de Oliveira, A. Braga.** See **Crossley, R.**, 205.
- De Pava, Orso Vajne.** See **Bianchi, Giorgio**, 1148.
- de Rooy, Jan F. M.** See **Boom, Jacques H. van**, 2513.
- Desai, Prabhakar B.** Preparation and stability of 4-fluoropyridine, 1865.
- Devlin, Celestine J., and Walker, Brian J.** Reactions of bromonitroalkenes with trivalent phosphorus. Part I. Reaction in aprotic solvents, 1428.
- Dewick, Paul M.** See **Crombie, Leslie**, 1285.
- Dickeson, John E., Eckhard, Ian F., Fielden, Rae, and Summers, Lindsay A.** Diquaternary salts of 1,5- and 1,8-naphthyridines and the structure of their derived pseudo-bases, 2885.
- Dingwall, John G., Ingram, Alexander S., Reid, David H., and Symon, John D.** Studies of heterocyclic compounds. Part XIV. 1,6a-Dithia-6-azapentalenes, 2351.
- Dingwall, John G.** See also **Barlow, Michael G.**, 1542.
- Di Nunno, L., Florio, S., and Todesco, P. E.** Reaction of benzofurazan oxides with sodium azide; a new synthesis of benzofurazans, 1954.
- Djerassi, Carl.** See **Midgley, Ian**, 155.
- Dolan, Timothy C. S.** See **Anderson, Norman S.**, 2173.
- Doner, Landis W.** See **Brimacombe, John S.**, 1295.
- Donnelly, Dervilla M. X., Kavanagh, Philip J., Kunesch, Gerhard, and Polonsky, Judith.** Interconversion of neoflavanoids, 965.
- Donnelly, Dervilla M. X., Thompson, John C., Whalley, W. B., and Ahmad, Saboor.** *Dalbergia* species. Part IX. Phytochemical examination of *Dalbergia stevensonii* Standl, 1737.
- Donnelly, John A., Hoey, James G., O'Brien, Simon, and O'Grady, John.** Rearrangement of cyclopropyl epoxides to 3,6-dihydro-2*H*-pyrans, 2030.
- Donnelly, John A.** See also **Bennett, Peter**, 688, and **Buggle, Katherine**, 1006.
- Downing, A. P.** See **Crossley, R.**, 205.
- Drey, Charles N. C., Lowbridge, John, and Ridge, Richard J.** Synthesis of  $\beta$ -amino-acid peptides by aminolysis of substituted dihydro-1,3-oxazinones and amino-protected  $\beta$ -lactams, 2001.
- Driscoll, John S.** See **Hirata, Tadashi**, 1209.
- Dronsfield, A. T.** See **Bowden, F. L.**, 516, and **Davies, A. R.**, 379.
- Duff, Elaine, Trippett, Stuart, and Whittle, Peter J.** Hexafluoroacetone adducts of phosphines containing a group susceptible to nucleophilic attack, 972.
- Duke, A. Jonathan.** See **Brook, Peter R.**, 1013.
- Dunkelblum, Esra, and Hoffer, Dorit.** Reaction of benzylidenecyclohexanone with borane, 1707.
- Dunstan, Diana R., Mose, Wendy P., and Scopes, P. Molly.** Optical rotatory dispersion and circular dichroism. Part LXXIX. Circular dichroism of some carbohydrate azides, 2749.
- Dunwell, David W., and Evans, Delme.** Reactions of 2-aminobenzimidazoles with propiolic ester and diethyl ethoxymethylenemalonate, 1588.
- du Plessis, Eberhard.** See **Burger, Barend V.**, 581, 584.
- Durrant, Graham, Edwards, Peter D., and Owen, Leonard N.** Cytotoxic compounds. Part XVI. Reactions of the bismethanesulphonates of 3-(*N*-methylanilino)propane-1,2-diol and of 2-(*N*-methylanilino)propane-1,3-diol with nucleophiles, 1271.
- Dutta, Phanindra Chandra.** See **Mukherjee, Debabrata**, 2083.

## E

- Eaborn, C.** See **Asomaning, W. A.**, 137.
- Eagle, Garth A., and Rivett, Douglas E. A.** Diterpenoids of *Leonotis* species. Part IV. Dubiin, a furanoid labdane derivative from *L. dubia* E. Mey, 1701.
- Eakins, John P.** See **Adamson, George W.**, 2071.
- East, D. Stuart R., Ishikawa, Kiyoyasu, and McMurry, T. Brian H.** Chemistry of santonene. Part IX. Photolysis products of santonene, and their chemical transformations, 2563.
- Eckell, Albrecht.** See **Crowley, Kevin J.**, 2671.
- Eckhard, Ian F.** See **Dickeson, John E.**, 2885.
- Edge, M. D., Hodgson, A., Jones, A. S., MacCross, M., and Walker, R. T.** Synthetic analogues of polynucleotides. Part IX. Synthesis of 3'-*O*-carboxymethyl-2'-deoxy-ribonucleosides and their use in the synthesis of an analogue of 2'-deoxyadenyl-1-(3'  $\rightarrow$  5'-)thymidine 3'-phosphate, 290.

- Edmonds**, Anthony C. F. See **Jones**, D. Neville, 2602.
- Edwards**, Peter D., **Foster**, Duncan L. D., **Owen**, Leonard N., and **Pringle**, Michael J. Cytotoxic compounds. Part XVII. *o*-, *m*-, and *p*-(Bis-2-chloroethylamino)phenol, *p*-[*N*-(2-chloroethyl)methylamino]phenol, *NN*-bis-2-chloroethyl-*p*-phenylenediamine, and *NN*-bis-2-chloroethyl-*N'*-methyl-*p*-phenylenediamine as sources of biologically active carbamates, 2397.
- Edwards**, Peter D. See also **Durrant**, Graham, 1271.
- Edwards**, Raymond L., and **Gill**, Melvyn. Constituents of the higher fungi. Part XII. Identification of involutin as (-)-*cis*-5-(3,4-dihydroxyphenyl)-3,4-dihydroxy-2-(4-hydroxyphenyl)cyclopent-2-enone and synthesis of ( $\pm$ )-*cis*-involutin trimethyl ether from isoxerocomic acid derivatives. Part XIII. 2-Aryl-3-methoxymaleic anhydrides from pulvinic acid derivatives. A convenient method for determination of structure of fungal and lichen pulvinic acid derivatives. Part XIV. 3',4',4'-Trihydroxypulvinone, thelephoric acid, and novel pyrandione and furanone pigments from *Suillus grevillei* (Klotzsch) Sing. [*Boletus elegans* (Schum. per Fries)], 1529, 1538, 1921.
- Elix**, J. A. See **Cresp**, Terry M., 340.
- Ellis**, Gwynn P., and **Thomas**, Idris L. Benzopyrones. Part X. Bromination of chromones and coumarins with dibromoisocyanuric acid. Nitrations of chromones, 2781.
- Elson**, Clive M., **Hamilton**, Alan, and **Johnson**, Alan W. Cobalt(II) tetradehydrocorrin complexes, 775.
- Elson**, Clive M. See also **Conlon**, Michael, 2281.
- Elvidge**, John A. See **Al-Rawi**, Jasim M. A., 2432, **Bailey**, Joseph, 823, and **Barot**, Nandkishor R., 606.
- Entwistle**, Ian D. See **Dare**, Derek L., 1130.
- Entwistle**, Norman, and **Pratt**, Alexander D. Studies of artefacts of the acid treatment of (23*S*)-lanosta-8,24-diene-3 $\beta$ ,23-diol, 1235.
- Epszajn**, Jan, **Katritzky**, Alan R., **Lunt**, Edward, **Mitchell**, James W., and **Roch**, Gilberto. *N*-Oxides and related compounds. Part XLII. Amine *N*-nitroimides derived from trimethylamine, 1-methylpiperidine, 1,4-diazabicyclo[2.2.2]octane (triethylenediamine), pyridines, quinoline, and isoquinoline, 2622.
- Epton**, J. See **Kennedy**, John F., 488.
- Erickson**, Karen L. See **Crowley**, Kevin J., 2671.
- Evans**, David A. See **Battersby**, Alan R., 1546.
- Evans**, Delme. See **Dunwell**, David W., 1588.
- Evans**, D. D. See **Bowman**, R. E., 438, 760.
- Evans**, Henry H., **Fields**, Roy, **Haszeldine**, Robert N., and **Illingworth**, Michael. Fluoro-olefins. Part VIII. Preparation and some reactions of perfluoro-2,3-dimethylbut-2-ene and of some tristrifluoromethyl ethylenes, 649.
- Evans**, John M. See **Chambers**, Virginia E. M., 1500.
- Evans**, N. See **Carruthers**, W., 44.
- Evans**, Roger, **Hanson**, James R., and **Mulheirn**, Larry J. Studies in terpenoid biosynthesis. Part X. Incorporation of (5*S*)-[5-<sup>3</sup>H]<sub>1</sub>mevalonic acid into gibberellic acid, 753.
- Evgenios**, D. M. See **Campbell**, Malcolm M., 2862, 2866.
- Fallis**, Alexander G., **Hearn**, Milton T. W., **Jones**, Sir Ewart R. H., **Thaller**, Viktor, and **Turner**, John L. Natural acetylenes. Part XL. Syntheses of polyacetylenic C<sub>18</sub> and C<sub>16</sub> esters with 9-ene-12,14-diyne unsaturation, and their labelling, 743.
- Farrell**, Iain W., **Keeping**, John W., **Pellatt**, Martin G., and **Thaller**, Viktor. Natural acetylenes. Part XLI. Polyacetylenes from fungal fruiting bodies, 2642.
- Fenwick**, R. G. See **Blackburn**, G. M., 2809.
- Ferrari**, Giorgio. See **Mussini**, Patrizia, 2551.
- Ferrier**, Robert J., and **Vethaviasar**, Nadarajah. Unsaturated carbohydrates. Part XVII. Synthesis of branched-chain sugar derivatives by application of the Claisen rearrangement, 1791.
- Ferrier**, Robert J. See also **Bethell**, Geoffrey S., 1400.
- Ferrito**, Victor. See **Ballantine**, James A., 1825.
- Fielden**, Rae, **Meth-Cohn**, Otto, and **Suschitzky**, Hans. Syntheses of heterocyclic compounds. Part XXV. Action of acid on *NN*-disubstituted *o*-nitroanilines: benzimidazole *N*-oxide formation and nitro-group rearrangements. Part XXVI. Photo-rearrangements of benzimidazole *N*-oxides and related systems. Part XXVII. Substitution reactions and rearrangements of benzimidazole *N*-oxides, 696, 702, 705.
- Fielden**, Rae. See also **Dickeson**, John E., 2885.
- Fields**, Roy. See **Birchall**, J. Michael, 1773, and **Evans**, Henry H., 649.
- Finar**, Ivor F., and **Okoh**, Eric. Reactions of some  $\alpha\beta$ -unsaturated pyrazolyl compounds with bromine and with Grignard reagents, 2008.
- Finzi**, Paolo Vita. See **Bianchi**, Giorgio, 1148.
- Fitton**, Harry. See **Banthorpe**, Derek V., 2051.
- Fjeldstad**, Per E. See **Undheim**, Kjell, 829.
- Flaherty**, B., **Nahar**, S., **Overend**, W. G., and **Williams**, N. R. Branched-chain sugars. Part XIV. Reactions of some glycosulose derivatives with diazomethane: ring expansion of glycosulose derivatives, 632.
- Flannery**, Richard E. See **Hampton**, K. Gerald, 2308.
- Fleming**, George L., **Haszeldine**, Robert N., and **Tipping**, Anthony E. Addition of free radicals to unsaturated systems. Part XX. The direction of radical addition of heptafluoro-2-iodopropane to vinyl fluoride, trifluoroethylene, and hexafluoropropene, 574.
- Fleming**, Ian. Synthesis of the 8-cycloheptatrienylheptafulvenyl cation, 1019.
- Fleming**, Ian, and **Hanson**, Steven W. The intramolecular reaction between a diazoalkane group and an ester group: the second example, 1669.
- Fleming**, Ian, and **Woodward**, R. B. A synthesis of (-)-(*R*)-*trans*- $\beta$ -(1,2,3-trimethylcyclopent-2-enyl)acrylic acid, 1653.
- Fleming**, Ian. See also **Billett**, Eric H., 1658, 1661.
- Fletcher**, George A., **Löw**, Miklos, and **Young**, Geoffrey T. Amino-acids and peptides. Part XXXVII. Trifluoroacetylation during the coupling of *t*-butoxycarbonyl-amino-acids with peptide esters in the presence of trifluoroacetate anion, 1162.
- Florio**, S. See **Di Nunno**, L., 1954.
- Flowers**, William T., **Heyes**, Graham, and **Holt**, Geoffrey. Thermal decomposition of bismesitylsulphonyl- and bis-2,4-xylylsulphonyl-diazomethanes, 2438.
- Fomum**, Zacharias T., **Greaves**, Peter M., **Landor**, Phyllis D., and **Landor**, Stephen R. Allenes. Part XXVI. The synthesis of enamino nitriles by the nucleophilic addition of amines to allenic nitriles, 1108.

## F

- Fahmy**, Amin F. M. See **Baddar**, Fawzi G., 2448.
- Fairclough**, Peter H. See **Ballard**, John M., 1524.
- Fairlie**, John C., **Hodgson**, Gordon L., and **Money**, Thomas. Synthesis of ( $\pm$ )-camphor, 2109.

- Fomum, Zacharias T. See also Black, Donald K., 1349.
- Foreman, Michael I. See Khand, Ihsan U., 975, 977.
- Forrester, Alexander R. See Calder, Alan, 456.
- Foster, Duncan L. D. See Edwards, Peter D., 2397.
- Foster, Hylton E., and Hurst, Jim. Pyrazolopyridines. Part II. Preparation of 3-substituted 2-aryl-2H-pyrazolo[4,3-b]pyridines. Acid-catalysed cyclisation of 2-arylaminoethyl-3-nitropyridines. Part III. Preparation and reactions of pyrazolo[4,3-b]pyridines, 319, 2901.
- Fox, G. J., Hepworth, J. D., and Hallas, G. Bromination of 3-amino- and 3-dimethylamino-pyridine, 68.
- Foxton, Michael W. See Borthwick, Alan D., 2769, and Claisse, John A., 2241.
- Fraser, Alan W., and Lewis, John R. Rutaceous constituents. Part II. Two acridone alkaloids from *Atalantia ceylanica* (Rutaceae), 1173.
- Freeman, Peter W. See Crombie, Leslie, 1277.
- Fried, John H. See Carpio, Humberto, 227.
- Frost, David A., and Morrison, George A. Naturally occurring compounds related to phenalenone. Part V. Synthetic approaches to structures based on 8,9-dihydro-8,8,9-trimethylphenaleno[1,2-b]furan-7-one. Part VI. Synthesis of atrovnetin (8,9-dihydro-3,4,5,6-tetrahydroxy-1,8,8,9-tetramethylphenaleno[1,2-b]furan-7-one) and related compounds, 2159, 2388.
- Fuganti, Claudio, and Mazza, Mareo. Biosynthesis of Amaryllidaceae alkaloids. Stereochemistry of hydrogen removal  $\alpha$  to the tertiary nitrogen atom in the biological conversion of norpluviine into lycorenine, 954.
- Fujita, E., and Saeki, Y. Lythraceae alkaloids. Part VII. The absolute configurations of lythrancines-I—IV and lythrancepines-I—III. Part VIII. The mass spectra of lythrancine and lythrancepine alkaloids. Part IX. The structure and absolute configuration of lythrancine-V, -VI, and -VII, 297, 301, 306.
- Fujita, Eiichi, Taoka, Manabu, Nagao, Yoshimitsu, and Fujita, Tetsuro. Terpenoids. Part XXV. Structures and absolute configurations of isodoacetal, nodosinin, and odonicin, novel diterpenoids of *Isodon japonicus*, 1760.
- Fujita, Eiichi, Taoka, Manabu, Shibuya, Masayuki, Fujita, Tetsuro, and Shingu, Tetsuro. Terpenoids. Part XXVII. Structure and stereochemistry of ponigidin, a diterpenoid of *Isodon japonicus*, 2277.
- Fujita, Tetsuro. See Fujita, Eiichi, 1760, 2277.
- Fujiwara, Y. See Yamamura, M., 203.
- Fujiyama, Fusako. See Nishiwaki, Tarozaemon, 817.
- Fukada, Naoaki. See Takeshima, Tatsuo, 1009.
- Fukamiya, Narihiko, Kato, Michiharu, and Yoshikoshi, Akira. Total synthesis of (+)-seychellene, 1843.
- Fukuhara, Genji. See Nishiwaki, Tarozaemon, 1606.
- Furtado, D. See Lockhart, J. C., 577.
- G**
- Galantay, Eugene. See Coombs, Robert V., 2095.
- Gallina, Carlo, Maneschi, Massimo, and Romeo, Aurelio. Synthesis of 2-alkoxy-2-acylamino propionic acids by alkoxymercuration-demercuration of 2-acylaminoacrylic acids, 1134.
- Gandolfi, Remo. See Bianchi, Giorgio, 1148.
- Garbarino, Juan A., Sierra, Jorge, and Tapia, Ricardo. Stereochemical studies on aromatic  $\alpha$ -alkyl- $\alpha$ -amino-acids. Part III. Absolute configuration of 2-amino-2-phenylbutyric acid, 1866.
- Garbers, Christoph F., Labuschagne, A. Johan H., Meyer, Cornelius J., and Schneider, David F. Stereospecific formation of a vinyl sulphide *via* a sulphonium ylide-salt coupling reaction, 2016.
- Garbers, Christoph F. See also Burger, Barend V., 581, 584, 590.
- García, Gustavo A. See Crabbé, Pierre, 810.
- Garratt, Peter J., Holmes, Andrew B., Sondheimer, Franz, and Vollhardt, K. Peter C. Wittig reactions of 1,2-dihydro-1,2-bis(triphenylphosphoranylidene)benzocyclobutene. Synthesis of all-*cis*- and mono-*trans*-1,2,3,4,6,7,8,9-octahydrodibenzo[*b,h*]benzo[3,4]cyclobuta[1,2-*e*]thionin, analogues of biphenylene containing a thionin ring, 2253.
- Garwood, Robert F., Naser-ud-Din, Scott, Claude J., and Weedon, Basil C. L. Anodic syntheses. Part XV. Further studies with ethylenic acids, 2714.
- Gent, Patricia A., Gigg, Roy, and Conant, Roy. The allyl ether as a protecting group in carbohydrate chemistry. Part IV. The 2-methylallyl ether group, 1858.
- Georghiou, Paris E., and Just, George. Reactions of the enol sulphite of 3 $\beta$ -acetoxy-5 $\alpha$ -hydroxycholestan-6-one, 70.
- Cycloadducts of ergosterol with azo-type dienophiles, and their chemical reactivities, 888.
- Giacopello, D. See Moltrasio, G. Y., 349.
- Gibbs, John A. See Chan, Wilfred R., 1047.
- Gibson, David T. See Howe, Ralph, 1940.
- Gibson, Keith H. See Battersby, Alan R., 1546.
- Gibson, Samuel G. See Hewett, Colin L., 1967.
- Gigg, Roy. See Gent, Patricia A., 1858.
- Gilbert, Iain M. See Hewett, Colin L., 1967.
- Gilchrist, Thomas L., Gymer, Geoffrey E., and Rees, Charles W. Reactive intermediates. Part XXIII. Pyrolysis of 1-phthalimido-1,2,3-triazoles: formation and thermal reactions of 2H-azirines, 555.
- Gilchrist, Thomas L., Livingstone, Rosemary, Rees, Charles W., and von Angerer, Erwin. Pyran-2-ylidene carbene complexes, 2535.
- Gilchrist, Thomas L. See also Anderson, David J., 550, and Bashir, Naz, 868.
- Giles, Robin G. F., Mitchell, Peter R. K., Roos, Gregory H. P., and Baxter, Ian. A photochemical reaction of 2-acetyl-3-alkylamino-1,4-benzoquinones: formation of benzoxazoles, 493.
- Gill, Melvyn. See Edwards, Raymond L., 1529, 1538, 1921.
- Giordano, Claudio. See Abis, Luigi, 771.
- Girijavallabhan, Moopil. See Allan, Robin D., 1182.
- Glover, Edward E., Rowbottom, Kenneth T., and Bishop, Derek C. Synthesis of 3,3'-dimethyl-1,1'-azobenzimidazolium salts, 842.
- Glover, Edward E., Vaughan, Kenneth D., and Bishop, Derek C. Synthesis and quaternization of some heterocyclic mono- and di-sulphides, 2595.
- Glover, Stephen A., Goosen, André, and Laue, Hugh A. H. Cyclisation of biphenyl-2-carboxamides, 1647.
- Glue, S. E. J. See Atkins, P. R., 2644.
- Godfrey, J. M. See Bonnett, R., 252.
- Godfrey, K. E. See Bodman, R. E., 1.
- Golborn, Peter and Scheinmann, Feodor. Isomerisation of allyl phenyl ethers and allylphenols with transition metal catalysts, 2870.
- Golding, Bernard T., Hall, David R., and Sakrikar, Satish. Reaction between vicinal diols and hydrogen bromide in acetic acid; synthesis of chiral propylene oxide, 1214.

