

INDEX OF AUTHORS, 1972

A

- Abbott, P. J., Acheson, R. M., Foxton, M. W., Raulins, N. R., and Robinson, G. E.** Addition reactions of heterocyclic compounds. Part L. Reactions of 1-alkylbenzotriazoles and benzo[*c*]cinnolines with dimethyl acetylenedicarboxylate, 2182.
- Abdou, S. E.** See **Tadros, W.**, 2839.
- Acheson, R. M., Bridson, J. N., and Cameron, T. S.** Addition reactions of heterocyclic compounds. Part XLVII. Formation of benzazepines from indoles with dimethyl acetylenedicarboxylate in acetonitrile; crystal structure of dimethyl 2,3-dihydro-2-indol-3-ylbenz[*b*]azepine-3,4-dicarboxylate, 968.
- Acheson, R. M., Bridson, J. N., Cecil, T. R., and Hands, A. R.** Addition reactions of heterocyclic compounds. Part XLVIII. Reactions of indoles with dimethyl acetylenedicarboxylate in the presence and absence of solvents, 1569.
- Acheson, R. M., and Stubbs, J. K.** The synthesis of some heterocyclic sulphonium salts, 899.
- Acheson, R. M., and Verlander, M. S.** Addition reactions of heterocyclic compounds. Part XLIX. Reactions of benzimidazoles possessing an activated 2-methylene group with acetylenic esters, 1577.
- Acheson, R. M., Wright, N. D., and Tasker, P. A.** Addition reactions of heterocyclic compounds. Part LI. Cyclobuta[*b*]pyridines from reactions of dimethyl acetylenedicarboxylate with 1-alkyl-1,4-dihydropyridines and the cycloelimination of amide and carboxy-groups, 2918.
- Acheson, R. M.** See also **Abbott, P. J.**, 2182.
- Achilladelis, B. A., Adams, P. M., and Hanson, J. R.** Studies in terpenoid biosynthesis. Part VIII. The formation of the trichothecane nucleus, 1425.
- Ackrell, J., Altaf-ur-Rahman, M., Boulton, A. J., and Brown, R. C.** Furazans and furazan oxides. Part I. Synthesis and reactions of some strained furazan *N*-oxides, 1587.
- Adachi, T.** See **Okumura, K.**, 173.
- Adams, D. R., and Davies, D. I.** The reaction of alkoxide ions with some chlorine-substituted norbornadienes, 1237.
- Adams, P. M., and Hanson, J. R.** Studies in terpenoid biosynthesis. Part VII. The biosynthesis of helicosidin, 586.
- The stereochemistry of some reactions of the sesquiterpenoid trichodermol, 2283.
- Adams, P. M.** See also **Achilladelis, B. A.**, 1425.
- Adamson, G. W., Lambourne, D. R., and Lynch, M. F.** Analysis of structural characteristics of chemical compounds in a large computer-based file. Part III. Statistical association of fragment incidence, 2428.
- Adembri, G., De Sio, F., Nesi, R., and Scotton, M.** New derivatives of pyridazino[4,5-*d*]pyridazine, 953.
- Ager, E., Iddon, B., and Suschitzky, H.** Polyhalogenoaromatic compounds. Part XXII. Some reactions of tetrachloro-4-methylsulphonylpyridine and related compounds, 133.
- Aizawa, Y.** See **Kametani, T.**, 1435.
- Akhtar, M., Chadwick, J. C., and Fray, G. I.** Highly condensed polycyclic systems. Part IV. Action of concentrated sulphuric acid on 1,2,4,5-tetrachloro-3,3-ethylenedioxytetracyclo[3,2,0,0^{2,7},0^{4,6}]heptane: a novel rearrangement of a quadricyclanone acetal, 1778.
- Akhtar, M. H.** See **Lown, J. W.**, 1459.
- Albert, A.** *v*-Triazolo[4,5-*d*]pyrimidines (8-azapurines). Part X. New routes to *v*-triazolo[4,5-*d*]pyrimidines via 4-dimethylaminomethyleneamino-1,2,3-triazole-5-carbonitriles, 461.
- Albert, A., and Pendergast, W.** *v*-Triazolo[4,5-*d*]pyrimidines (8-azapurines). Part IX. Some nucleophilic addition reactions, 457.
- Albert, A., and Taguchi, H.** *v*-Triazolo[4,5-*d*]pyrimidines (8-azapurines). Part VIII. Synthesis, from 1,2,3-triazoles, of 1- and 2-methyl derivatives of 5,7-disubstituted *v*-triazolo[4,5-*d*]pyrimidines (7- and 8-methyl 2,6-disubstituted 8-azapurines), 449.
- Albert, A., and Thacker, D.** *v*-Triazolo[4,5-*d*]pyrimidines (8-azapurines). Part XI. Preparation of 2-benzyl-*v*-triazolo[4,5-*d*]pyrimidine (8-benzyl-8-azapurine), 468.
- Albinati, A.** See **Ferruti, P.**, 2001.
- Aldridge, D. C., Borrow, A., Foster, R. G., Large, M. S., Spencer, H., and Turner, W. B.** Metabolites of *Nectria coccinea*, 2136.
- Alexander, C. W., and Grimshaw, J.** Dypnopinacol. Part II. Tautomerism of 4-methyl-2,4,6-triphenylcyclohexa-2,6-dienyl phenyl ketone (isodypnopinacolone). Part III. The photochemistry of 4-methyl-2,4,6-triphenylcyclohexa-2,6-dienyl phenyl ketone (isodypnopinacolone). Part IV. Tautomerism of α - and β -photodypnopinacolones (6-*exo*- and 6-*endo*-methyl-1,3,6-triphenylbicyclo[3,1,0]hex-2-en-2-yl phenyl ketone), 1372, 1374, 1380.
- Alford, J. R., Cuddy, B. D., Grant, D., and McKervey, M. A.** Carboxylation of 2-methyladamantan-2-ol and 2-(1-adamantyl)ethanol: evidence for the intermolecular nature of hydride transfer reactions in rearrangements involving adamantyl cations, 2707.
- Ali, A., Hardy, P. M., and Rydon, H. N.** Polypeptides. Part XIX. The synthesis of some sequential polypeptides of β -methyl aspartate and γ -methyl glutamate, 1070.
- Al-Jallo, H. N., Al-Khashab, A., and Sallomi, I. G.** Reactions of unsaturated tetra- and tri-esters with hydrazine hydrate and semicarbazide hydrochloride, 1022.
- Al-Khashab, A.** See **Al-Jallo, H. N.**, 1022.
- Allen, D. W., Mann, F. G., and Tebby, J. C.** Constitution of the adducts derived from tertiary phosphine oxides and arenosulphonamides, 2793.
- Allen, J., Boar, R. B., McGhie, J. F., and Barton, D. H. R.** Synthesis of primulagenin A and of echinocystic acid, 2994.
- Al-Radhi, A. K., Brimacombe, J. S., and Tucker, L. C. N.** The deamination of methyl 4-amino-4,6-dideoxy-2,3-*O*-isopropylidene- α -*L*-talo- and -manno-pyranosides with nitrous acid, 315.

- Altaf-ur-Rahman**, M. See **Ackrell**, J., 1587.
- Ames**, D. E., and **Binns**, S. H. Syntheses of long-chain acids. Part IX. Docosa-3,9,15- and -5,11,17-triynoic acids and eicosa-5,11,14-triynoic acid, 255.
- Ames**, D. E., and **Dodds**, W. D. Condensation of β -dicarbonyl compounds with halogenopyridinecarboxylic acids. A convenient synthesis of some naphthyridine derivatives, 705.
- Anderson**, D. J., **Horwell**, D. C., **Stanton**, E., **Gilchrist**, T. L., and **Rees**, C. W. Reactive intermediates. Part XX. Preparation of sulphoximides from sulphoxides and *N*-amino-lactams, and a study of their fragmentation, 1317.
- Anderson**, D. T., and **Horspool**, W. M. The synthesis of dihydrofurobenzodioxins by reaction of tetrachloro-1,2-benzoquinone with some 2,3-diphenylfurans, 532.