- Gonsalves, António M. d'A. Rocha.** See **Cavaleiro, José A. S.**, 2471.
- González, Antonio G., Alvarez, Miguel A., Darías, José, and Martín, Julio D.** Marine natural products of the Atlantic zone. Part VI. Base-catalysed rearrangement of taon-diol, 2637.
- Goodchild, John.** See **Dean, Francis M.**, 1022.
- Goeres, Alfred P.** See **Koomen, Gerrit J.**, 1934.
- Goosen, André.** See **Glover, Stephen A.**, 1647.
- Gore, Brian A.** See **Chapman, Norman B.**, 750.
- Gore, Peter H., Miri, Adhid Y., and Siddiquei, Asif S.** Friedel-Crafts reactions. Part XXIV. Diacylations of 2,7-dimethylnaphthalene. Deuterium-labelling as an aid to structural determinations, 2936.
- Gore, Peter H., Thorburn, Stewart, and Weyell, David J.** Friedel-Crafts reactions. Part XXV. Acetylation and benzylation of iodobenzene and of *o*-, *m*-, and *p*-iodotoluenes, 2940.
- Goulding, Ronald W.** See **Chakrabarti, Jiban K.**, 2499.
- Granoth, Itshak, Segall, Yoffi, and Kalir, Asher.** Friedel-Crafts acylation-cyclisation reactions of 3-bromophenyl ethers with phosphorus trichloride and oxalyl chloride to give the corresponding phenoxaphosphine and xanthen-9-one derivatives, 1972.
- Grattan, David W., Locke, J. Michael, and Wallis, Stanley R.** Free-radical addition of alkanethiols to some acyclic olefins, 2264.
- Gray, Brian V.** See **Borthwick, Alan D.**, 2769.
- Gray, Elizabeth.** See **Atkinson, Robert S.**, 960.
- Gray, G. A.** See **Collins, J. F.**, 94.
- Gray, Gerald A.** See **Bowman, Robert M.**, 1051.
- Greaves, Peter M.** See **Fomum, Zacharias T.**, 1108.
- Green, Malcolm L. H., and Knowles, Peter J.** Selective reduction of organic compounds with bis-( $\eta$ -cyclopentadienyl)dihydridotungsten, 989.
- Gregory, Derek N.** See **Clarke, Kenneth**, 2956.
- Gregory, G. I., Seale, P. W., Warburton, W. K., and Wilson, M. J.** 3-Amino- and 3-cyano-1,2,4-oxadiazole, 47.
- Gregory, Gordon I.** See **Borthwick, Alan D.**, 2769, and **Claisse, John A.**, 2241.
- Greig, David G. T.** See **Ager, Ian**, 1187.
- Gretton, W. R.** See **Bowman, W. R.**, 218.
- Gribble, Michael Y.** See **Bell, Stephen L.**, 1716, and **Chambers, Richard D.**, 1405, 1411, 1710.
- Griffiths, Nigel D.** See **Ames, Douglas E.**, 2818.
- Grigg, Ronald.** See **Bramley, Robert K.**, 1913.
- Grimshaw, James, and Trocha-Grimshaw, Jadwiga.** Electrochemical reactions. Part XIII. Reduction of some styrylpyrazole derivatives. Part XVI. Stereochemistry of two known diketonic hydrodimers from reduction of carvone, 1275, 2584.
- Grimshaw, James.** See also **Azizullah**, 425.
- Grinstead, Martin J.** See **Heddon, Peter**, 2773.
- Grout, Raymond J., Hynam, Brian M., and Partridge, Maurice W.** Cyclic amidines. Part XXV. Derivatives of 1-alkyl-2-aminoquinolin-4(1*H*)-ones and 2,3-dihydroimidazo[1,2-*a*]quinolin-5(1*H*)-one, 1314.
- Grove, John Frederick.** New metabolic products of *Aspergillus flavus*. Part IV. 4'-Hydroxyasperentin and 5'-hydroxyasperentin 8-methyl ester, 2704.
- Grove, John Frederick.** See also **Cattel, L.**, 2626.
- Grünanger, Paolo.** See **Bianchi, Giorgio**, 1148.
- Grundon, M. F.** See **Collins, J. F.**, 94, 161.
- Grundon, Michael F.** See **Bowman, Robert M.**, 626, 1051, 1055.
- Guest, Ian G., and Marples, Brian A.** Steroids. Part XVI. Long-range substituent effects on boron trifluoride-catalysed rearrangements of 5,6-epoxy-steroids, 900.
- Gunatilaka, Abeysinghe A. L.** See **Barton, Derek H. R.**, 874.
- Gunatilake, A. A. Leslie, and Sultanbawa, M. Uvais S.** Chemical investigation of Ceylonese plants. Part III. Extractives of the fruits of *Argyreia populifolia* Choisy (Convolvulaceae), 1155.
- Gunn, Brian C., and Stevens, Malcolm F. G.** Medicinal nitro-compounds. Part I. Photo-rearrangements of *N*-aryl-2-nitrobenzamides, 1682.
- Gupta, Amitabha Das.** See **Mukherjee, Debabrata**, 2083.
- Gupta, Arun K. Das., and Chatterje, Rabindra M.** Coumarins and related compounds. Part XIX. Synthesis of 3-phenylbenzo[*h*]coumarin, 1802.
- Gupta, Shyam K.** See **Pettit, George R.**, 950.
- Gupta, Surendra K.** See **Harmon, Robert E.**, 1160.
- Guthrie, Roy D., Jenkins, Aubrey D., and Roberts, George A. F.** Synthesis of oligosaccharides on polymer supports. Part II. Synthesis of  $\beta$ -D-gentiobiose derivatives on soluble support copolymers of styrene and 6-*O*-(*p*-vinylbenzoyl) or 6-*O*-(*p*-vinylphenylsulphonyl) derivatives of D-glucopyranose, 2414.
- Guy, R. G., and Pearson, I.** Pseudohalogen chemistry. Part I. Heterolytic addition of thiocyanogen chloride to some symmetrical alkenes and cycloalkenes, 281.
- Guyett, J.** See **Bowman, R. E.**, 438, 760.
- Guzmán, A., de Montellano, P. Ortiz, and Crabbé, Pierre.** Reaction of phosphoryl chloride in pyridine with halo-geno-hydrins, 91.
- Gymer, Geoffrey E.** See **Anderson, David J.**, 550, and **Gilchrist, Thomas L.**, 555.

## H

- Haas, Michael A.** See **Birch, Arthur J.**, 1882.
- Haga, Seiji.** See **Kametani, Tetsuji**, 471.
- Haines, A. H., and Symes, K. C.** Syntheses of some poly-fluoro-aromatic derivatives of carbohydrates and polyols, 53.
- Hall, David R.** See **Golding, Bernard T.**, 1214.
- Hall, Maureen.** See **Coombs, Maurice M.**, 1255.
- Hall, Richard H., and Jordaan, Amor.** Preparation of 2-C-cyano-glycals, 1059.
- Hall, R. H., Jordaan, Amor, and Lourens, G. J.** Reaction of chlorosulphonyl isocyanate with unsaturated sugars, 38.
- Hallas, G.** See **Fox, G. J.**, 68.
- Hamilton, Alan.** See **Elson, Clive M.**, 775.
- Hamilton, Alan L.** See **Johnson, Alan W.**, 991.
- Hampton, K. Gerald, and Flannery, Richard E.** Alkylation of disodiopentane-2,4-dione with halogeno-acetals, 2308.
- Hankinson, Barry, Heaney, Harry, Price, Anthony P., and Sharma, Ram Prakash.** Aryne chemistry. Part XXXII. Reactions of tetrahalogenobenzynes with 6,6-dialkylfulvenes, and the photoisomerisation and thermal reactions of derived products, 2569.
- Hansen, Kristian J.** See **Ames, Douglas E.**, 2818.
- Hanson, James R.** See **Baldwin, Derek**, 1704, 2687, and **Evans, Roger**, 753.
- Hanson, Steven W.** See **Billett, Eric H.**, 1661, and **Fleming, Ian**, 1669.
- Harcourt, David N.** See **Brooks, J. Robin**, 2588.

- Hargraves**, H. Edwin. See **Chadwick**, Derek J., 2327.
- Harmon**, Robert E., **Mazharuddin**, Mohammed, and **Gupta**, Surendra K. Total synthesis of acephenanthren-5-one, 1160.
- Harnden**, Michael R., **Brown**, Allan G., and **Hodge**, R. Anthony Vere. Oxidation of ribonucleic acids with *m*-chloroperbenzoic acid, 333.
- Harris**, John A. See **Ayres**, David C., 2059.
- Harrison**, D. M. See **Collins**, J. F., 94.
- Harrison**, Roy M., and **Hobson**, John D. Claisen rearrangement of tropolone ethers. Part II, 1958.
- Harrison**, Roy M., **Hobson**, John D., and **Midgley**, Alan W. Claisen rearrangement of tropolone ethers. Part III, 1960.
- Harvey**, David J. See **Vouros**, Paul, 727.
- Hassall**, Cedric H., and **Morgan**, Barry A. Tetracycline studies. Part IV. Some novel cyclisations through benzophenone carbanions, including a new synthesis of anthraquinones, 2853.
- Hassall**, Cedric H. See also **Ballantine**, James A., 1825, and **Davies**, John S., 2614.
- Haszeldine**, Robert N., **Rigby**, Rhymer B., and **Tipping**, Anthony E. Perfluoroalkyl derivatives of sulphur. Part XV. Preparation and certain reactions of methyl polyfluoroalkyl sulfoxides and sulphones and their conversion into polyfluoroalkanesulphonic acids, 676.
- Haszeldine**, Robert N. See also **Banks**, Ronald E., 80, 596, 1092, 1111, **Barlow**, Michael G., 1542, 1798, **Birchall**, J. Michael, 1071, 1121, 1773, **Bowden**, F. L., 516, **Coy**, David H., 1062, 1066, 1561, **Davies**, A. R., 379, **Evans**, Henry H., 649, and **Fleming**, George L., 574.
- Hatam**, Natiq A. R. See **Davies**, Richard V., 2359.
- Hawkins**, David W. See **Boar**, Robin B., 654.
- Hawkins**, Edwin G. E. 1,5-Radical rearrangements during oxaziridine-iron(II) reactions, 2155.
- Hawkins**, Edwin G. E., and **Large**, Robert. Isomeric spiro-diketones from 1,1'-epoxybicyclohexyl-2-one, 2169.
- Heacock**, R. A. See **Powell**, W. S., 509.
- Heaney**, Harry, **Hollinshead**, John H., **Kirby**, Gordon W., **Ley**, Steven V., **Sharma**, Ram Prakash, and **Bentley**, Kenneth W. Rearrangement reactions of bicyclic systems. Part I. Synthesis of a model compound related to flavothebaone trimethyl ether. The abnormal ultraviolet absorption spectrum of flavothebaone and its trimethyl ether, 1840.
- Heaney**, Harry, and **Ley**, Steven V. *N*-alkylation of indole and pyrroles in dimethyl sulphoxide, 499.
- Heaney**, Harry. See also **Hankinson**, Barry, 2569.
- Hearn**, Milton T. W., **Jones**, Sir Ewart R. H., **Pellatt**, Martin G., **Thaller**, Viktor, and **Turner**, John L. Natural acetylenes. Part XLII. Novel C<sub>7</sub>, C<sub>8</sub>, C<sub>9</sub>, and C<sub>10</sub> polyacetylenes from fungal cultures, 2785.
- Hearn**, Milton T. W. See also **Fallis**, Alexander G., 743.
- Heath-Brown**, Basil. See **Cattanach**, Christopher J., 1041.
- Heatherington**, Kenneth. See **Boyd**, Gerhard V., 2523, 2532.
- Hecht**, Sidney M., and **Werner**, Dieter. A concise synthesis of substituted 4-alkylaminopyrazolo[3,4-*d*]pyrimidines, 1903.
- Hedden**, P. See **Crane**, R. I., 194.
- Hedden**, Peter, **MacMillan**, Jake, and **Grinsted**, Martin J. Fungal products. Part VIII. New kaurenolides from *Gibberella fujikuroi*, 2773.
- Heissner**, Christopher J. See **Strunz**, George M., 2600.
- Helmy**, Essam. See **Jones**, D. Neville, 2602.
- Henderson**, Robert. See **Connolly**, Joseph D., 865.
- Heng**, Ching K. See **Chin**, Wah J., 1437.
- Hepburn**, Stuart P. See **Calder**, Alan, 456.
- Hepworth**, J. D. See **Fox**, G. J., 68.
- Herz**, Josef E., and **de Márquez**, Lilia Albert. Reduction of steroidal ketones with aminoiminomethanesulphinic acid, 2633.
- Herz**, Josef E., and **Montalvo**, Sergio Cruz. Fluorinated sterols. Part I. 26,26,26,27,27,27-Hexafluorodesmosterol, 1233.
- Hesp**, Barrie. See **Dalziel**, William, 2841.
- Hesse**, Robert H. See **Barton**, Derek H. R., 2365.
- Hewett**, Colin L., **Gibson**, Samuel G., **Gilbert**, Iain M., **Redpath**, James, and **Savage**, David S. 18-Norandrosta-8,11,13-trienes. Part I. 11-Hydroxy-derivatives, 1967.
- Hewitt**, Graham H. See **Ager**, Ian, 1187.
- Heyes**, Graham, and **Holt**, Geoffrey. Preparation of  $\alpha$ -diazo- $\beta$ -disulphones; a novel sulphinate elimination in their coupling reactions, 189.
- Thermal rearrangement of  $\alpha$ -diazo- $\beta$ -diketones, 1206.
- Heyes**, Graham. See also **Flowers**, William T., 2438.
- Hickmott**, Peter W., **Miles**, Geoffrey J., **Sheppard**, George, **Urbani**, Raymond, and **Yoxall**, Charles T. Enamine chemistry. Part XVII. Reaction of  $\alpha\beta$ -unsaturated acid chlorides with enamines. Further mechanistic investigations. Effect of triethylamine on the reaction path, 1514.
- Hickmott**, Peter W., **Suschnitzky**, Hans, and **Urbani**, Raymond. Enamine chemistry. Part XVIII. Reaction of crotonyl and methacryloyl chlorides with dialkyl 4-(pyrrolidin-1-yl)cyclohex-3-ene-1,1-dicarboxylates. One-step synthesis of adamantanes, 2063.
- Hider**, R. C. See **Clarke**, S., 230.
- Hiragi**, Mineharu. See **Kametani**, Tetsuji, 471.
- Hildick**, Brian J. See **Cusack**, Noel J., 1720.
- Hill**, Andrew W. See **Dean**, Francis M., 1022.
- Hines**, James N., **Peagram**, Michael J., **Thomas**, Eric J., and **Whitham**, Gordon H. Some reactions of benzaldehyde acetals with alkyl-lithium reagents; a stereospecific olefin synthesis from 1,2-diols, 2332.
- Hirata**, Shoji. See **Kametani**, Tetsuji, 1466.
- Hirata**, Tadashi, **Wood**, Harry B., jun., and **Driscoll**, John S. Rearrangement and elimination reactions in 1,2,4-triazole derivatives, 1209.
- Hiremath**, Shivayogi P. See **Hosmane**, Ramachandra S., 2450.
- Hirsch**, Jerry A., and **Lin**, Lynda Y. Equilibria of 3-methoxycarbonylcycloalkenones, 1366.
- Ho**, Tse-Lok. A convenient synthesis of ( $\pm$ )-occidol, 2579.
- Hobbs**, Peter D., and **Magnus**, Philip D. Photolysis of 5-aryloxy-1-phenyl-1*H*-tetrazoles, and photo-Fries rearrangement of 2-aryloxybenzimidazole, 469.
- Studies on terpenes. Part III. Synthesis of (-)-neoverbanol (pinan-4-ol), 2879.
- Hobson**, John D. See **Harrison**, Roy M., 1958, 1960.
- Hodge**, Philip. See **Davies**, David G., 850, 2299.
- Hodge**, R. A. V. See **Barley**, G. C., 161.
- Hodge**, R. Anthony Vere. See **Harnden**, Michael R., 333.
- Hodgkin**, D. C. See **Vijayan**, Kalyani, 484.
- Hodgson**, A. See **Edge**, M. D., 290.
- Hodgson**, Gordon L., **MacSweeney**, D. F., and **Money**, Thomas. Synthesis of ( $\pm$ )-campherone, ( $\pm$ )-epicampherone, ( $\pm$ )- $\beta$ -santalene, ( $\pm$ )-epi- $\beta$ -santalene, ( $\pm$ )- $\alpha$ -santalene, ( $\pm$ )-ylangocamphor, ( $\pm$ )-copacamphor, and ( $\pm$ )-sativene, 2113.