Synthesis of phenanthro[9,10-*b*]furans by the photolysis of dihydrofurobenzodioxins, 536.
- André**, J., **Buu-Hoï**, N. P., and **Jacquignon**, P. Carcinogenic nitrogen compounds. Part LXXVIII. Some indeno-[1,7-*bc*]-, benz[*a*]indeno[7,1-*hi*]-, and benz[*c*]indeno-[7,1-*hi*]-acridines, 1261.
- Andrew**, H. F., **Campbell**, N., and **Wilson**, N. H. Nitration of 3-methylfluoroanthene, 755.
- Angyal**, A. M. See **Brown**, D. J., 1819.
- Angyal**, S. J. See **Randall**, M. H., 346.
- Annunziata**, R., **Cinquini**, M., and **Colonna**, S. Synthesis and stereochemistry of optically active [^{18}O , ^{18}O]sulphones, 2057.
- Anteunis**, M., **Borremans**, F., **Tadros**, W., **Zaher**, A. H. A., and **Gliobrial**, S. S. Isomerism of semicarbazones of 6-hydroxy-4,7-dimethoxy- and 6-hydroxy-4-methoxy-benzofuran-5-yl methyl ketone and derivatives, 616.
- Anteunis**, M. See also **Van den Bossche**, R., 1599.
- Arcamone**, F. See **Caglioti**, L., 1235.
- Ariyan**, Z. S., and **Martin**, R. L. Novel macrocyclic polysulphur compounds. 7,15,17,19-Tetra-alkoxy-2,3,4,5-, 10,11,12,13-octathiatricyclo-[12,2,2, $2^{6,9}$]eicosa-6,8,14,16-, 17,19-hexaenes and 2,3,7,8-tetra-alkoxythianthrens; products of the catalysed reaction of aromatic ethers and sulphur monochloride, 1687.
- Armarego**, W. L. F., **Milloy**, B. A., and **Sharma**, S. C. Synthesis and stability of 2-methyl 2,4-diaza- and 2-methyl-2,5-diazaindene (2-methyl-pyrrolo[3,4-*b*]pyridine and -pyrrolo[3,4-*c*]pyridine), 2485.
- Armenakian**, A., **Mahmood**, M., and **Murphy**, D. A synthesis of *L*-psicose, 63.
- Armitage**, D. A., **Clark**, M. J., and **Tso**, C. C. Synthesis of unsymmetrical disulphides, 680.
- Artico**, M. See **De Martino**, G., 2504.
- Aslam**, F. M., **Gore**, P. H., and **Jehangir**, M. Friedel-Crafts acylations of aromatic hydrocarbons. Part XIII. Syntheses of methyl-substituted naphthalenes. Some anomalous Gattermann formylation reactions, 892.
- Asscher**, M. See **Sinnreich**, J., 1543.
- Atkinson**, J. R. See **Cotterill**, W. D., 787, 817.
- Atta-ur-Rahman**. Reactions of harmaline (4,9-dihydro-7-methoxy-1-methyl-3*H*-pyrido[3,4-*b*]indole) and its derivatives. Part I. Reactions of harmaline with methyl acrylate. Part II. Reinvestigation of acetylharmaline, 731, 736.
- Aversa**, M. C., **Cum**, G., **Stagno d'Alcontres**, I., and **Uccella**, N. Cycloaddition reactions of cumulenes. Part III. Diketen as an allene-like system in the reaction with an azomethine oxide, 222.
- Aylward**, J. B. See **Norman**, R. O. C., 1692.
- Ayres**, D. C., **Harris**, J. A., **Jenkins**, P. N., and **Phillips**, L. Lignans and related phenols. Part XII. Application of nuclear magnetic resonance to the aryltetrahydronaphthalene class, 1343.
- Ayres**, D. C., and **Lim**, C. K. Lignans and related phenols. Part XIII. Halogenated derivatives of podophyllotoxin, 1350.

B

- Bachi**, M. D. Some new aspects in the chemistry of 4-alkylidene- Δ^2 -thiazolin-5-ones, 310.
- Bachi**, M. D., and **Goldberg**, O. Studies related to penicillins and cephalosporins. Part II. An approach to the synthesis of β -lactam antibiotics, 2332.
- Bachi**, M. D., and **Rothfield**, M. Studies related to penicillins and cephalosporins. Part I. The preparation of 4-alkylthio- β -lactams in which the ring nitrogen atom is part of an α -amino-acid ester system, 2326.
- Bacon**, R. G. R., and **Hamilton**, S. D. Metal ions and complexes in organic reactions. Part XIV. Syntheses of *NN'*-bisdiarylphenylenediamines, 2391.
- Baddar**, F. G., **Nosseir**, M. H., **Doss**, N. L., and **Messiha**, N. N. Pyridazines. Part IV. Action of Grignard reagents on 6-methyl- and 4,5-dihydro-6- α -styryl-pyridazin-3(2*H*)-ones, 1091.
- Bagnall**, R. D., **Coe**, P. L., and **Tatlow**, J. C. Fluorinations with potassium tetrafluorocobaltate(III). Part II. Fluorination of ketones, 2277.
- Baigrie**, B., **Cadogan**, J. I. G., **Mitchell**, J. R., **Robertson**, A. K., and **Sharp**, J. T. Simple, convenient, and direct conversion of anilines and anilides into arynes, 2563.
- Bailey**, A. S., **Buckley**, A. J., and **Warr**, W. A. Reactions of some 1,3-disubstituted indoles and of 3-methylindole with arylsulphonyl azides, 1626.
- Bailey**, A. S., **Buckley**, A. J., **Warr**, W. A., and **Wedgwood**, J. J. The reactions of arenesulphonyl azides with indole and with 1-methylindole, 2411.
- Bailey**, A. S., **Holton**, A. G., and **Seager**, J. F. The reaction of 1,2,3,4-tetrahydro-2,5-dimethyl-5*H*-pyrido[4,3-*b*]indole with arenesulphonyl azides, 1003.
- Baker**, A. J., **Brown**, J., and **Raphael**, R. A. Synthesis of compounds related to gibberellins. Part I. Methyl 3-methoxy-6 β -methyl-16-methylene-9 α *H*-gibba-1(10),2,4-triene-4-carboxylate, 1256.
- Baker**, K. M., **Briggs**, L. H., **Buchanan**, J. G. St. C., **Cambie**, R. C., **Davis**, B. R., **Hayward**, R. C., **Long**, G. A. S., and **Rutledge**, P. S. Diterpenes. Part X. Some transformations of phyllocladene and isophyllocladene, 190.
- Baldas**, J., **Bick**, I. R. C., **Falco**, M. R., **de Vries**, J. X., and **Porter**, Q. N. Mass spectrometry of bisbenzylisoquinoline alkaloids. Part II. Alkaloids derived from one coclaurine and one isococlaurine unit, 597.
- Baldas**, J., **Bick**, I. R. C., **Ibuka**, T., **Kapil**, R. S., and **Porter**, Q. N. Mass spectrometry of bisbenzylisoquinoline alkaloids. Part I. Alkaloids derived from coclaurine units joined tail-to-tail. Part III. Alkaloids derived from coclaurine units joined head-to-tail, 592, 599.
- Baldwin**, D., and **Hanson**, J. R. Aromatization of some 4,5-epoxy-3-hydroxysteroids, 1889.
The base-catalysed epoxidation of androst-4-en-6-ones, 2051.

- Banks, R. E., Haszeldine, R. N., and Myerscough, T.** Nitroxide chemistry. Part III. Photolysis of bistrifluoromethyl nitroxide and some reactions of the major product, perfluoro-(2,4-dimethyl-3-oxa-2,4-diazapentane), 1449.
Polyhalogenoallenes. Part IX. Reaction of tetrafluoroallene with bistrifluoromethyl nitroxide and with perfluoro-(2,4-dimethyl-3-oxa-2,4-diazapentane), 2336.