- Hodgson**, Gordon L. See also **Battersby**, Alan R., 2923, and **Fairlie**, John C., 2109.
- Hoey**, James G. See **Donnelly**, John A., 2030.
- Hoffer**, Dorit. See **Dunkelblum**, Esra, 1707.
- Holland**, J. Murray, and **Jones**, David W. *o*-Quinonoid compounds. Part VI. Spiroconjugation in the ethylene acetal of 1,3-diphenylinden-2-one and derivatives of benzo[*c*]phosphole 2-oxide, 927.
- Hollinshead**, John H. See **Heaney**, Harry, 1840.
- Holmes**, Andrew B. See **Garratt**, Peter J., 2253.
- Holt**, Geoffrey. See **Flowers**, William T., 2438, and **Heyes**, Graham, 189, 1206.
- Holtom**, Ann M. See **Baldwin**, Derek, 1704, 2687.
- Homfeld**, Enno. See **Davis**, Michael, 1863.
- Hooper**, Malcolm, and **Pitkethly**, William N. 2-Arylmethyleneindolin-3-ones: photodimerisation to cyclobutane derivatives, 2804.
- Hopkins**, Keith H. See **Davies**, John S., 2614.
- Hosmane**, Ramachandra S., **Hiremath**, Shivayogi P., and **Schneller**, Stewart W. Synthesis of indoles and carbazoles: Diels-Alder reactions of nitrovinyl-pyrroles and -benzindoles, 2450.
- Hough**, Leslie, **Munroe**, P. A., **Richardson**, Anthony C., **Ali**, Y., and **Bukhari**, S. T. K. Chemical modification of trehalose. Part XII. Synthesis of azido- and amino-trehaloses via epoxide derivatives, 287.
- Hough**, Leslie, **Palmer**, Anthony K., and **Richardson**, Anthony C. Chemical modification of trehalose. Part XIII. Synthesis of some 4,4'-difluoro- and 4,4',6,6'-tetrafluoroanalogues, 784.
- Hough**, Leslie. See also **Ballard**, John M., 1524.
- Howard**, Arthur S. See **Perold**, Guido W., 638, 643.
- Howard**, Colin C., and **Johnstone**, Robert A. W. Fungal metabolites. Part I. Stereochemical features and mass spectrometry of secalonic acids. Part III. Isolation of secalonic acids from *Phoma terrestris*, 2033, 2440.
- Howe**, Ralph, **Moore**, Ronald H., **Rao**, Balbir S., and **Gibson**, David T. Microbial modification of diosgenin and hecogenin, 1940.
- Howes**, P. D. See **Batty**, J. W., 59, 65.
- Huddleston**, Patrick R. See **Barker**, John M., 1200.
- Hudson**, Mervyn F. See **Barnett**, Graham H., 691.
- Hughes**, C. G. See **Clarke**, Kenneth, 356.
- Hughes**, Norman W. See **Cookson**, Richard C., 2738.
- Hui**, Wai-Haan. See **Chan**, Wai-Shing, 490.
- Hull**, Roy. Reactions of heterocycles with thiophosgene. Part II. The chemistry of 3-formylquinoline-2(1*H*)-thione, 2911.
- Hunt**, Eric. See **Battersby**, Alan R., 2917.
- Hurst**, Jim. See **Foster**, Hylton E., 319, 2901.
- Hutchinson**, Ewen G. See **Birch**, Arthur J., 1757.
- Hydes**, P. C. See **Brettle**, R., 345.
- Hynam**, Brian M. See **Grout**, Raymond J., 1314.
- I
- Iddon**, B. See **Chippendale**, K. E., 125, 129.
- Iddon**, Brian, **Suschitzky**, Hans, and **Thompson**, Alan W. Polyhalogeno-aromatic compounds. Part XXVIII. Derivatives of polyhalogenopyridine-4-thiols, 2971.
- Ihara**, Masataka. See **Battersby**, Alan R., 2923.
- Ikeda**, Masazumi. See **Tamura**, Yasumitsu, 2091, 2580.
- Illingworth**, Michael. See **Evans**, Henry H., 649.
- Ima-ye**, Kiyoto, and **Kakisawa**, Hiroshi. Synthesis of grifolin and dihydrodeoxytauranin, 2591.
- Inamoto**, Naoki. See **Nakayama**, Shigenobu, 2069, and **Yoshifuji**, Masaaki, 2065.
- Ingram**, Alexander S. See **Dingwall**, John G., 2351.
- Inoue**, Seiichi. See **Sato**, Kikumasa, 2289.
- Irwin**, W. J. See **Bird**, P. G., 2664, and **Cooper**, G., 911.
- Ishibe**, Nobuyuki, and **Yamaguchi**, Yukio. Photoaddition of *p*-quinones to *N*-(cyclohexyl)dimethylketenimine, 2618.
- Ishikawa**, Kiyoyasu, and **McMurry**, T. Brian H. The chemistry of santonene. Part VIII. Photoreaction of 4*α**H*-pyrosantonin, 914.
- Ishikawa**, Kiyoyasu. See also **East**, D. Stuart R., 2563.
- Ishimaru**, Haruhide. See **Kametani**, Tetsuji, 471.
- Ito**, Gin-ichi. See **Sasaki**, Tadashi, 2089.
- J
- Jacquignon**, P., **Croisy**, A., **Ricci**, A., and **Balucani**, D. Thiophen derivatives. Part XXII. Preparation of naphtho[2',3':4,5]thieno[3,2-*b*][1]benzothiophen and some methyl homologues, 734.
- Jacquignon**, P., and **Périn-Roussel**, O. Carcinogenic nitrogen compounds. Part LXXXIII. New condensed acridines derived from benz[*c*]indeno[1,3-*mn*]-, benz[*c*]indeno[1,3-*kl*]-, and phenanthro[9,10,1-*mna*]-acridines, 2311.
- Jaffari**, Ghayhoor A., and **Nunn**, Arthur J. Methylation of indazoles and related reactions, 2371.
- James**, Kevin J. See **Bowman**, Robert M., 1055.
- Janssen**, Gerard. See **Vlietinck**, Arnold, 937.
- Jaret**, Robert S., **Mallams**, Alan K., and **Reimann**, Hans. The megalomicins. Part IV. The structures of megalomicins A, B, C<sub>1</sub>, and C<sub>2</sub>, 1374.
- Jaret**, Robert S., **Mallams**, Alan K., and **Vernay**, H. Frederick. The megalomicins. Part V. Mass spectral studies, 1389.
- Jarman**, Michael. See **Baker**, Jennifer, 665.
- Jarvis**, John A. J. See **Dalziel**, William, 2841.
- Jenkins**, Aubrey D. See **Guthrie**, Roy D., 2414.
- Jenkins**, J. K. See **Badanyan**, S. O., 145.
- Jenkins**, Malcolm L. See **Ballantine**, James A., 1825.
- John**, D. I. See **Clarke**, S., 230.
- Johnson**, Alan W., **Overend**, William R., and **Hamilton**, Alan L. The course of hydrogenation of nickel(II) *β*-alkylated 1,19-dimethyltetrahydrocorrin salts, 991.
- Johnson**, Alan W. See also **Callott**, Henry J., 1424, **Conlon**, Michael, 2281, and **Elson**, Clive M., 775.
- Johnston**, James P., and **Overton**, Karl H. The pimarane → cassane rearrangement. Synthesis of a potential intermediate from isopimaric acid, 853.
- Johnstone**, R. A. W. See **Bentley**, T. W., 449.
- Johnstone**, Robert A. W. See **Dare**, Derek L., 1130, and **Howard**, Colin C., 2033, 2440.
- Jones**, Alan J., **Casy**, Alan F., and **McErlane**, Keith M. J. Stereochemistry of the four diastereoisomeric 1,2,5-trimethyl-4-phenylpiperidines, 2576.
- Jones**, A. S. See **Edge**, M. D., 290.
- Jones**, D. Neville, **Blenkinsopp**, John, **Edmonds**, Anthony C. F., **Helmy**, Essam, and **Taylor**, Richard J. K. Steroidal sulphur compounds. Part IX. 6*α*- and 6*β*-Methylsulphinylcholest-4-ene and related compounds; stereochemical aspects of the allyl sulphoxide-sulphenate rearrangement, 2602.

- Jones**, David W. Photoreactions of 3a,7a-dihydro-3,3a,5,6-tetraphenylinden-1-one, 1951.
- Jones**, David W. See also **Holland**, J. Murray, 927.
- Jones**, Sir Ewart R. H., **Keeping**, J. W., **Pellatt**, M. G., and **Thaller**, V. Natural acetylenes. Part XXXVIII. Biosyntheses of acetylenedicarboxamide (cellocidin) in *Streptomyces SF-536* cultures, 148.
- Jones**, Sir Ewart R. H. See also **Badanyan**, S. O., 145, **Barley**, G. C., 151, **Bell**, Alan M., 2131, **Bentley**, R. K., 140, **Browne**, John W., 1493, **Chambers**, Virginia E. M., 1500, **Clegg**, Andrew S., 2137, **Fallis**, Alexander G., 743, and **Hearn**, Milton T. W., 2785.
- Jones**, Gurnos, and **Jones**, Ronald K. Annulation of pyridine as a route to quinolines, isoquinolines, and cycloheptapyridines, 26.
- Jones**, Gurnos, **Jones**, Ronald K., and **Robinson**, Michael J. Synthesis of 4*H*-cyclohepta[*b*]thiophen-4-ones, 4*H*-cyclohepta[*b*]furan-4-one, and 9*H*-cyclohepta[*b*]pyridin-9-one, 968.
- Jones**, J. Gareth Ll., and **Marples**, Brian A. Steroids. Part XVII. Functionalisation of the 5 $\beta$ -methyl group in 9,10-epoxy-5-methyl-19-nor-5 $\beta$ -steroids and 5-methyl-18,19-bisnor- $\Delta^{13(17)}$ -5 $\beta$ ,8 $\alpha$ ,9 $\beta$ ,10 $\alpha$ ,14 $\beta$ -steroids, 1143.
- Jones**, J. R., **Chambers**, M. R., and **Lowther**, E. D. Reactions of mono-olefins in the presence of alkali metals. The effect of lithium and Group 2A metals, 248.
- Jones**, Peter F., **Lappert**, Michael F., and **Szary**, Anne C. Wittig-type reactions of 2-lithio-2-trimethylsilyl-1,3-dithian and related reactions, 2272.
- Jones**, Richard A. Y. See **Boyle**, F. T., 167, 170.
- Jones**, Ronald K. See **Jones**, Gurnos, 26, 968.
- Jordaan**, Amor. See **Hall**, Richard H., 38, 1059.
- Joshi**, Balawant Shankar, and **Kamat**, Venkatesh Narsinh. Tuberosin, a new pterocarpan from *Pueraria tuberosa* DC, 907.
- Joshi**, Gurdev S. See **Kessar**, Satinder V., 1158.
- Joshi**, Krishna C., and **Pathak**, Vijai N. Studies of fluorinated  $\beta$ -diketones and related compounds. Part II. Synthetic and infrared spectral studies of 1,3-diketono-chromium derivatives, and their substitution reactions, 57.
- Joshua**, Alummoottil V. See **Lown**, J. William, 2680.
- Just**, George. See **Georghiou**, Paris E., 70, 888.
- K**
- Kabli**, Reda A. See **Ayres**, Barry E., 2267.
- Kakehi**, Akikazu. See **Sasaki**, Tadashi, 2089.
- Kakisawa**, Hiroshi. See **Ima-ye**, Kiyoto, 2591.
- Kakushima**, Masatoshi. See **Strunz**, George M., 2600.
- Kalir**, Asher. See **Granoth**, Itshak, 1972.
- Kalli**, Michael, **Landor**, Phyllis D., and **Landor**, Stephen R. Allenes. Part XXVII. Reaction of dialkyl(lithio)-copper reagents with 1-bromoallenes, 1-iodoallenes, and 3-chloroalk-1-yne, 1347.
- Kaloustian**, Moses K. See **Barton**, Derek H. R., 1571.
- Kamano**, Yoshiaki. See **Pettit**, George R., 725.
- Kamat**, Venkatesh Narsinh. See **Joshi**, Balawant Shankar, 907.
- Kametani**, Tetsuji, **Hirata**, Shoji, and **Ogasawara**, Kunio. Studies on the syntheses of heterocyclic compounds. Part DXXVI. A novel synthesis of isopavine-type alkaloids. Total synthesis of ( $\pm$ )-reframidine, 1466.
- Kametani**, Tetsuji, **Kigasawa**, Kazuo, **Hiragi**, Mineharu, **Ishimaru**, Haruhide, **Uryu**, Tuneo, and **Haga**, Seiji. Studies on the syntheses of heterocyclic compounds. Part DII. Synthesis of 1-substituted 1,2,3,4-tetrahydrophthalazines by a Pictet-Spengler-type reaction of 3-hydroxybenzylhydrazine with carbonyl compounds, 471.
- Kametani**, Tetsuji, **Shibuya**, Shiroshi, and **Kano**, Shinzo. Studies on the syntheses of heterocyclic compounds. Part DXIV. Synthesis of 6a,7-didehydroaporphine and indolo[2,1-*a*]isoquinoline systems by benzyne reactions, 1212.
- Kametani**, Tetsuji, **Takahashi**, Tamiko, and **Ogasawara**, Kunio. A novel synthesis of an ochotensine-type isoquinoline by thermolysis, 1464.
- Kanematsu**, Ken. See **Sasaki**, Tadashi, 375, 2089.
- Kannan**, R. See **Muthukrishnan**, R., 2949.
- Kano**, Shinzo. See **Kametani**, Tetsuji, 1212.
- Kapoor**, Vijaya M., and **Mehta**, Arvind M. Steroid intermediates. Synthesis and transformations of 7-aryl-4,7-dioxoheptanoic acids, 2420.
- Karim**, Amna. See **Bacon**, R. G. R., 272, 278.
- Kasal**, Alexander. See **Chambers**, Virginia E. M., 1500.
- Kasturi**, T. R., **Abraham**, E. M., and **Brown**, Peter. Structure of a dimer of ageratochromene, 2468.
- Katayama**, Teruaki. See **Minato**, Hitoshi, 1819.
- Kato**, Michiharu. See **Fukamiya**, Narihiko, 1843.
- Kato**, Natsuki, **Shibayama**, Masakazu, and **Munakata**, Katsura. Structure of the diterpene clerodendrin A, 712.
- Katritzky**, Alan R., and **Mitchell**, James W. *N*-Oxides and related compounds. Part XLIII. Formation of *N*-nitroimides by base-catalysed nitration, 2624.
- Katritzky**, Alan R. See also **Epszajn**, Jan, 2622.
- Katsoyannis**, Panayotis G. See **Schwartz**, Gerald P., 2890, 2894.
- Kaura**, C. K. See **Lockhart**, J. C., 577.
- Kavanagh**, Philip J. See **Donnelly**, Dervilla M. X., 965.
- Kay**, I. T. See **Atkins**, P. R., 2644.
- Kazlauskas**, Rymantas. See **Cohen**, Keith F., 2076.
- Keeping**, J. W. See **Jones**, Sir Ewart R. H., 148.
- Keeping**, John W. See **Farrell**, Iain W., 2642.
- Kelsey**, John E. See **Battersby**, Alan R., 1609.
- Kendall**, Michael. See **Della**, Ernest W., 2729.
- Kendall**, Norman T. See **Birchall**, J. Michael, 1773.
- Kennedy**, G. R. See **Kennedy**, John F., 488.
- Kennedy**, John F., **Barker**, S. Alan, **Epton**, J., and **Kennedy**, G. R. Poly-(4- and 5-acrylamidosalicylic acids). Part I. Preparation and properties, 488.
- Kennedy**, John F., **Barker**, S. Alan, and **Rosevear**, Alan. Preparation of a water-insoluble *trans*-2,3-cyclic carbonate derivative of macroporous cellulose and its use as a matrix for enzyme immobilisation, 2293.
- Kennedy**, John F., and **Rosevear**, Alan. An assessment of the fractionation of carbohydrates on Concanavalin A-Sepharose 4B by affinity chromatography, 2041.
- Kenner**, George W., **McCombie**, Stuart W., and **Smith**, Kevin M. Pyrroles and related compounds. Part XXIV. Separation and oxidative degradation of chlorophyll derivatives, 2517.
- Kenner**, George W. See also **Cavaleiro**, José A. S., 2471, 2478.
- Kessar**, Satinder V., **Parkash**, Narasimha, and **Joshi**, Gurdev S. Azasteroids. Part X. Synthesis of 3,4-dihydro-8-methoxybenzo[*c*]phenanthridin-1(2*H*)-one, 1158.