- Banks, R. E., Mullen, K., Nicholson, W. J., Oppenheim, C., and Prakash, A.** *N*-Fluoro-compounds. Part IV. Photochemical and fluoride-initiated reactions between perfluoro-*N*-fluoropiperidine and perfluoropropene, 1098.
- Banks, R. E., and Sparkes, G. R.** Studies in azide chemistry. Part V. Synthesis of 4-azido-2,3,5,6-tetrafluoro-, 4-azido-3-chloro-2,5,6-trifluoro-, and 4-azido-3,5-dichloro-2,6-difluoro-pyridine, and some thermal reactions of the tetrafluoro-compound, 2964.
- Bannister, B.** Modifications of lincomycin involving the carbohydrate portion. Part I. The 2-*O*-methyl and 2-deoxy-analogues. Part II. Analogues with *D*-gluco- and *D*-ido-stereochemistry, 3025, 3031.
- Banthorpe, D. V., Charlwood, B. V., and Young, M. R.** Terpene biosynthesis. Part IV. Biosynthesis of (+)-pulegone in *Mentha pulegioides* L., 1532.
- Banthorpe, D. V., Doonan, H. J., and Wirz-Justice, A.** Terpene biosynthesis. Part V. Interconversions of some monoterpenes in higher plants and their possible role as precursors of carotenoids, 1764.
- Banthorpe, D. V., and Wirz-Justice, A.** Terpene biosynthesis. Part VI. Monoterpenes and carotenoids from tissue cultures of *Tanacetum vulgare* L., 1769.
- Barker, S. A., and Riley, T.** Pyrylium salt formation from aromatic ketones. Part I. Reactions of β -methylchalcones in non-aqueous acidic media, 809.
- Barker, S. A.** See also **Kennedy, J. F.**, 2568.
- Barlin, G. B., and Young, A. C.** Useful preparations involving the reactions of nucleophiles with some trimethylammonio-derivatives of nitrogen heterocycles, 1269.
- Barlow, M. G., Haszeldine, R. N., Morton, W. D., and Woodward, D. R.** Valence-bond isomer chemistry. Part III. Some addition and nucleophilic substitution reactions of hexafluorobicyclo[2,2,0]hexa-2,5-diene, 2170.
- Barot, N. R., and Elvidge, J. A.** Heterocyclic imines and amines. Part XII. Imino-derivatives of piperazine, 1009.
- Barraclough, D., Oakland, J. S., and Scheinmann, F.** Studies in the norbornene series. Part I. Elucidation of the structure of norbornene derivatives by use of the nuclear magnetic resonance shift reagent trisdipivaloylmethanatoeuropium(III), the nuclear Overhauser effect, and mass spectrometry, 1500.
- Barraclough, D. J.** See **Hickmott, P. W.**, 1639.
- Barrett, G. C., Hardy, P. M., Harrow, T. A., and Rydon, H. N.** Polypeptides. Part XXII. The synthesis of peptides of α -benzylphenylalanine by the dicyclohexylcarbodi-imide method, 2634.
- Barrow, K. D., and Murphy, W. S.** The structures of alboleersin and luteoleersin; the identity of luteoleersin with cochlioquinone A, 2837.
- Barry, J. A.** See **Scott, F. L.**, 2663, 2666.
- Bartley, J. P.** See **Briggs, L. H.**, 581.
- Bartnik, T.** See **Buu-Hoi, N. P.**, 263.
- Bartoli, G., Latrofa, A., Naso, F., and Todesco, P. E.** Fluorodenitration of some mildly activated nitro-compounds, 2671.
- Barton, D. H. R., Blair, I. A., and Magnus, P. D.** Ring opening of (–)-pin-2(10)-ene with iodine, 614.
- Barton, D. H. R., Davies, P. J., Kempe, U. M., McGarrity, J. F., and Widdowson, D. A.** Biosynthesis of terpenes and steroids. Part VIII. The synthesis and metabolism in *Saccharomyces cerevisiae* of ergosta-7,22,24(28)-trien-3 β -ol, 1231.
- Barton, D. H. R., Girijavallabhan, M., and Sammes, P. G.** Transformations of penicillin. Part II. *N,N'*-Di-isopropylhydrazine, a new reagent for protection of carboxylic acids, 929.