- Khand, Ihsan U., Knox, Graham R., Pauson, Peter L., and Watts, William E.** Organocobalt complexes. Part I. Arene complexes derived from dodecacarbonyltetracobalt, 975.
- Khand, Ihsan U., Knox, Graham R., Pauson, Peter L., Watts, William E., and Foreman, Michael I.** Organocobalt complexes. Part II. Reaction of acetylenehexacarbonyldicobalt complexes,  $(R^1C_2R^2)Co_2(CO)_6$ , with norbornene and its derivatives, 977.
- Kidd, David, and Swingland, Berit Viig.** Synthesis of a 1,2,3,6b,7,8,12b,12c-octahydrobenzo[*f*]fluoroanthene, 1983.
- Kigasawa, Kazuo.** See **Kametani, Tetsuji**, 471.
- Kiguchi, Toshiko.** See **Ninomiya, Ichiya**, 1696, 2257, 2261.
- King, T. J., Roberts, John C., and Thompson, D. J.** Studies in mycological chemistry. Part XXX and last. Isolation and structure of purpuride, a metabolite of *Penicillium purpurogenum* Stoll, 78.
- King, Trevor J.** See **Brown, P. Margaret**, 2721.
- Kinoshita, Masayoshi.** See **Yamauchi, Kiyoshi**, 391, 2506.
- Kirby, G. W., and Michael, J.** Stereoselective  $\beta$ -labelling of aromatic amino-acids with deuterium and tritium, 115.
- Kirby, G. W.** See also **Allen, R. M.**, 363, and **Bowman, W. R.**, 218.
- Kirby, Gordon W.** See **Heaney, Harry**, 1840.
- Kirk, David N., and Leonard, David R. A.** 6,7-Unsaturated 5 $\beta$ -steroids as intermediates for labelling with isotopic hydrogen, 1836.
- Kirk, David N.** See also **Burnett, Raymond D.**, 1830.
- Kitchin, John, and Stoodley, Richard J.** Studies related to dihydro-1,4-thiazines. Part II. Reduction of methyl (6*S*)-7-hydroxy-5,5,9,9-tetramethyl-8-oxa-4-thia-1-azabicyclo[4,3,0]non-2-ene-3-carboxylate and its 4-oxide. Part III. Transformations of methyl (6*S*)-7-hydroxy-5,5,9,9-tetramethyl-8-oxa-4-thia-1-azabicyclo[4,3,0]non-2-ene-3-carboxylate. Part IV. Stereochemical consequences of 1,3-sulphur migrations. Part V. Intramolecular cyclisations of 3,4-dihydro-3-hydroxymethyl-6-methoxycarbonyl-2*H*-1,4-thiazines, 22, 1985, 2460, 2464.
- Kleiner, Mordechai.** Reactions of some 8-(3-pyridyl)-6-thioxanthines with methyl iodide, 739.
- Reactions of some 6-mercapto-8-(3-pyridyl)purines with methyl iodide, 2019.
- Knowles, Ashley M., and Lawson, Alexander.** Action of isoxazol-5-ones on Schiff's bases, 537.
- Knowles, Peter J.** See **Green, Malcolm L. H.**, 989.
- Knox, Graham R.** See **Khand, Ihsan U.**, 975, 977.
- Koch, H. P.** See **Cox, M. R.**, 174.
- Koga, Toshitaka, and Tomoeda, Munemitsu.** Studies on conformation and reactivity. Part XII. Acetolysis and stereospecific rearrangement of 4-bromocholest-4-en-3-one, 1848.
- Koletar, Judit.** See **Coombs, Robert V.**, 2095.
- Koomen, Gerrit J., Kroon, Abraham P., Cabré, Francisco R. Mas, Goeres, Alfred P., Peereboom, Rob, and Pandit, Upendra K.** Unconventional nucleotide analogues. Part X. Synthesis of *N*-substituted 3-(adenin-9-yl)pyrrolidin-2-ones, 1934.
- Koomen, Gerrit J., and Pandit, Upendra K.** Unconventional nucleotide analogues. Part IX. *N*-Substituted 3-(pyrimidin-1-yl)pyrrolidin-2-ones, 1929.
- Koshizawa, Shuichi.** See **Takeshima, Tatsuo**, 1009.
- Kricka, Larry J., and Ledwith, Anthony.** Cation radicals: reaction of methoxylated benzil and bibenzyl derivatives with tris-(*p*-bromophenyl)ammoniumyl hexachloroantimonate, 294.
- Reactions of condensed *N*-heteroaromatic molecules. Part II. Electrophilic substitution of *N*-acetylcarbazole, *N*-acetyl-10,11-dihydrodibenz[*b,f*]azepine, and derivatives, 859.
- Kricka, Larry J., and Vernon, John M.** Deamination of naphthalen-1,4-imines and anthracen-9,10-imines by reaction with benzyne or dimethyl acetylenedicarboxylate, 766.
- Krishnamoorthy, Velagalety.** See **Brown, P. Margaret**, 2721.
- Kroon, Abraham P.** See **Koomen, Gerrit J.**, 1934.
- Kruszynska, L.** See **Bowman, R. E.**, 1.
- Kunesch, Gerhard.** See **Donnelly, Dervilla M. X.**, 965.

## L

- Labuschagne, A. Johan H.** See **Garbers, Christoph F.**, 2016.
- Lakshminarayana, P., Balasubramanian, K. K., and Shanmugam, P.** Reaction of *N*-(4-chlorobutyl)isatin with potassium hydroxide, 998.
- Lambe, Terence M.** See **Butler, Richard N.**, 1357.
- Lambert, Robert W.** See **Atherton, Frank R.**, 1079.
- Landor, Phyllis D.** See **Black, Donald K.**, 1349, **Cowie, James S.**, 720, **Fomum, Zacharias T.**, 1108, and **Kalli, Michael**, 1347.
- Landor, S. R., O'Connor, P. W., Tatchell, A. R., and Blair, I.** Asymmetric synthesis. Part VI. Reactions of 3,3,5-trimethylcyclohexanone with Grignard reagents and configurational interrelationships of 1-alkyl(alkenyl and alkynyl)-3,3,5-trimethylcyclohexanols and compounds derived from 1-hydroxy-3,3,5-trimethylcyclohexanecarbonitriles, 473.
- Landor, Stephen R.** See **Black, Donald K.**, 1349, **Cowie, James S.**, 720, **Fomum, Zacharias T.**, 1108, and **Kalli, Michael**, 1347.
- Landquist, Justus K., and Thornber, Craig W.** Pyridazines. Part V. Preparation and reactions of some dialkylaminopyridazinones, 1114.
- Lappert, Michael F.** See **Jones, Peter F.**, 2272.
- Large, Robert.** See **Hawkins, Edwin G. E.**, 2169.
- Larkin, John.** See **Miller, J. Allen**, 603.
- Laue, Hugh A. H.** See **Glover, Stephen A.**, 1647.
- Laws, Derek R. J.** See **Collins, Malcom**, 2013.
- Lawson, Alexander.** See **Cook, David C.**, 465, and **Knowles, Ashley M.**, 537.
- Lawson, Christopher J., Rees, David A., Stancioff, Dimitri J., and Stanley, Norman F.** Carrageenans. Part VIII. Repeating structures of galactan sulphates from *Furcellaria fastigiata*, *Gigartina canaliculata*, *Gigartina chamissoi*, *Gigartina atropurpurea*, *Ahnfeltia durvillaei*, *Gymnogongrus furcellatus*, *Euचेuma cottonii*, *Euचेuma spinosum*, *Euचेuma isiforme*, *Euचेuma uncinatum*, *Aghardhiella tenera*, *Pachymenia hymantophora*, and *Gloiopeltis cervicornis*, 2177.
- Ledwith, Anthony.** See **Kricka, Larry J.**, 294, 859.
- Lee, Thomas B. K.** See **Moss, Robert A.**, 2778.
- Lehman, Peter G.** See **Birch, Arthur J.**, 2754.
- Leonard, David.** See **Cremlyn, Richard J. W.**, 500.
- Leonard, David R. A.** See **Kirk, David N.**, 1836.

- Letcher**, Roy M., and **Nhamo**, Llewellyn R. M. Chemical constituents of the Combretaceae. Part IV. Phenanthrene derivatives from the heartwood of *Combretum hereroense*, 1179.  
Structure of orchinol, loriglossol, and hircinol, 1263.
- Letcher**, Roy M. See also **Barton**, Derek H. R., 874.
- Lethbridge**, Andrew, **Norman**, Richard, O. C., and **Thomas**, C. Barry. Reactions of lead(IV). Part XXVII. Oxidative rearrangement of styrene and related compounds to aldehydes or ketones in the presence of trifluoroacetic acid, 35.  
Oxidation of a simple alkene by thallium(III) trifluoroacetate, 2763.
- Lewis**, Dennis A. See **Boar**, Robin B., 1583.
- Lewis**, Jack. See **Banthorpe**, Derek V., 2051.
- Lewis**, John R. See **Fraser**, Alan W., 1173.
- Lewis**, John W., **Myers**, Peter L., and **Ormerod**, Joseph A. Reaction of aromatic nitroso-compounds with enamines. Part II. Reaction of 1-nitroso-2-naphthol with enamines, 1129.
- Ley**, Steven V. See **Heaney**, Harry, 499, 1840.
- Lichtenberg**, Dov, and **Bergmann**, Felix. Mechanism of hydrogen-deuterium exchange in hypoxanthines, 789.
- Lichtenberg**, Dov, **Bergmann**, Felix, and **Neiman**, Zohar. Tautomerism and ionisation processes in 6-methylthio-2-oxopurines, 2445.
- Lichtenberg**, D. See also **Bergmann**, Felix, 1225, and **Reichman**, Uri, 793, 2647.
- Lie**, Reidar, and **Undheim**, Kjell. *N*-Quaternary compounds. Part XXXIV. Addition of pyridine-2-thiones to  $\alpha$ -bromo- $\alpha\beta$ -unsaturated cyclic ketones, 2049.
- Lin**, Lynda Y. See **Hirsch**, Jerry A., 1366.
- Lindsay**, G. A., and **Overton**, K. H. Synthesis of locked half-chair and boat  $\delta$ -lactones from the sesquiterpenoid drimenol, 385.
- Lister**, John H. See **Badger**, Rodney J., 1906.
- Livingston**, Rosemary. See **Gilchrist**, Thomas L., 2535.
- Llewellyn**, Jeffery W., and **Williams**, J. Michael. The deamination of pyranose amines. Part II. Methyl 2-amino-2-deoxy- $\alpha$ -D-mannopyranoside, 1997.
- Lloyd**, J. P. See **Connor**, J. A., 17.
- Lobo**, Awa M. F. T. See **Barton**, Derek H. R., 874.
- Locke**, J. Michael. See **Grattan**, David W., 2264.
- Lockhart**, J. C., **Robson**, A. C., **Thompson**, M. E., **Furtado**, D., **Kaura**, C. K., and **Allan**, A. R. Preparation of some nitrogen-containing polyether 'crown' compounds, 577.
- Lockley**, William J. S. See **Badar**, Yasmeen, 1416.
- Lohse**, Christian. See **Pedersen**, Carl Th., 2837.
- Looker**, Brian E. See **Ager**, Ian, 1187.
- Lord**, George H., **Millard**, Brian J., and **Memel**, Joachim. High resolution mass spectrometry. Part X. Loss of water from the molecular ions of aromatic amides, 572.
- Lord**, W. Martin, and **Peters**, Arnold T. New intermediates and dyestuffs for synthetic fibres. Part VI. 1-Arylaminoanthraquinones, 2305.
- Lourens**, G. J. See **Hall**, Richard H., 38.
- Louw**, Robert. See **Nieuwenhuys**, Hugo, 839.
- Love**, Christopher J., and **McQuillin**, Francis J. Mechanisms of hydrogenation. Part X. Homogeneous hydrogenolysis of organic halides and hydrogenation of the carbonyl, epoxy-, and nitro-groups, 2509.
- Lów**, Miklos. See **Fletcher**, George A., 1162.
- Lowbridge**, John. See **Drey**, Charles N. C., 2001.
- Lowe**, G., and **Ramsay**, M. V. J. Synthetic studies related to nuclear analogues of the penicillins and cephalosporins, 479.
- Lowe**, Gordon, and **Ridley**, Damon D. Synthesis of  $\beta$ -lactams by photolytic Wolff rearrangement, 2024.
- Lowe**, Gordon, and **Yeung**, H. Wing. Synthesis of a  $\beta$ -lactam related to the cephalosporins, 2907.
- Lowe**, Gordon. See also **Brunwin**, David M., 1321.
- Lown**, J. William, and **Akhtar**, M. Humayoun. Self-condensation and rearrangement of *N*-alkylphenacylamines, 683.
- Lown**, J. William, and **Joshua**, Alummoottil V. Stereochemistry and regiochemistry of the addition of iodonium nitrate to alkenes, 2680.
- Lowther**, E. D. See **Jones**, J. R., 248.
- Lucente**, Gino. See **Ager**, Ian, 1187.
- Lunazzi**, Lodovico. See **Bonini**, Bianca F., 2314.
- Lunt**, Edward. See **Epszajn**, Jan, 2622.
- Lynch**, Joseph, and **Meth-Cohn**, Otto. Transformations of 2-substituted 1-dialkylaminoanthraquinones. A re-investigation, 920.
- Lynch**, Michael F. See **Adamson**, George W., 863, 2071.

## M

- Maccagnani**, Gaetano. See **Bonini**, Bianca F., 2314.
- McCombie**, Stuart W. See **Barnett**, Graham H., 691, and **Kenner**, George W., 2517.
- McCormack**, John J. See **Albert**, Adrien, 2630.
- MacCoss**, M. See **Edge**, M. D., 290.
- McCrindle**, Robert. See **Connolly**, Joseph D., 865.
- McDonagh**, Antony F. See **Bonnett**, Raymond, 881.
- McDonald**, Edward. See **Battersby**, Alan R., 1546, 2917, 2923.
- McDonald**, S. See **Chauhan**, M. S., 359.
- McErlane**, Keith M. J. See **Jones**, Alan J., 2576.
- McGarrity**, John F. See **Barton**, Derek H. R., 1565.
- McGhie**, James F. See **Allen**, John, 2402, and **Boar**, Robin B., 654, 1583.
- Machin**, P. J., **Porter**, A. E. A., and **Sammes**, P. G. Pyrazine chemistry. Part V. Diels-Alder reactions of some 2,5-dihydroxypyrazines, 404.
- McKennis**, Herbert, jun., **Bowman**, Edward R., **Quin**, Louis D., and **Denney**, Ronald C. Structure of dibromoticonine, a bromination product of nicotine, 2046.
- McKenzie**, S. See **Mackie**, R. K., 657.
- Mackie**, Alexander M. See **Smith**, Derek S. H., 1745.
- Mackie**, R. K., **McKenzie**, S., **Reid**, D. H., and **Webster**, R. G. Studies of heterocyclic compounds. Part XIII. Pyrrolo[2,1-*b*]thiazole thioaldehydes: synthesis and spectral studies, 657.
- McLean**, Angus, and **Proctor**, George R. Azabenzocycloheptenones. Part XVI. Amino-ketones of the tetrahydro-2-benzazepin-5-one series, 1084.
- MacMillan**, J. See **Crane**, R. I., 194.
- MacMillan**, Jake, and **Simpson**, Thomas J. Fungal products. Part V. The absolute stereochemistry of colletodiol and the structures of related metabolites of *Colletotrichum capsici*, 1487.
- MacMillan**, Jake. See also **Bearder**, John R., 2824, and **Hedden**, Peter, 2773.
- McMurry**, T. Brian H. See **East**, D. Stuart R., 2563, and **Ishikawa**, Kiyoyasu, 914.
- McNab**, Hamish, and **Smith**, David M. *o*-Nitroaniline derivatives. Part III. Cyclisation of *N-p*-nitrobenzyl-*N-p*-tolylsulphonyl-*o*-nitroaniline by sodium methoxide: formation of an *N*-methoxybenzimidazole derivative, 1310.