- Barton, D. H. R., Hesse, R. H., Ogunkoya, L., Westcott, N. D., and Pechet, M. M.** Organic reactions of fluoro-oxy-compounds. Fluorination of griseofulvin, 2889.
- Barton, D. H. R., and Houminer, Y.** A study of base-catalysed opening of $\beta\gamma$ -epoxy-ketones, 919.
- Barton, D. H. R., Kempe, U. M., and Widdowson, D. A.** Investigations on the biosynthesis of steroids and terpenoids. Part VI. The sterols of yeast, 513.
- Barton, D. H. R., MacGrillen, H., Magnus, P. D., Carlisle, C. H., and Timmins, P. A.** Equilibration of 24,25-dibromides of lanosterol and derivatives, 1584.
- Barton, D. H. R., Magnus, P. D., and Okogun, J. I.** Experiments on the synthesis of tetracyclines. Part XII. Extension of the acetal photocyclisation process, 1103.
- Barton, D. H. R., Magnus, P. D., Smith, G., Streckert, G., and Zurr, D.** Experiments on the synthesis of tetracycline. Part XI. Oxidation of ketone acetals and ethers by hydride transfer, 542.
- Barton, D. H. R., Poyser, J. P., and Sammes, P. G.** Some stereoselective and regioselective olefin additions: iodo-acetoxylation and related electrophilic additions across the 22(23)-bond of 3 α ,5 α -cycloergosta-7,22-dien-6-one, 53.
- Barton, D. H. R., and Willis, B. J.** Olefin synthesis by two-fold extrusion processes. Part I. Preliminary experiments, 305.
- Barton, D. H. R.** See also **Allen, J.**, 2994, **Batten, P. L.**, 739, and **Bentley, T. J.**, 749.
- Barton, J. W., Chaudri, T. A., Gaskin, P., and Whitaker, K. E.** Benzocyclo-octenes. Part III. Reactions of 5,10-dibromobenzocyclo-octene, 717.
- Barton, J. W., and Grinham, A. R.** Polycyclic biphenylenes. Part IV. Biphenylenes derived from 9,10-phenanthryne, 634.
- Bastable, J. W., Hobson, J. D., and Riddell, W. D.** Trans-annular cyclisation of cyclo-olefinic *N*-chloro-amines. Synthesis of azabicyclic compounds, 2205.
- Basu, N. K.** See **Mukherjee, S.**, 1325.
- Bateson, J. H., and Cross, B. E.** New metabolites of *Gibberella fujikuroi*. Part XIX. 3 β ,7 β -Dihydroxykaurenolide, 1117.
- Batey, I. L., Pinhey, J. T., Ralph, B. J., Simes, J. J. H., and Wootton, M.** Extractives of fungi. Part III. Introduction of a (*Z*)-17(20)-double bond into a tumulosic acid derivative, 2260.
- Batten, P. L., Bentley, T. J., Boar, R. B., Draper, R. W., McGhie, J. F., and Barton, D. H. R.** The synthesis of some 32-functionalised lanostane derivatives, 739.
- Battersby, A. R., Dobson, T. A., Foulkes, D. M., and Herbert, R. B.** Alkaloid biosynthesis. Part XVI. Colchicine: origin of the tropolone ring and studies with the C₆-C₃-C₆-C₁ system, 1730.

- Battersby, A. R., Herbert, R. B., McDonald, E., Ramage, R., and Clements, J. H.** Alkaloid biosynthesis. Part XVIII. Biosynthesis of colchicine from the 1-phenethylisoquinoline system, 1741.
- Battersby, A. R., Herbert, R. B., Pijewska, L., Šantavý, F., and Sedmera, P.** Alkaloid biosynthesis. Part XVII. The structure and chemistry of androcymbine, 1736.
- Battersby, A. R., Laing, D. G., and Ramage, R.** Biosynthesis. Part XIX. Concerning the biosynthesis of (–)-camphor and (–)-borneol in *Salvia officinalis*, 2743.
- Battersby, A. R.** See also **Strange, P. G.**, 2364, and **Wightman, R. H.**, 2355.
- Baxter, I., Cameron, D. W., Sanders, J. K. M., and Titman, R. B.** Reactions of 2-ethyl- and 2-benzyl-1,4-naphthoquinone with *N*-methylcyclohexylamine, 2046.
- Beddows, C. G., and Wilson, D. V.** Syntheses of some α -D-ribofuranosylimidazoles related to purine nucleotide precursors, 1773.
- Begbie, A. L., and Golding, B. T.** A new synthesis of ethyl 2-methyl-4-oxocyclohex-2-enecarboxylate (Hagemann's ester) and its methyl and *t*-butyl analogues, 602.
- Bell, A. M., Browne, J. W., Denny, W. A., Jones, Sir Ewart R. H., Kasal, A., and Meakins, G. D.** Microbiological hydroxylation of steroids. Part VI. Hydroxylation of simple mono- and di-oxygenated 5 α -androstanes and of 3-oxoestrans with the fungus *Aspergillus ochraceus*, 2930.
- Bell, A. M., Cherry, P. C., Clark, I. M., Denny, W. A., Jones, Sir Ewart R. H., Meakins, G. D., and Woodgate, P. D.** Microbiological hydroxylation of steroids. Part IV. The pattern of dihydroxylation of mono-oxygenated 5 α -androstanes with cultures of the fungus *Calonectria decora*, 2081.
- Bell, A. M., Denny, W. A., Jones, Sir Ewart R. H., Meakins, G. D., and Müller, W. E.** Microbiological hydroxylation of steroids. Part V. The pattern of hydroxylation of dioxygenated 5 α -androstanes with cultures of the fungus *Calonectria decora*, 2759.
- Bellamy, A. J.** One-step synthesis of *cis*-5,6-dideuterio-*cis*-cyclo-octene and its thermal stability towards concerted, intramolecular transfer of hydrogen, 342.
- Bellino, A.** See **Piozzi, F.**, 759.
- Benati, L., Camaggi, C. M., and Zanardi, G.** Homolytic substitution of halogenobenzenes by arylthio- and arylsulphonyl radicals, 2817.
- Bendall, V. I., and Dharamshi, S. S.** A convenient synthesis of 2-aryllindenes, 2732.
- Bender, C. O., Bonnett, R., and Smith, R. G.** The formation of metal octamethyltetraabenzporphyrins from isoindole precursors, 771.
- Bennett, P., Donnelly, J. A., Meaney, D. C., and O'Boyle, P.** Stereochemistry of cyclopropyl ketones from the reaction of dimethylsulphoxonium methylide with 3-benzylidenechroman-4-ones, 1554.
Acid-catalysed rearrangements of some spiro cyclopropyl ketones, 2982.
- Bentley, K. W., Kirby, G. W., Price, A. P., and Singh, S.** Nitrosation of thebaine leading to 7-substituted neopinone derivatives, 302.
- Bentley, K. W., Lewis, J. W., and Smith, A. C. B.** Novel analgesics and molecular rearrangements in the morphine-thebaine group. Part XXIII. Adducts of thebaine with divinyl sulphone and with methyl vinyl sulphone, 870.
- Bentley, T. J., Boar, R. B., Draper, R. W., McGhie, J. F., and Barton, D. H. R.** The synthesis and configuration of some 32-norlanosterol derivatives, 749.
- Bentley, T. J.** See also **Batten, P. L.**, 739.
- Béranger, S.** See **Buu-Hoï, N. P.**, 278.
- Bergmann, F.** See **Lichtenberg, D.**, 2950.
- Berry, D., and Smith, D. C. C.** 2*H*-Naphtho[1,8-*bc*]furan and 8-hydroxy-1-naphthaldehyde, 699.
- Berry, D. J., Cook, J. D., and Wakefield, B. J.** Polyhalogenoaromatic compounds. Part XXIV. The reaction of chloropyridyl-lithium compounds with nitriles as a route to triazanaphthalenes, 2190.