- McOmie, John F. W. See Ayres, Barry E., 2267.
- McQuillin, Francis J. See Love, Christopher J., 2509.
- MacSweeney, D. F. See Hodgson, Gordon L., 2113.
- Magnus, Philip D. See Achmatowicz, Selim, 1567, Barton, Derek H. R., 1031, 1037, 1571, 1574, 1580, Bosworth, Nigel, 76, 2319, 2694, and Hobbs, Peter D., 469, 2879.
- Mah, Henry. See Coombs, Robert V., 2095.
- Mahajan, Jasurant R., and Monteiro, Maria B. New diterpenoids from *Pterodon emarginatus* Vog., 520.
- Mahalanabis, Kumur Kanti. See Mukherjee, Debabrata, 2083.
- Maher, Lorcan J. See Buggle, Katherine, 1006.
- Mahmood, Safia. See Neilson, D. G., 335.
- Mahmud, S. Aleem. See Ansell, Martin F., 2789.
- Maia, H. L., Ridge, B., and Rydon, H. N. Polypeptides. Part XXIII. The synthesis of peptides of  $\alpha$ -benzyl-phenylalanine by unconventional methods, with a note on magnetic non-equivalence in derivatives of  $\alpha$ -benzyl-phenylalanine, 98.
- Maiorana, S. See Bradamante, S., 612.
- Maiorana, Stephano. See Buttero, Paola Del, 2540.
- Malchenko, Swiatoslaw. See Colvin, Ernest W., 1989.
- Mallams, Alan K. The megalomicins. Part III. D-Rhodamine, a new dimethylamino-sugar, 1369.
- Mallams, Alan K. See also Jaret, Robert S., 1374, 1389.
- Mane, Ramachandra B., and Rao, G. S. Krishna. Studies in terpenoids. Part XXIII. An approach to the 1-aryl-1,2,2-trimethylcyclopentane skeleton by intramolecular ketocarbene insertion. Synthesis of  $\beta$ -cuparenone, 1806.
- Maneschi, Massimo. See Gallina, Carlo, 1134.
- Manolis, Antonios. See Chapman, Norman B., 750.
- Mansfield, J. W., Porter, A. E. A., and Widdowson, D. A. Structure of a fungal metabolite of the phytoalexin wyerone acid from *Vicia faba* L., 2557.
- Marathe, Keshav G. See Barton, Derek H. R., 1574.
- Marchand, Alan P., and Chou, Teh-chang. Base-promoted rearrangement of 2,3,5,6-tetrachloropentacyclo-[5.4.0.0<sup>2,6</sup>.0<sup>3,10</sup>.0<sup>5,9</sup>]undecane-4,8,11-trione, 1948.
- Marino, Maria L. See Piozzi, Franco, 1164.
- Markwell, Roger E. See Cross, Brian E., 1476.
- Maroni, Roberto, Melloni, Giovanni, and Modena, Giorgio. Electrophilic additions to acetylenes. Part I. Addition of some alkyl chlorides to phenylacetylene, 2491.
- Marper, Eric. See Chambers, Richard D., 1710.
- Marples, Brian A. See Guest, Ian G., 900, and Jones, J. Gareth LL., 1143.
- Marr, George, and White, Trevor M. Organometallic derivatives. Part VI. Synthesis and reactivity of some (ferrocenylmethyl)phosphines, 1955.
- Martin, Julio D. See González, Antonio G., 2637.
- Maskens, Kenneth, and Polgar, Nicholas. Studies in the stereochemistry of 2-alkyl-3-hydroxy- and 2-alkyl-3-methoxy-butyric acids, 109.
- Stereochemistry of the methoxyphthioceranes, 1117.
- Absolute configuration of the  $\cdot\text{CH}(\text{OMe})\cdot\text{CHMe}\cdot$  system in the phthiocerols, 1909.
- Maslakiewicz, Jerzy R. See Bell, Stephen L., 1716.
- Massardo, Pietro. See Piccardi, Paolo, 982.
- Math, V. B. See Bonnett, R., 252.
- Mathieson, D. W., Millard, B. J., Powell, J. W., and Whalley, W. B. The chemistry of the 'insoluble red' woods. Part XI. Revised structures of santalin and santarubin, 184.
- Matkin, D. See Chauhan, M. S., 120.
- Matlin, Stephen A., and Sammes, Peter G. Metal-catalysed oxidation of acetylenes and diazo-ketones, 2851.
- Matsuda, Kazuo. See Usui, Taichi, 2425.
- Matsumoto, Makoto. See Minato, Hitoshi, 1819.
- Mazharuddin, Mohammed. See Harmon, Robert E., 1160.
- Mazza, Mareo. See Fuganti, Claudio, 954.
- Mazzanti, Germana. See Bonini, Bianca F., 2314.
- Meakins, G. Denis. See Bell, Alan M., 2131, Browne, John W., 1493, Chadwick, Derek J., 201, 1766, 2327, Chambers, Virginia E. M., 1500, and Clegg, Andrew S., 2137.
- Meaney, David C. See Bennett, Peter, 688.
- Mehta, Arvind M. See Kapoor, Vijaya M., 2420.
- Meinwald, Jerrold. See Crowley, Kevin J., 2671.
- Melloni, Giovanni. See Capozzi, Giuseppe, 2250, and Maroni, Roberto, 2491.
- Mellows, S. M. See Arnold, B. J., 1266.
- Memel, Joachim. See Lord, George H., 572.
- Merwe, Johannes P. van der. See Burger, Barend V., 581.
- Meth-Cohn, O. See Ahmed, Munir, 1099, and Ashby, John, 1104.
- Meth-Cohn, Otto. See Fielden, Rae, 696, 702, 705, and Lynch, Joseph, 920.
- Meyer, Cornelius J. See Garbers, Christoph F., 2016.
- Michael, J. See Kirby, G. W., 115.
- Midgley, Alan W. See Harrison, Roy M., 1960.
- Midgley, Ian, and Djerassi, Carl. Stereochemical course of the reduction of 5 $\alpha$ -cholest-8(14)-en-7-one by metal-ammonia; a ready synthesis of 14 $\beta$ -steroids, 155.
- Miki, Yasuyoshi. See Tamura, Yasumitsu, 2580.
- Miles, Geoffrey J. See Hickmott, Peter W., 1514.
- Millard, B. J. See Mathieson, D. W., 184.
- Millard, Brian J. See Lord, George H., 572.
- Miller, J. Allen, Scrimgeour, Charles M., Black, Rona, Larkin, John, Nonhebel, Derek C., and Wood, Hamish C. S. Formation of 1,1-dimethylallyl derivatives by reaction of 3,3-dimethylallyl halides with copper(II) chelates of acetylacetone and methyl acetoacetate, 603.
- Milloy, Beverly A. See Armarego, Wilfred L. F., 2814.
- Mills, R. W., Murray, R. D. H., and Raphael, R. A. A new stereoselective synthesis of *trans*-chrysanthemic acid [2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropane-carboxylic acid], 133.
- Milne, George H., and Townsend, Leroy B. Purine nucleosides. Part XXXII. Synthesis and reactivity of 6-alkylseleno-9-( $\beta$ -D-ribofuranosyl)purines, 313.
- Minato, Hitoshi, Matsumoto, Makoto, and Katayama, Teruaki. Studies on the metabolites of *Verticillium* sp. Structures of verticillins A, B, and C, 1819.
- Minato, Hitoshi. See also Binder, Michael, 1146.
- Minshall, Jonathan. See Brimacombe, John S., 2691.
- Miri, Adhid Y. See Gore, Peter H., 2936.
- Mitchell, James W. See Epszajn, Jan, 2622, and Katritzky, Alan R., 2624.
- Mitchell, Peter R. K. See Giles, Robin G. F., 493.
- Mitra, Alok K. See Nasipuri, D., 285.
- Miyamoto, Takuji, Tanaka, Souichi, and Odaira, Yoshinobu. Synthesis of tricarbonylcyclobuta[7]phenanthreneiron, 138.
- Miyachi, Tetsuko. See Takeshima, Tatsuo, 1009.
- Mizuno, Hatsuhiko. See Albert, Adrien, 1615, 1974.
- Modena, Giorgio. See Capozzi, Giuseppe, 2250, and Maroni, Roberto, 2491.
- Modena, Mario. See Piccardi, Paolo, 982.

- Moir**, Michael, and **Thomson**, Ronald H. Naturally occurring quinones. Part XXII. Terpenoid quinones in *Cordia* spp. Part XXIII. Cordiachromes from *Patagonula americana* L., 1352, 1556.
- Moir**, Michael. See also **Brown**, P. Margaret, 2721.
- Molina**, G. A. See **Cadogan**, J. I. G., 541.
- Moltrasio**, G. Y., **Sotelo**, R. M., and **Giacopello**, D. Synthesis of ( $\pm$ )-neolitsine, 349.
- Monache**, Franco Delle, **Bettólo**, G. B. Marini, **de Lima**, Oswaldo Gonçalves, **d'Albuquerque**, Ivan Leôncio, and **Coêlho**, José Sidney de Barros. The structure of tingenone, a quinonoid triterpene related to pristimerin, 2725.
- Monasterios**, Jose R. See **Abraham**, Raymond J., 1446.
- Money**, Thomas. See **Fairlie**, John C., 2109, and **Hodgson**, Gordon L., 2113.
- Montalvo**, Sergio Cruz. See **Herz**, Josef E., 1233.
- Monteiro**, Maria B. See **Mahajan**, Jasurant R., 520.
- Moore**, Richard. See **Bosworth**, Nigel, 2694.
- Moore**, Ronald H. See **Howe**, Ralph, 1940.
- Morgan**, Barry A. See **Hassall**, Cedric H., 2853.
- Mori**, Takako. See **Ninomiya**, Ichiya, 505, 1696.
- Morisawa**, Yasu. See **Browne**, John W., 1493.
- Moritani**, I. See **Yamamura**, M., 203.
- Moron**, Jaqueline. See **Battersby**, Alan R., 2917.
- Morrison**, George A. See **Frost**, David A., 2159, 2388.
- Morton**, William D. See **Barlow**, Michael G., 1798.
- Mose**, Wendy P. See **Dunstan**, Diana R., 2749.
- Moss**, Robert A., and **Lee**, Thoms B. K. Alkanediazoates. Part XIII. Synthesis of azoxyalkanes: 1-dihydro-elaiomycin [4-methoxy-3-(octyl-*ONN*-azoxy)butan-2-ol], 2778.
- Motwani**, Ramesh. See **Cremllyn**, Richard J. W., 500.
- Mowatt**, Ann. See **Ager**, Ian, 1187.
- Mukair**, T. See **Neeman**, M., 1462.
- Mukherjee**, Debabrata, **Mukhopadhyay**, Sunil Kumar, **Mahalanabis**, Kumur Kanti, **Gupta**, Amitabha Das, and **Dutta**, Phanindra Chandra. Synthetic studies on terpenoids. Part XVI. Synthesis of 3 $\beta$ ,17-diacetoxy-phylloladen-15-one, 2083.
- Mukhopadhyay**, Sunil Kumar. See **Mukherjee**, Debabrata, 2083.
- Mulheirn**, Larry J. See **Evans**, Roger, 753.
- Müller**, Wilhelm E. See **Bell**, Alan M., 2131.
- Munakata**, Katsura. See **Kato**, Natsuki, 712.
- Munroe**, P. A. See **Hough**, Leslie, 287.
- Muraoka**, Motomu. See **Takeshima**, Tatsuo, 1009.
- Murphy**, D. P. H. See **Cresp**, Terry M., 340.
- Murray**, R. D. H. See **Mills**, R. W., 133.
- Mussini**, Patrizia, **Orsini**, Fulvia, **Pelizzoni**, Francesca, and **Ferrari**, Giorgio. Constituents of *Annona coriacea*. The structure of a new diterpenoid, 2551.
- Muthukrishnan**, R., **Kannan**, R., and **Swaminathan**, S. Participation of *o*-carboxylate groups in aromatic nucleophilic substitution, 2949.
- Myers**, Malcolm. See **Brewster**, David, 2796.
- Myers**, Peter L. See **Lewis**, John W., 1129.
- Nakano**, Tatsuhiko, **Rivas**, C., **Perez**, C., and **Tori**, Kazuo. Configuration and stereochemistry of photoproducts by application of the nuclear Overhauser effect. Adducts of benzophenone with methyl-substituted furans and 2,5-dimethylthiophen, and of methyl-substituted maleic anhydrides with thiophen and its methyl derivatives, and benzo[*b*]thiophen, 2322.
- Nakayama**, Shigenobu, **Yoshifuji**, Masaaki, **Okazaki**, Renji, and **Inamoto**, Naoki. Phosphinidenes and related intermediates. Part II. Reactions of phosphonic or phosphonothioic dichlorides with benzil in the presence of an excess of magnesium. Formation of diphenylacetylene, 2069.
- Nakayama**, Shigenobu. See also **Yoshifuji**, Masaaki, 2065.
- Naser-ud-Din**. See **Garwood**, Robert F., 2714.
- Nasipuri**, D., and **Mitra**, Alok K. Synthetic studies in the diterpene series. Part VIII. Synthesis of miltirone, a diterpenoid quinone, 285.
- Nasipuri**, Dhanonjoy, **Choudhury**, Swadesh R. Roy, and **Bhattacharya**, Amitava. Cyclohexenone derivatives. Part VII. Novel aromatisation reaction of some aryloxycyclohexenylacetic acid derivatives, 1451.
- Nasipuri**, Dhanonjoy, **De Dalal**, Ila, and **Roy**, Dibyendu N. Synthetic studies in the diterpene series. Part IX. Synthesis of 1,2,3,4-tetrahydro-1,1,5,7-tetramethyl-6-(3-methylpentyl)naphthalene (Ruzicka's hydrocarbon), 1754.
- Nechvatal**, Anthony. See **Ashton**, David S., 846.
- Neeman**, M., **Osawa**, Y., and **Mukai**, T. Regiospecific syntheses of modified steroid hormones. Part V. 6 $\beta$ -Fluoro-7 $\alpha$ -hydroxy-17 $\beta$ -oestradiol, 7 $\alpha$ -fluoro-6 $\alpha$ -hydroxy-17 $\beta$ -oestradiol, and 7 $\alpha$ -fluoro-17 $\beta$ -oestradiol, 1462.
- Neilson**, D. G., **Mahmood**, Safia, **Watson**, K. M. Studies on the *meso*, -racemic, and optically active forms of 3,6-bis-[1-hydroxy-1-(4-methylphenyl)ethyl]-1,2,4,5-tetrazines and related systems along with the corresponding 3,5-disubstituted 1,2,4-triazoles, their 4-amino-derivatives and 2,5-disubstituted 1,3,4-oxadiazoles including their circular dichroism spectra, 335.
- Neiman**, Zohar. See **Lichtenberg**, Dov, 2445, and **Reichman**, Uri, 793.
- Nemorin**, J. See **Shoppee**, C. W., 542.
- Neville**, A. F. See **Bentley**, T. W., 449.
- Newlands**, Michael J. See **Coy**, David H., 1062, 1066, 1561.
- Nhamo**, Llewellyn R. M. See **Letcher**, Roy M., 1179, 1263.
- Nicholson**, Sydney H., **Smith**, Derek S. H., and **Turner**, Alan B. Steroid conjugates. Part V. Glucuronosides of 19-oxygenated 3 $\beta$ -hydroxyandrost-5-en-17-ones, 2887.
- Nieuwenhuys**, Hugo, and **Louw**, Robert. Sulphoxides. Part II. Stereochemistry of the  $\gamma$ -disulphoxides 2,5-dithiahexane 2,5-dioxide and 1,4-diphenyl-1,4-dithiabutane 1,4-dioxide, 839.
- Nilsson**, Anders, **Ronlán**, Alvin, and **Parker**, Vernon D. Anodic oxidation of phenolic compounds. Part III. Anodic hydroxylation of phenols. A simple general synthesis of 4-alkyl-4-hydroxycyclohexa-2,5-dienones from 4-alkylphenols, 2337.
- Ninomiya**, Ichiya, **Naito**, Takeaki, and **Kiguchi**, Toshiko. Photocyclisation of enamides. Part III. Photocyclisation of *N*-benzoylenamines of cyclohexanone and 2-substituted cyclohexanones. Part IV. A new stereoselective synthesis of ( $\pm$ )-crinan, 2257, 2261.
- Ninomiya**, Ichiya, **Naito**, Takeaki, **Kiguchi**, Toshiko, and **Mori**, Takako. Photocyclisation of enamides. Part II. Photocyclisation of *N*-benzoyl enamines of 1-tetralone to benzo[*c*]phenanthridines, 1696.

## N

- Nagao**, Yoshimitsu. See **Fujita**, Eiichi, 1760.
- Nagy**, H. See **Bowman**, R. E., 438.
- Nahar**, S. See **Flaherty**, B., 632.
- Naito**, Takeaki. See **Ninomiya**, Ichiya, 505, 1696, 2257, 2261.

- Ninomiya**, Ichiya, **Naito**, Takeaki, and **Mori**, Takako. Photocyclisation of enamides. Part I. Photochemical reactions of *N*-acyl enamines, 505.
- Nisbet**, Donald F. See **Acheson**, R. Morrin, 1338.
- Nishinaga**, Akira, and **Cahnmann**, Hans J. Model reactions for the biosynthesis of thyroxine. Part XVII. On the mechanism of the conversion of 4-hydroxy-3,5-di-iodophenylpyruvic acid into thyroxine, 757.
- Nishiwaki**, Tarozaemon, and **Fujiyama**, Fusako. Studies on heterocyclic chemistry. Part XV. Synthesis of phosphine *N*-styrylimides by the reaction of 2*H*-azirines with triphenylphosphine and a tetrahalogenomethane, and their transformation into isoquinoline derivatives, 817.
- Nishiwaki**, Tarozaemon, **Fukuhara**, Genji, and **Takahashi**, Tamiyoshi. Studies on heterocyclic chemistry. Part XVI. Reaction of 4-*o*-nitrobenzylidene- $\Delta^2$ -pyrazolin-5-ones with trialkyl phosphites: synthesis of phosphorus-substituted pyrazolo[3,4-*b*]quinoline derivatives, 1606.
- Nixon**, Leon. See **Battersby**, Alan R., 1546.
- Nógrádi**, M. See **Crossley**, R., 205.
- Nonhebel**, Derek C. See **Miller**, J. Allen, 603.
- Norman**, Richard O. C., **Thomas**, C. Barry, and **Ward**, Philip J. Oxidation of some aromatic hydrocarbons by cerium(IV) trifluoroacetate, 2914.
- Norman**, Richard O. C., **Thomas**, C. Barry, and **Willson**, John S. Reactions of lead(IV). Part XXVIII. Oxidative coupling of methyl-substituted benzenoid compounds: formation of biaryls and diarylmethanes in trifluoroacetic acid, 325.
- Norman**, Richard O. C. See also **Lethbridge**, Andrew, 35, 2763, and **Smith**, John R. Lindsay, 566.
- Norris**, Robert K. See **Barton**, Derek H. R., 1031, 1037.
- Nunn**, Arthur J., and **Rowell**, Frederick J. Semmler-Wolff aromatisation and abnormal Beckmann and Schmidt reactions of 3-alkyl-4-oxo-1-phenyl-4,5,6,7-tetrahydroindazoles and their oximes in polyphosphoric acid, 2697.
- Nunn**, Arthur J. See also **Jaffari**, Ghayhoor A., 2371.
- Nussey**, Brian. See **Bowie**, John H., 1693.

## O

- Oakland**, John S., and **Scheinmann**, Feodor. Studies in the norbornene series. Part II. Synthesis and reactions of some norbornanes carrying fused heterocycles, 800.
- O'Boyle**, Peter. See **Bennett**, Peter, 688.
- O'Brien**, Simon. See **Donnelly**, John A., 2030.
- O'Connor**, P. W. See **Landor**, S. R., 473.
- Odaira**, Yoshinobo. See **Miyamoto**, Takuji, 138.
- Ode**, Richard H. See **Pettit**, George R., 950.
- Ogasawara**, Kunio. See **Kametani**, Tetsuji, 1464, 1466.
- Ogata**, Y., **Takagi**, K., and **Takayanagi**, Y. Photodecomposition of alkyl benzoates and *S*-alkyl thiobenzoates. Possibility of a Barton-type transition state, 1244.
- O'Grady**, John. See **Donnelly**, John A., 2030.
- Ohnsorge**, Ulrich F. W. See **Barrow**, Kevin D., 1590.
- Okazaki**, Renji. See **Nakayama**, Shigenobu, 2069, and **Yoshifuji**, Masaaki, 2065.
- Okoh**, Eric. See **Finar**, Ivor F., 2008.
- Okuda**, S. See **Abe**, K., 316.
- Olaniyi**, A. A., **Powell**, J. W., and **Whalley**, W. B. The pigments of 'dragon's blood' resin. Part VII. Synthesis of ( $\pm$ )-draconol, ( $\pm$ )-*O*-methylraconol, ( $\pm$ )-*O*-methylisodraconol, and derivatives; the structure of dracorubin, 179.

- Ollis**, W. D. See **Crossley**, R., 205.
- Olson**, Edwin S., and **Whitehead**, Avon J. Synthesis and reactions of 1,1-dichloro-2,2,6,6-tetramethyl-4-oxaspiro[2.3]hexan-5-one, 1242.
- Onda**, M. See **Abe**, K., 316.
- Opара**, Augustine E., and **Read**, Gordon. Characterisation of *threo*- and *erythro*-2-benzyl-3-phenylsuccinic acids, 1221.
- Oram**, Robert K., and **Trippett**, Stuart. Reactions of 1-substituted 2,2,3,4,4-pentamethylphosphetans with hexafluoroacetone and the  $^{19}\text{F}$  nuclear magnetic resonance spectra of the resulting 1,3,2-dioxaphospholans, 1300.
- Ormerod**, Joseph. See **Brewster**, David, 2796.
- Ormerod**, Joseph A. See **Lewis**, John W., 1129.
- Orsini**, Fulvia. See **Mussini**, Patrizia, 2551.
- Osawa**, Y. See **Neeman**, M., 1462.
- Otter**, Philip. See **Brewster**, David, 2796.
- Overend**, W. G. See **Flaherty**, B., 632.
- Overend**, William R. See **Conlon**, Michael, 2281, and **Johnson**, Alan W., 991.
- Overton**, K. H., and **Owen**, P. Bis-(6,6-dimethylnorpinane-2,2-diyl) diperoxide, 226.
- Overton**, K. H. See also **Lindsay**, G. A., 385.
- Overton**, Karl H. See **Connolly**, Joseph D., 865, and **Johnston**, James P., 853.
- Owen**, Leonard N. See **Behzadi**, Afarin, 2733, **Durrant**, Graham, 1271, and **Edwards**, Peter D., 2397.
- Owen**, P. See **Overton**, K. H., 226.
- Oyama**, Kiyotaka, and **Stewart**, Ross. Position of methylation of 2,3-diaminopyridine and 3-amino-2-methylaminopyridine, 673.

## P

- Pachler**, Klaus G. R. See **Burger**, Barend V., 584.
- Pagani**, Giorgio. See **Bradamante**, Silvia, 163.
- Palmer**, Anthony K. See **Hough**, Leslie, 784.
- Pandit**, Upendra K. See **Koomen**, Gerrit J., 1929, 1934.
- Panzica**, Raymond P., and **Townsend**, Leroy B. Synthesis of imidazo[4,5-*b*]pyrazine nucleosides, 244.
- Papuroth**, Terry G. See **Davis**, Michael, 2057.
- Parashar**, Veerendra V. See **Singh**, Harkishan, 1204.
- Parijs**, Roger Van. See **Rompuy**, Ludo Van, 2503.
- Parkash**, Narasimha. See **Kessar**, Satinder V., 1158.
- Parker**, A. J. See **Banks**, Ronald E., 5.
- Parker**, Vernon D. See **Nilsson**, Anders, 2337, and **Svanholm**, Ulla, 562.
- Partridge**, Maurice W., and **Smith**, Alan. Cyclic amidines. Part XXIV. Cyclisation of *N*-allyl-*N'*-arylacetamidines to imidazolines, dihydroquinazolines, and dihydrobenzodiazepines, 453.
- Partridge**, Maurice W. See also **Grout**, Raymond J., 1314.
- Pascali**, V., **Tangari**, N., and **Umani-Ronchi**, A. The dianion of benzyl phenyl sulphone. A general method for obtaining  $\alpha\beta$ -unsaturated phenyl sulphones from aldehydes and ketones, 1166.
- Pathak**, Vijai N. See **Joshi**, Krishna C., 57.
- Paul**, Dharam. See **Singh**, Harkishan, 1204.
- Pauson**, Peter L. See **Khand**, Ihsan U., 975, 977.
- Peagram**, Michael J. See **Hines**, James N., 2332.
- Pearce**, Desmond J. A. See **Davies**, David I., 433, 2559.
- Pearson**, I. See **Guy**, R. G., 281.
- Pechet**, Maurice M. See **Barton**, Derek H. R., 2365.

- Pedersen, Carl Th., and Lohse, Christian.** Thermal reversal of the photochemically induced *cis-trans*-isomerisation of  $\alpha$ -(3*H*-1,2-dithiol-3-ylidene) ketones and aldehydes. Substituent effects, 2837.
- Pedersen, Christian.** See **Bock, Klaus**, 1456.
- Peereboom, Rob.** See **Koomen, Gerrit J.**, 1934.
- Peet, J. H., and Rockett, B. W.** Unsymmetrically disubstituted ferrocenes. Part XIII. Neighbouring group participation in the conversion of 2-substituted ferrocenylacetonitriles into ferrocenylacetamides, 106.
- Pelc, Bohumil.** See **Crump, Douglas R.**, 2731.
- Pelizzoni, Francesca.** See **Mussini, Patrizia**, 2551.
- Pellatt, M. G.** See **Jones, Sir Ewart R. H.**, 148.
- Pellatt, Martin G.** See **Carruthers, William**, 1136, **Farrell, Iain W.**, 2642, and **Hearn, Milton T. W.**, 2875.
- Pendergast, William.** Purine studies. Part IX. Nucleophilic addition of barbituric acids to purines, 2759.
- Pendergast, William.** See also **Albert, Adrien**, 1620, 1625, 1794.
- Pendlebury, Anthony.** See **Browne, John W.**, 1493.
- Penman, Alistair, and Rees, David A.** Carrageenans. Part IX. Methylation analysis of galactan sulphates from *Furcellaria fastigiata*, *Gigartina canaliculata*, *Gigartina chamissoi*, *Gigartina atropurpurea*, *Ahnfelia durvillaei*, *Gymnogongrus furcellatus*, *Euचेuma isiforme*, *Euचेuma uncinatum*, *Aghardhiella tenera*, *Pachymenia hymantophora*, and *Gloiopeltis cervicornis*. Structure of  $\xi$ -carrageenan, 2182.
- Perez, C.** See **Nakano, Tatsuhiko**, 2322.
- Périn-Roussel, O.** See **Jacquignon, P.**, 2311.
- Perold, Guido W., Beylis, Peter, and Howard, Arthur S.** Metabolites of proteaceae. Part VII. Lacticolorin, a phenolic glucoside ester, and other metabolites of *protea lacticolor* Salisb. Part VIII. The occurrence of (+)-D-allose in nature: rubropilosin and pilorubrosin from *Protea rubrupilosa* beard, 638, 643.
- Peters, Arnold T.** See **Lord, W. Martin**, 2305.
- Pettit, George R., Gupta, Shyam K., and Ode, Richard H.** Structural biochemistry. Part XII. Synthesis of tobacco mosaic virus protein unit 150—158, 950.
- Pettit, George R., and Kamano, Yoshiaki.** Bufadienolides. Part XXIII. 14,15 $\beta$ -Epoxy-3 $\beta$ ,11 $\alpha$ -dihydroxy-5 $\beta$ -bufa-20,22-dienolide (11 $\alpha$ -hydroxyresibufogenin), 725.
- Phillips, Lawrence.** See **Boyce, Clive B. C.**, 2881.
- Phillips, William R.** See **Baird, David B.**, 832, and **Baxter, Ian**, 268, 2374.
- Piccardi, Paolo, Massardo, Pietro, Modena, Mario, and Santoro, Ettore.** Addition of carbon tetrachloride to 3,3,4,4-tetrafluorohepta-1,5-diene, 982.
- Pietra, Francesco.** See **Biggi, Gino**, 1980.
- Pinhey, John T.** See **Clegg, Andrew S.**, 2137, and **Cohen, Keith F.**, 2076.
- Piozzi, Franco, Venturella, Pietro, Bellino, Aurora, and Marino, Maria L.** Partial synthesis of *ent*-kaur-16-ene-15 $\beta$ ,18-diol and *ent*-kaur-16-ene-7 $\alpha$ ,15 $\beta$ ,18-triol, 1164.
- Pirzada, Nassim H.** See **Deady, Leslie W.**, 782.
- Pitkethly, William N.** See **Hooper, Malcolm**, 2804.
- Polgar, Nicholas.** See **Maskens, Kenneth**, 109, 1117, 1909.
- Polonsky, Judith.** See **Donnelly, Dervilla M. X.**, 965.
- Pooranamorthy, Ratnam.** See **Carruthers, William**, 44, 1181.
- Porter, A. E. A.** See **Machin, P. J.**, 404, and **Mansfield, J. W.**, 2557.
- Porter, Harry.** See **Chapman, Norman B.**, 750.
- Poulton, Gerald A.** See **Achmatowicz, Selim**, 1567, and **Barton, Derek H. R.**, 1571, 1574.
- Powell, J. W.** See **Ali, S. A.**, 173, **Mathieson, D. W.**, 184, and **Olaniyi, A. A.**, 179.
- Powell, W. S., and Heacock, R. A.** Chemistry of the aminochromes. Part XVII. Formation of addition products with bisulphite and thiols, 509.
- Pragnell, John.** See **Browne, John W.**, 1493, and **Chambers, Virginia E. M.**, 1500.
- Pratt, Albert C.** Photochemistry of  $\beta\gamma$ -unsaturated carbonyl compounds. 3,3-Dimethyl-5,5-diphenylpent-4-ene-2-one and 2,2-dimethyl-4,4-diphenylbut-3-enal, 2496.
- Pratt, Alexander D.** See **Entwistle, Norman**, 1235.
- Price, Anthony P.** See **Hankinson, Barry**, 2569.
- Pringle, Michael J.** See **Edwards, Peter D.**, 2397.
- Proctor, George R.** See **McLean, Angus**, 1084.
- Prodgers, Alan.** See **Banks, Ronald E.**, 596.
- Pulman, D. A., and Whiting, D. A.** Synthesis and conformation of substituted isothiochromans and derivatives. X-Ray analysis of *cis*-1,4-dimethylisothiochroman 2,2-dioxide, an S-heterocycle with preferred boat conformation, 410.

## Q

- Quasem, Md. Abul.** See **Brooke, G. M.**, 429.
- Quillinan, Augustus J., and Scheinmann, Feodor.** Studies in the xanthone series. Part XII. A general synthesis of polyoxygenated xanthenes from benzophenone precursors, 1329.
- Quin, Louis D.** See **McKennis, Herbert, jun.**, 2046.
- Qureshi, M. I.** See **Carruthers, W.**, 51.

## R

- Rahat, Miriam.** See **Bergmann, Felix**, 1225.
- Rajapaksa, Dayananda.** See **Conlon, Michael**, 2281.
- Ramsay, M. V. J.** See **Lowe, G.**, 479.
- Rao, Balbir S.** See **Howe, Ralph**, 1940.
- Rao, G. S. Krishna.** See **Mane, Ramachandra B.**, 1806.
- Raphael, R. A.** See **Buchanan, G. L.**, 373, and **Mills, R. W.**, 133.
- Raphael, Ralph A.** See **Colvin, Ernest W.**, 1989.
- Rasmussen, Poul.** See **Bock, Klaus**, 1456.
- Reid, Gordon, and Ruiz, Victor M.** Quinone epoxides. Part VII. Stereospecific elaboration of 2-acetyl-1,4-naphthoquinone epoxides. Part VIII. C-Acetyl fission and C  $\rightarrow$  O-acetyl migration in reactions of acetylquinone epoxides and related compounds, 235, 368. A novel synthetic route to 3,4-benzotropolones: the expansion of a six-membered carbocycle under reducing conditions, 1223.
- Read, Gordon.** See also **Opara, Augustine E.**, 1221.
- Redpath, James.** See **Hewett, Colin L.**, 1967.
- Rees, C. W., and Yelland, M.** Reactive intermediates. Part XXI. Thermal 'decarboxylation' of 2,6-diazatri-cyclo[5,2,1,0<sup>2,6</sup>]deca-4,8-diene-3,10-diones to pyrazolo-[1,5-*a*]pyridines, 221.
- Rees, Charles W., and Sale, Alan A.** Ring contraction of 1,2,4-triazin-3-ones to imidazolin-2-ones and 1,2,3-triazoles, 545.
- Rees, Charles W.** See also **Anderson, David J.**, 550, and **Gilchrist, Thomas L.**, 555, 2535.

- Rees**, David A. See **Anderson**, Norman S., 2173, **Lawson**, Christopher J., 2177, and **Penman**, Alistair, 2182.
- Reese**, Colin B. See **Boom**, Jacques H. van, 2513.
- Reichman**, Uri, **Bergmann**, Felix, and **Lichtenberg**, Dov. Tautomerism, ionisation, and methylation of 2-(methylthio)- and 2,8-bis(methylthio)-hypoxanthines, 2647.
- Reichman**, Uri, **Bergmann**, Felix, **Lichtenberg**, Dov, and **Neiman**, Zohar. Tautomerism, protonation, and methylation in methylthiopurines; factors determining electrophilic attack on purines, 793.
- Reid**, Andrew A., **Sharp**, John T., **Sood**, Hem R., and **Thorgood**, Peter B. Cyclisation of  $\alpha$ -(*o*-alkenylaryl)diazoalkanes: a route to 2,3-benzodiazepines *via* a novel 1,7-electrocyclic ring closure, 2543.
- Reid**, D. H. See **Mackie**, R. K., 657.
- Reid**, David H. See **Dingwall**, John G., 2351.
- Reimann**, Hans. See **Jaret**, Robert S., 1374.
- Reynolds**, A. A. See **Bowman**, R. E., 1.
- Ricci**, A. See **Jacquignon**, P., 734.
- Richards**, Eva E. See **Bell**, Alan M., 2131.
- Richardson**, Anthony C., and **Tarelli**, Edward. Chemical modification of trehalose. Part XIV. Some tetra- and hexa-deoxy-derivatives and their amino-analogues, 1520.
- Richardson**, Anthony C. See also **Ballard**, John M., 1524, and **Hough**, Leslie, 287, 784.
- Ridge**, B. See **Maia**, H. L., 98.
- Ridge**, Richard J. See **Drey**, Charles N. C., 2001.
- Ridley**, Damon D. See **Lowe**, Gordon, 2024.
- Rigby**, Rhymer B. See **Haszeldine**, Robert N., 676.
- Ríos**, Carlos. See **Crabbé**, Pierre, 810.
- Rivas**, C. See **Nakano**, Tatsuhiko, 2322.
- Rivett**, Douglas E. A. See **Eagle**, Garth A., 1701.
- Roberts**, David W. See **Birchall**, J. Michael, 1071.
- Roberts**, George A. F. See **Guthrie**, Roy D., 2414.
- Roberts**, James S. See **Colvin**, Ernest W., 1989.
- Roberts**, John C. See **King**, T. J., 78.
- Robins**, Roland K. See **Smith**, Carmen V. Z., 1855.
- Robinson**, David H. See **Cusack**, Noel J., 1720.
- Robinson**, Michael J. See **Jones**, Gurnos, 968.
- Robinson**, M. L. See **Chauhan**, M. S., 120.
- Robinson**, M. S. See **Chauhan**, M. S., 359.
- Robson**, A. C. See **Lockhart**, J. C., 577.
- Robson**, Caroline A. See **Ager**, Ian, 1187.
- Roch**, Gilberto. See **Epsztajn**, Jan, 2622.
- Rockett**, B. W. See **Peet**, J. H., 106.
- Roets**, Eugene. See **Claes**, Paul, 932, and **Vlietinck**, Arnold, 937.
- Rogers**, Nigel R. See **Cookson**, Richard C., 2741.
- Rollins**, Anthony J. See **Brimacombe**, John S., 1295.
- Romeo**, Aurelio. See **Gallina**, Carlo, 1134.
- Rompuy**, Ludo Van, **Schamp**, Niceas, **De Kimpe**, Norbert, and **Parijs**, Roger Van. 2-Substituted 3,4-unsubstituted isoxazolin-5-ones: synthesis and comparison with the natural compounds, 2503.
- Ronchi**, A. Umani. See **Cainelli**, G., 400.
- Ronlán**, Alvin. See **Nilsson**, Anders, 2337.
- Roos**, Gregory H. P. See **Giles**, Robin G. F., 493.
- Rosevear**, Alan. See **Kennedy**, John F., 2041, 2293.
- Ross**, R. A. M. See **Bentley**, R. K., 140.
- Roughley**, Peter J., and **Whiting**, Donald A. Experiments in the biosynthesis of curcumin, 2379.
- Rowbottom**, Kenneth T. See **Glover**, Edward E., 842.
- Rowell**, Frederick J. See **Nunn**, Arthur J., 2697.
- Rowley**, Alan G. See **Smith**, John R. Lindsay, 566.
- Roy**, Dibyendu N. See **Nasipuri**, Dhanonjoy, 1754.
- Roy**, Sunil K. Synthesis of a benzo[*a*]fluorenone lactone related to etiojervine, 1780.
- Rugg**, Peter W. See **Cusack**, Noel J., 1720.
- Ruiz**, Victor M. See **Read**, Gordon, 235, 368, 1223.
- Rutledge**, P. S. See **Briggs**, Lindsay H., 806.
- Rydon**, H. N. See **Maia**, H. L., 98.

## S

- Saeki**, Y. See **Fujita**, E., 297, 301, 306.
- Saito**, Kenji. See **Sato**, Kikumasa, 2289.
- Sakrikar**, Satish. See **Golding**, Bernard T., 1214.
- Sale**, Alan A. See **Rees**, Charles W., 545.
- Sammes**, P. G. See **Arnold**, B. J., 1266, **Barton**, Derek H. R., 599, and **Machin**, P. J., 404.
- Sammes**, Peter G. See **Ager**, Ian, 1187, **Allan**, Robin D., 1182, and **Matlin**, Stephen A., 2851.
- Santoro**, Ettore. See **Piccardi**, Paolo, 982.
- Sargent**, Melvyn V. See **Cresp**, Terry M., 340, 1786, 2961.
- Sarkanen**, Kyösti V., and **Wallis**, Adrian F. A. Oxidative dimerizations of (*E*)- and (*Z*)-isoeugenol (2-methoxy-4-propenylphenol) and (*E*)- and (*Z*)-2,6-dimethoxy-4-propenylphenol, 1869.
- Oxidative dimerization of methyl (*E*)-4-hydroxy-3,5-di-*t*-butylcinnamate with potassium ferricyanide, 1878.
- Sarkar**, Tarun K. Synthetic studies on terpenoids. Part XVII. Synthetic approaches to hirsutic acid, 2454.
- Sasaki**, Tadashi, **Kanematsu**, Ken, **Kakehi**, Akikazu, and **Ito**, Gin-ichi. Molecular design by cycloaddition reactions. Part IX. Further investigation of the cycloaddition reactions of pyridinium allylides [1-(1-pyridinio)-prop-2-enides] to give indolizines, 2089.
- Sasaki**, Tadashi, **Kanematsu**, Ken, and **Yukimoto**, Yusuke. Studies of heteroaromaticity. Part LXV. Reactions of valence tautomers of three medium-sized ring unsaturated compounds with iodine azide, 375.
- Sato**, Kikumasa, **Inoue**, Seiichi, and **Saito**, Kenji. A new synthesis of vitamin K *via*  $\pi$ -allylnickel intermediates, 2289.
- Sato**, Takeo, **Akima**, Toshio, and **Uno**, Kazuo. Medium-sized cyclophanes. Part XIV. An aromatic displacement reaction in veratrylic compounds. Attempted nitration and halogenation of cyclotriveratrylene (10,15-dihydro-2,3,7,8,12,13-hexamethoxy-5*H*-tribenzo[*a,d,g*]-cyclononene), 891.
- Sato**, Takeo, and **Uno**, Kazuo. Medium-sized cyclophanes. Part XV. 10,15-Dihydro-5*H*-tribenzo[*a,d,g*]cyclononene and analogues, 895.
- Saunders**, John. See **Battersby**, Alan R., 2923.
- Savage**, David S. See **Hewett**, Colin L., 1967.
- Savins**, Eric G. See **Burrell**, Raymond A., 2707.
- Sawyer**, James R. H., and **Wibberley**, D. George. Pyrido-[1,2-*a*]pyrimidinium salts. Part I. Synthesis from 2-aminopyridines and interconversion with 2-(2-acylvinylamino)pyridines, 1138.
- Schamp**, Niceas. See **Rompuy**, Ludo Van, 2503.
- Scheinmann**, Feodor. See **Golborn**, Peter, 2870, **Oakland**, John S., 800, and **Quillinan**, Augustus J., 1329.
- Schneider**, David F. See **Garbers**, Christoph F., 2016.
- Schneider**, John J. 17,21-Dihydroxy-5 $\beta$ -pregn-2-ene-1,11,20-trione, a new analogue of cortisone. Methods for distinguishing between  $\Delta^2$ -1-oxo- and  $\Delta^2$ -3-oxo-steroids, 1361.

- Schneller, Stewart W. See **Hosmane**, Ramachandra S., 2450.
- Schwartz, Gerald P., and **Katsoyannis**, Panayotis G. Insulin peptides. Part XXIII. The synthesis of a hexadecapeptide derivative related to the B chain of human insulin. Part XXIV. A novel synthesis of the human insulin B chain S-sulphonate, 2890, 2894.
- Scopes, P. M. See **Bonnett**, R., 252.
- Scopes, P. Molly. See **Dunstan**, Diana R., 2749.
- Scott, Claude J. See **Garwood**, Robert F., 2714.
- Scott, Francis L. See **Butler**, Richard N., 1357.
- Scrimgeour, Charles M. See **Miller**, J. Allen, 603.
- Scrowston, Richard M. See **Clarke**, Kenneth, 356, 623, 1196, 2956.
- Seager, John F. See **Bailey**, A. Sydney, 1809.
- Seale, P. W. See **Gregory**, G. I., 47.
- Seale, Peter W. See **Borthwick**, Alan D., 2769.
- Seddon, D. See **Brettell**, R., 345.
- Segall, Yoffi. See **Granoth**, Itshak, 1972.
- Serlin, J. See **Bloodworth**, A. J., 261.
- Seshadri, Tiruvenkaia R. See **Brown**, P. Margaret, 2721.
- Seto, Shuichi. See **Usui**, Taichi, 2425.
- Shah, Munawer A. See **Brooks**, Gerald, 1297.
- Shanmugam, P. See **Lakshminarayana**, P., 998.
- Shannon, P. V. R. See **Collins**, E., 419.
- Sharma, Ram P. See **Barrow**, Kevin D., 1590.
- Sharma, Ram Prakash. See **Hankinson**, Barry, 2569, and **Heaney**, Harry, 1840.
- Sharp, John T. See **Reid**, Andrew A., 2543.
- Sharp, M. J. See **Banks**, Ronald E., 5.
- Shaw, D. See **Cattel**, L., 2626.
- Shaw, Gordon. See **Cusack**, Noel J., 1720.
- Sheppard, Alan H. See **Claisse**, John A., 2241.
- Sheppard, George. See **Hickmott**, Peter W., 1514.
- Shibayama, Masakazu. See **Kato**, Natsuki, 712.
- Shibuya, Masayuki. See **Fujita**, Eiichi, 2277.
- Shibuya, Shiroshi. See **Kametani**, Tetsuji, 1212.
- Shingu, Tetsuro. See **Fujita**, Eiichi, 2277.
- Shoppee, C. W., and **Nemorin**, J. Steroids and Walden inversion. Part LXIX. Substitution reactions of the 5 $\alpha$ -androstan-11-ols, 542.
- Shoppee, Charles W., and **Cooke**, Burgess J. A. Electrocyclic reactions. Part III. Some reactions of 2,4-dimethyl-1,5-diphenylpenta-1,4-dien-3-one ( $\alpha\alpha'$ -dimethyldibenzylideneacetone), 1026.
- Siddappa, S. See **Agasimundin**, Y. S., 503.
- Siddiquei, Asif S. See **Gore**, Peter H., 2936.
- Sierra, Jorge. See **Garbarino**, Juan A., 1866.
- Simpson, Thomas J. See **MacMillan**, Jake, 1487.
- Singh, Harkishan, **Paul**, Dharam, and **Parashar**, Veerendra V. Steroids and related studies. Part XX. 4,17a-Diaza-D-homo-steroids, 1204.
- Sinnott, Michael. See **Ballardie**, Francis, 2418.
- Smalley, Robert K. See **Archer**, John G., 1169.
- Smith, Alan. See **Partridge**, Maurice W., 453.
- Smith, Alan C. B. See **Brewster**, David, 2796.
- Smith, Carmen V. Z., **Robins**, Roland K., and **Tolman**, Richard L. Clarification of the ring-closure of certain 4,5-diaminopyrimidines to 6-substituted 8-alkylpurines, 1855.
- Smith, David M. See **McNab**, Hamish, 1310.
- Smith, Derek S. H., **Turner**, Alan B., and **Mackie**, Alexander M. Marine steroids. Part I. Structures of the principal aglycones from the saponins of the starfish, *Marthasterais glacialis*, 1745.
- Smith, Derek S. H. See also **Nicholson**, Sydney H., 2887.
- Smith, G. F. See **Banks**, Ronald E., 5.
- Smith, John R. Lindsay, **Norman**, Richard O. C., and **Rowley**, Alan G. Amine oxidation. Part VIII. Evidence for intramolecular hydrogen-atom transfer in amine radical cations, 566.
- Smith, Kevin M. See **Abraham**, Raymond J., 2142, **Barnett**, Graham H., 691, **Cavaleiro**, José A. S., 2149, 2471, 2478, and **Kenner**, George W., 2517.
- Smith, Roy G. See **Bonnett**, Raymond, 1432.
- Snowden, Roger L. See **Chadwick**, Derek J., 201, 1766, 2327.
- Sondheimer, Franz. See **Garrett**, Peter J., 2253.
- Sonoda, A. See **Yamamura**, M., 203.
- Sood, Hem R. See **Reid**, Andrew A., 2543.
- Sotelo, R. M. See **Moltrasio**, G. Y., 349.
- Spinner, Margaret E. See **Brewster**, David, 2796.
- Spyropoulos, C. G. See **Collins**, J. F., 94.
- Srinivasan, Krishnaswamy. See **Cocker**, Wesley, 2485.
- Srivastava, K. S. Lal. See **Davis**, Michael, 1863.
- Stancioff, Dimitri J. See **Lawson**, Christopher J., 2177.
- Stanley, Norman F. See **Lawson**, Christopher J., 2177.
- Stannnton, James. See **Battersby**, Alan R., 1609.
- Steiner, Peter R. See **Brimage**, David R. G., 526.
- Stevens, Laurence J. See **Davis**, Michael, 2057.
- Sternhell, S. See **Au**, T. Y., 13.
- Stevens, Malcolm F. G. See **Gunn**, Brian C., 1682.
- Stevenson, Karen M. See **Dalziel**, William, 2841.
- Stevenson, Robert. See **Block**, Elliott, 308.
- Stewart, Ross. See **Oyama**, Kiyotaka, 673.
- Stilwell, Merlyn A. See **Strunz**, George M., 2600.
- Stirling, C. J. M. See **Batty**, J. W., 59, 65.
- Stock, John A. See **Baker**, Jennifer, 665.
- Stoddart, Ian K. See **Ashton**, David S., 846.
- Stoodley, R. J., and **Whitehouse**, N. R. Studies related to penicillins. Part IX. Degradation of penicillanic acid derivatives by mercury(II) acetate, 32.
- Stoodley, Richard J., and **Watson**, Nigel S. Studies related to penicillins. Part X. Some transformations of 4-isopropylidene-3-oxo-7 $\beta$ -phenoxyacetamidocepham, 2105.
- Stoodley, Richard J. See also **Kitchin**, John, 22, 1985, 2460, 2464.
- Strating, J. See **Zwanenburg**, B., 73.
- Strunz, George M., **Kakushima**, Masatoshi, **Stillwell**, Merlyn A., and **Heissner**, Christopher J. Hyalodendrin: a new fungitoxic epidithiodioxopiperazine produced by a *Hyalodendron* species, 2600.
- Stverteczky, Judith, **Szabó**, Patricia, and **Szabó**, Ladislas. Phosphorylated sugars. Part XIII. A new synthesis of D-arabinose 5-(dilithium phosphate), 872.
- Suckling, Keith E. See **Battersby**, Alan R., 1609.
- Sugiyama, Hiroshi. See **Usui**, Taichi, 2425.
- Sultanbawa, M. Uvais S. See **Gunatilake**, A. A. Leslie, 1155.
- Sumida, Yoshio. See **Tamuta**, Yasumitsu, 2091, 2580.
- Summers, Lindsay A. See **Dickeson**, John E., 2885.
- Suschitzky, Hans. See **Ager**, Ernest, 1125, 2839, **Bratt**, Jack, 1689, **Chippendale**, K. E., 125, 129, **Fielden**, Rae, 696, 702, 705, **Hickmott**, Peter W., 2063, and **Iddon**, Brian, 2971.
- Sutherland, Derek R., **Tennant**, George, and **Vevers**, Robin J. S. The chemistry of polyazaheterocyclic compounds. Part VI. Condensation reactions of 5-amino-1H-1,2,3-triazoles with ethyl acetoacetate and a new type of Dimroth rearrangement, 943.
- Sutherland, I. O. See **Crossley**, R., 205.



- Sutherland, J. Derek G. See **Ballardie**, Francis, 2418.  
 Sutton, J. R. See **Brettle**, R., 345.  
 Sutton, Terrence M. See **Chapman**, Norman B., 750, and **Clarke**, Kenneth, 623, 1196.  
 Svanholm, Ulla, and **Parker**, Vernon D. Alkyl exchange reactions in trifluoroacetic acid. *t*-Butyl trifluoroacetate, an efficient alkylation agent for aromatic compounds, 562.  
 Swaminathan, S. See **Muthukrishnan**, R., 2949.  
 Sweeney, Anthony. See **Callott**, Henry J., 1424.  
 Swingland, Berit Viig. See **Kidd**, David, 1983.  
 Symes, K. C. See **Haines**, A. H., 53.  
 Symon, John D. See **Dingwall**, John G., 2351.  
 Szabó, Ladislav. See **Charon**, Daniel, 1175, and **Stverteczky**, Judith, 872.  
 Szabó, Patricia. See **Stverteczky**, Judith, 872.  
 Szary, Anne C. See **Jones**, Peter F., 2272.

## T

- Taguchi**, Hiroyasu. See **Albert**, Adrien, 1629, 2037.  
**Takagi**, K. See **Ogata**, Y., 1244.  
**Takahashi**, Tamiko. See **Kametani**, Tetsuji, 1464.  
**Takahashi**, Tamiyoshi. See **Nishiwaki**, Tarozsuo, 1606.  
**Takayanagi**, Y. See **Ogata**, Y., 1244.  
**Takeshima**, Tatsuo, **Miyauchi**, Tetsuko, **Fukada**, Naoaki, **Koshizawa**, Shuichi, and **Muraoka**, Motomu. Formation of 3-substituted 2-iminocyclopentanedithiocarboxylic acids and *N*-[amino(dimercapto)methyl]-2-methylcyclopentanimine from 2-substituted cyclopentanones. Some reactions of the imino-dithiocarboxylic acids, 1009.  
**Tamm**, Christoph. See **Binder**, Michael, 1146.  
**Tamura**, Yasumitsu, **Miki**, Yasuyoshi, **Sumida**, Yoshio, and **Ikeda**, Masazumi. Synthesis and thermal reaction of 2,2-diacyl-*N*-(1-pyridinio)vinylaminides: formation of pyrazolo[1,5-*a*]pyridines and isoxazoles, 2580.  
**Tamura**, Yasumitsu, **Sumida**, Yoshio, and **Ikeda**, Masazumi. Synthesis and thermal reaction of pyridinium 3,3-diacyl-1-benzoylallylides [3,3-diacyl-1-benzoyl-1-(1-pyridinio)prop-2-enides]: formation of indolizine derivatives, 2091.  
**Tanaka**, Souichi. See **Miyamoto**, Takuji, 138.  
**Tangari**, N. See **Pascali**, V., 1166.  
**Tankard**, Malcom H., and **Whitehurst**, John S. Stereochemistry of the ethoxyethynyl carbinol- $\alpha\beta$ -unsaturated ester conversion, 615.  
**Taoka**, Manabu. See **Fujita**, Eiichi, 1760, 2277.  
**Tapia**, Ricardo. See **Garbarino**, Juan A., 1866.  
**Tarelli**, Edward. See **Richardson**, Anthony C., 1520.  
**Tatchell**, A. R. See **Landor**, S. R., 473.  
**Taussig**, P. See **Blackburn**, G. M., 2809.  
**Taylor**, David A. H., and **Wehrli**, Felix W. The structure of fassinolide and angustidienolide, limonoids from species of meliaceae, 1599.  
**Taylor**, David A. H. See also **Connolly**, Joseph D., 686, 2407.  
**Taylor**, D. R. See **Bowden**, F. L., 516, and **Davies**, A. R., 379.  
**Taylor**, David R., and **Wright**, D. Bruce. Allene cycloadditions. Part IV. Reactions of tetramethylallene with unsymmetrically substituted olefins, 445.  
 Ene reactions of allenes. Part I. Reactions of alkylallenes with hexafluoroacetone, 956.  
**Taylor**, David R. See also **Chan**, Wilfred R., 1047.  
**Taylor**, Giles A. See **Brooks**, Gerald, 1297.  
**Taylor**, Michael V. See **Ager**, Ian, 1187, and **Allan**, Robin D., 1182.  
**Taylor**, R. See **Buchanan**, G. L., 373.  
**Taylor**, Richard J. K. See **Jones**, D. Neville, 2602.  
**Tedder**, John M. See **Ashton**, David S., 846.  
**Tennant**, George. See **Sutherland**, Derek R., 943.  
**Teranishi**, S. See **Yamamura**, M., 203.  
**Tewson**, Timothy J. See **Barton**, Derek H. R., 2365.  
**Thaller**, V. See **Badanyan**, S. O., 145, **Barley**, G. C., 151, **Bentley**, R. K., 140, and **Jones**, Sir Ewart R. H., 148.  
**Thaller**, Viktor. See **Fallis**, Alexander G., 743, **Farrell**, Iain W., 2642, and **Hearn**, Milton T. W., 2785.  
**Thijs**, L. See **Zwanenburg**, B., 73.  
**Thomas**, C. Barry. See **Lethbridge**, Andrew, 35, 2763, and **Norman**, Richard O. C., 325, 2914.  
**Thomas**, E. J. Reaction between 2-phenyl-1,3-benzodioxole and *n*-butyl-lithium; an unsuccessful attempt to synthesize benzyne, 2006.  
**Thomas**, Eric J. See **Hines**, James N., 2332.  
**Thomas**, Idris L. See **Ellis**, Gwynn P., 2781.  
**Thomas**, R. N. See **Bonnett**, R., 252.  
**Thompson**, Alan W. See **Iddon**, Brian, 2971.  
**Thompson**, D. J. See **King**, T. J., 78.  
**Thompson**, David J. See **Birch**, Arthur J., 1882, 1900.  
**Thompson**, John C. See **Donnelly**, Dervilla M. X., 1737.  
**Thompson**, M. E. See **Lockhart**, J. C., 577.  
**Thompson**, M. H. See **Blackburn**, G. M., 2809.  
**Thomson**, Ronald H. See **Brown**, P. Margaret, 2721, and **Moir**, Michael, 1352, 1556.  
**Thorburn**, Stewart. See **Gore**, Peter H., 2940.  
**Thorner**, Craig W. See **Landquist**, Justus K., 1114.  
**Thornton**, Ian M. S. See **Connolly**, Joseph D., 736, 2407.  
**Thorogood**, Peter B. See **Reid**, Andrew A., 2543.  
**Thorpe**, D. H. See **Birchall**, J. M., 442.  
**Thrift**, R. I. See **Bowman**, R. E., 1.  
**Tiley**, Edward P. See **Claisse**, John A., 2241.  
**Tipping**, Anthony E. See **Coy**, David H., 1062, 1066, 1561, **Fleming**, George L., 574, and **Haszeldine**, Robert N., 676.  
**Tobin**, James C. See **Butler**, Richard N., 1357.  
**Todd**, Alec. See **Chakrabarti**, Jiban K., 2499.  
**Todesco**, P. E. See **Di Nunno**, L., 1954.  
**Tolman**, Richard L. See **Smith**, Carmen V. Z., 1855.  
**Tomita**, Yutaka, and **Uomari**, Atsuko. Biosynthesis of isoprenoids. Part III. Mechanism of alkylation during biosynthesis of stigmaterol in tissue cultures of higher plants, 2656.  
**Tomoeda**, Munemitsu. See **Koga**, Toshitaka, 1848.  
**Tonellato**, Umberto. See **Bassi**, Pietro, 669.  
**Tooth**, R. See **Brettle**, R., 345.  
**Toppet**, Suzanne. See **Claes**, Paul, 932.  
**Topsom**, Ronald D. See **Deady**, Leslie W., 782.  
**Tori**, Kazuo. See **Nakano**, Tatsuhiko, 2322.  
**Toube**, Trevor P. See **Badar**, Yasmeen, 1416.  
**Town**, William G. See **Adamson**, George W., 863.  
**Townsend**, Leroy B. See **Milne**, George H., 313, and **Panzica**, Raymond P., 244.  
**Trapani**, G. See **Cainelli**, G., 400.  
**Trippett**, Stuart, and **Whittle**, Peter J. The hexafluoroacetone adducts of diphenyl phosphoramidites; a distinction between P-N bond rotation and pseudorotation, 2302.  
**Trippett**, Stuart. See also **Duff**, Elaine, 972, and **Oram**, Robert K., 1300.  
**Trocha-Grimshaw**, Jadwiga. See **Grimshaw**, James, 1275, 2584.

- Trudelle, Yves.** Sequential polypeptides. Synthesis of poly-(L-tyrosyl-L-glutamyl-L-tyrosyl-L-glutamyl), poly-(L-glutamyl-L-tyrosyl-L-glutamyl), and poly-(L-glutamyl-L-glutamyl-L-tyrosyl-L-glutamyl) by use of catechol esters, 1001.
- Tucker, Leslie C. N.** See **Brimacombe, John S.**, 2691.
- Turner, Alan B.** See **Nicholson, Sydney H.**, 2887, and **Smith, Derek S. H.**, 1745.
- Turner, John L.** See **Fallis, Alexander G.**, 743, and **Hearn, Milton T. W.**, 2785.
- Turner, Stephen.** See **Brewster, David**, 2796.
- Turner, W. B.** See **Binder, Michael**, 1146, and **Crane, R. I.**, 194.
- Tuzimura, Katura.** See **Usui, Taichi**, 2425.
- Tyman, John H. P.** Long-chain phenols. Part III. Identification of the components of a novel phenolic fraction in *Anacardium occidentale* (Cashew nut-shell liquid) and synthesis of the saturated member, 1639.

## U

- Umani-Ronchi, A.** See **Pascali, V.**, 1166.
- Underwood, William G. E.** See **Ager, Ian**, 1187.
- Undheim, Kjell, and Fjeldstad, Per E.** *N*-Quaternary compounds. Part XXIX. Selective removal of the *N*-chloroacetyl group in peptides, 829.
- Undheim, Kjell.** See also **Lie, Reidar**, 2049.
- Uno, Kazuo.** See **Sato, Takeo**, 891, 895.
- Uomori, Atsuko.** See **Tomita, Yutaka**, 2656.
- Urbani, Raymond.** See **Hickmott, Peter W.**, 1514, 2063.
- Uryu, Tuneso.** See **Kametani, Tetsuji**, 471.
- Usui, Taichi, Yamaoka, Naotaka, Matsuda, Kazuo, Tuzimura, Katura, Sugiyama, Hiroshi, and Seto, Shuichi.** <sup>13</sup>C Nuclear magnetic resonance spectra of glucobioses, glucotrioses, and glucans, 2425.

## V

- Valadon, L. R. Guy.** See **Badar, Yasmeen**, 1416.
- Vanderhaeghe, Hubert.** See **Claes, Paul**, 932, and **Vlietinck, Arnold**, 937.
- Vaughan, Kenneth D.** See **Glover, Edward E.**, 2595.
- Venturella, Pietro.** See **Piozzi, Franco**, 1164.
- Verlander, Michael S.** See **Acheson, R. Morrin**, 2348.
- Vernay, H. Frederick.** See **Jaret, Robert S.**, 1389.
- Vernon, John M.** See **Kricka, Larry J.**, 766.
- Vethaviasar, Nadarajah.** See **Ferrier, Robert J.**, 1791.
- Vevers, Robin J. S.** See **Sutherland, Derek R.**, 943.
- Vijayan, Kalyani, Anderson, B. F., and Hodgkin, D. C.** Crystal and molecular structure of a synthetic compound related to the penicillins and cephalosporins, 3-benzyl 7-*t*-butyl 2,2-dimethyl-8-oxo-4-thia-1-aza-6-*α*H-bicyclo[4.2.0]-octane-3 $\beta$ ,7 $\alpha$ -dicarboxylate, 484.
- Vlietinck, Arnold, Roets, Eugene, Claes, Paul, Janssen, Gerard, and Vanderhaeghe, Hubert.** Preparation of 6-*epi*-phenoxymethyl- and 6-*epi*-benzyl-penicillin, 937.
- Vlietinck, Arnold.** See also **Claes, Paul**, 932.
- Vollhardt, K. Peter C.** See **Garrett, Peter J.**, 2253.
- von Angerer, Erwin.** See **Gilchrist, Thomas L.**, 2535.
- Vouros, Paul, and Harvey, David J.** Influence of 11-trimethylsilyloxy- or 11-hydroxy-substituents on the electron-impact-induced fragmentation of trimethylsilyl derivatives of some androstanols, 727.
- Wade, Roy.** See **Brundish, Derek E.**, 2875.
- Wagenaar, A.** See **Zwanenburg, B.**, 73.
- Waigh, Roger D.** See **Brooks, J. Robin**, 2588.
- Waite, D.** See **Bowman, R. E.**, 1.
- Walker, Brian J.** See **Devlin, Celestine J.**, 1428.
- Walker, R. T.** See **Edge, M. D.**, 290.
- Wallis, Adrian F. A.** See **Sarkanen, Kyösti V.**, 1869, 1878.
- Wallis, Stanley R.** See **Grattan, David W.**, 2264.
- Walton, D. R. M.** See **Asomaning, W. A.**, 137.
- Walton, John C.** See **Ashton, David S.**, 846.
- Warburton, W. K.** See **Gregory, G. I.**, 47.
- Warburton, William K.** See **Borthwick, Alan D.**, 2769, and **Claisse, John A.**, 2241.
- Ward, Philip J.** See **Norman, Richard O. C.**, 2914.
- Waring, Anthony J.** See **Cook, Kenneth L.**, 529.
- Watson, K. M.** See **Neilson, D. G.**, 335.
- Watson, Nigel S.** See **Stoodley, Richard J.**, 2105.
- Watts, William E.** See **Khand, Ihsan U.**, 975, 977.
- Weale, J.** See **Bowman, R. E.**, 438, 760.
- Webb, Shirley B.** See **Boyce, Clive B. C.**, 2881.
- Webster, R. G.** See **Mackie, R. K.**, 657.
- Weedon, Basil C. L.** See **Badar, Yasmeen**, 1416, and **Garwood, Robert F.**, 2714.
- Wehrli, Felix W.** See **Taylor, David A. H.**, 1599.
- Werner, Dieter.** See **Hecht, Sidney M.**, 1903.
- West, Peter J.** See **Achmatowicz, Selim**, 1567, and **Barton, Derek H. R.**, 1571, 1574, 1580.
- Weyell, D. J.** See **Bowman, R. E.**, 438.
- Weyell, David J.** See **Gore, Peter H.**, 2940.
- Whalley, W. B.** See **Ali, S. A.**, 173, **Cox, M. R.**, 174, **Donnelly, Dervilla M. X.**, 1737, **Mathieson, D. W.**, 184, and **Olaniyi, A. A.**, 179.
- White, A. C.** See **Bowman, R. E.**, 760.
- White, Trevor M.** See **Marr, George**, 1955.
- Whitehead, Avon J.** See **Olson, Edwin S.**, 1242.
- Whitehouse, N. R.** See **Stoodley, R. J.**, 32.
- Whitehurst, J. S.** See **Dave, V.**, 393.
- Whitehurst, John S.** See **Tankard, Malcolm H.**, 615.
- Whitham, Gordon H.** See **Hines, James N.**, 2332.
- Whiting, D. A.** See **Pulman, D. A.**, 410.
- Whiting, Donald A.** See **Crombie, Leslie**, 1277, 1285, **Davies, Richard V.**, 2359, and **Roughley, Peter J.**, 2379.
- Whitmarsh, David.** See **Carruthers, William**, 1511.
- Whittaker, Norman.** See **Begley, Michael J.**, 2830.
- Whittle, Peter J.** See **Duff, Elaine**, 972, and **Trippett, Stuart**, 2302.
- Whitton, Brian R.** See **Collins, Peter M.**, 1470.
- Wibberley, D. George.** See **Sawyer, James R. H.**, 1138.
- Widdowson, D. A.** See **Mansfield, J. W.**, 2557.
- Widdowson, David A.** See **Barton, Derek H. R.**, 874, 1565.
- Wilkins, Alistair L.** See **Chin, Wah J.**, 1437.
- Williams, Dudley H.** See **Crump, Douglas R.**, 2731.
- Williams, Hugh J.** Metal hydride reduction of 9-anthryl ketones. Steric influence on reaction path, 1852.
- Williams, J. Michael.** See **Llewellyn, Jeffery W.**, 1997.
- Williams, N. R.** See **Flaherty, B.**, 632.
- Williamson, David H.** See **Birch, Arthur J.**, 1892.
- Williamson, W. R. N.** See **Bowman, R. E.**, 1.
- Willson, John S.** See **Norman, Richard O. C.**, 325.
- Wilson, Donald V.** See **Beddows, Clifford G.**, 2345.
- Wilson, M. J.** See **Gregory, G. I.**, 47.
- Wilson, Michael J.** See **Claisse, John A.**, 2241.
- Wood, Harry B., jun.** See **Hirata, Tadashi**, 1209.

- Wood**, Hamish C. S. See **Miller**, J. Allen, 603.  
**Woodfine**, Howard. See **Birchall**, J. Michael, 1121.  
**Woodward**, David R. See **Barlow**, Michael G., 1798.  
**Woodward**, R. B. See **Fleming**, Ian, 1653.  
**Worthington**, Paul A. See **Boyce**, Clive B. C., 2881.  
**Wright**, D. Bruce. See **Taylor**, David R., 445, 956.

## Y

- Yamaguchi**, Yukio. See **Ishibe**, Nobuyuki, 2618.  
**Yamamura**, M., **Moritani**, I., **Sonoda**, A., **Teranshi**, S., and **Fujiwara**, Y. Aromatic substitution of olefins. Part XVIII. Reactions of cycloalkenes with benzene, 203.  
**Yamaoka**, Naotaka. See **Usui**, Taichi, 2425.  
**Yamauchi**, Kiyoshi, and **Kinoshita**, Masayoshi. *N*-Alkylation of thymine and uracil with trialkyl phosphates, 391.  
 Esters of phosphorus oxy-acids as alkylating agents. Part II. *N*-Alkylation of imidazole and related heterocyclic compounds with trialkyl phosphates, 2506.  
**Yapp**, A. Margaret. See **Adamson**, George W., 863.  
**Yates**, Paul. See **Davies**, David G., 850, 2299.

- Yelland**, M. See **Rees**, C. W., 221.  
**Yeung**, H. Wing. See **Lowe**, Gordon, 2907.  
**Yoshifuji**, Masaaki, **Nakayama**, Shigenobu, **Okazaki**, Renji, and **Inamoto**, Naoki. Phosphinidenes and related intermediates. Part I. Reactions of phosphinoylidenes ( $R-\overset{\cdot}{P}=O$ ) and phosphinothioylidenes ( $R-\overset{\cdot}{P}=S$ ) with diethyl disulphide and benzil, 2065.  
**Yoshifuji**, Masaaki. See also **Nakayama**, Shigenobu, 2069.  
**Yoshikoshi**, Akira. See **Fukamiya**, Narihiko, 1843.  
**Young**, Graham A. R. See **Buchanan**, George L., 732, 2404.  
**Young**, Geoffrey T. See **Fletcher**, George A., 1162.  
**Yoxall**, Charles T. See **Hickmott**, Peter W., 1514.  
**Yukimoto**, Yusuke. See **Sasaki**, Tadashi, 375.

## Z

- Zammit**, Leslie J. See **Cross**, Brian E., 2975.  
**Zwanenburg**, B., **Wagenaar**, A., **Thijs**, L., and **Strating**, J. Chemistry of sulphines. Part XVI. Aliphatic sulphines from non-enethiolisable thioketones and their cycloaddition reactions with diazoalkanes, 73.