- Bethell, G. S., and Ferrier, R. J.** Direct conversion of 3,5,6-tri-*O*-benzoyl-1,2-*O*-isopropylidene- α -D-glucose into 4,5,6-tri-*O*-benzoyl-2,3-di-*S*-ethyl-2,3-dithio-D-allose diethyl dithioacetal, 1033.
The path of the conversion of 3,5,6-tri-*O*-benzoyl-1,2-*O*-isopropylidene- α -D-glucose into 4,5,6-tri-*O*-benzoyl-2,3-di-*S*-ethyl-2,3-dithio-D-allose diethyl dithioacetal, 2873.
- Bettelli, A.** See **Ferruti, P.**, 2001.
- Bianchetti, G., Stradi, R., and Pocar, D.** *v*-Triazolines. Part III. *cis-trans* Equilibrium of 1-aryl-4,5-dihydro-*v*-triazoles, 997.
- Bianchi, G., De Micheli, C., and Gandolfi, R.** 2-Isioxazoline derivatives. Part V. Regio- and stereo-selectivity in the cycloaddition of benzonitrile oxide to some cycloalkene and 2-isoxazoline derivatives, 1711.
- Bick, I. R. C., Bremner, J. B., Leow, H. M., and Wiriyaichitra P.** Alkaloids of *Daphnandra* species. Part XI. Some dibenzo-*p*-dioxin-type biscoclaurine alkaloids from an unnamed species. The structure of micranthine, 2884.
- Bick, I. R. C.** See also **Baldas, J.**, 592, 597, 599.
- Bigot, P., Saint-Ruf, G., and Buu-Hoï, N. P.** Carcinogenic nitrogen compounds. Part LXXXII. Polycyclic indoles by means of the Möhlau-Bischler synthesis, 2573.
- Binns, S. H.** See **Ames, D. E.**, 255.
- Biondi, L.** See **Toniolo, C.**, 1179, 1182.
- Birch, A. J., Brown, W. V., Corrie, J. E. T., and Moore, B. P.** Neocembrene-A, a termite trail pheromone, 2653.
- Birch, A. J., Corrie, J. E. T., Macdonald, P. L., and Subba Rao, G.** A total synthesis of (\pm)-ethyl acorate {(\pm)-ethyl (3*RS*)-3-[(1*SR*,4*SR*)-1-isobutyl-4-methyl-3-oxocyclohexyl]butyrate} and (\pm)-epiacoric acid. An application of the generation and alkylation of a specific enolate, 1186.
- Birch, A. J., and Hutchinson, E. G.** Reduction by dissolving metals. Part XVIII. Metal-ammonia reductions of some bicyclo[2,2,2]octene derivatives: structural effects on double bond reduction and nitrile cleavage, 1546.
- Birchall, J. M., Clark, M. T., Goldwhite, H., and Thorpe, D. H.** Rearrangements of diphenylamine derivatives. Part III. The Reilly-Hickinbottom rearrangement, 2579.
- Bird, C. W., Partridge, I., and Wong, D. Y.** The photochemistry of some *N*-(2-methyl-4,6-diphenyl-1-pyridinio)-anilides, 1020.
- Bishop, D. C.** See **Glover, E. E.**, 2927.
- Blair, I. A.** See **Barton, D. H. R.**, 614.
- Blair, J. A., and Gardner, R. J.** A novel synthesis of a diaziridine, 485.
- Blake, K. W., Porter, A. E. A., and Sammes, P. G.** Pyrazine chemistry. Part IV. Thermal [1,4] eliminations from 3,6-dihydropyrazines, 2494.
- Blaney, F., Faulkner, D., McKervey, M. A., and Step, G.** The π -route to substituted adamantanes. Part II, 2697.
- Blatchly, J. M., Green, R. J. S., and McOmie, J. F. W.** Thiele-Winter acetoxylation of quinones. Part IV. Quinones containing one or more *t*-butyl groups, 2286.

- Block, P., jun., and Coy, D. H.** Thyroxine analogues: synthesis of 3,3',5,5'-tetramethyl-L-thyronine, 633.
- Bloodworth, A. J., and Bunce, R. J.** Oxymetallation. Part IV. The reaction of derivatives from the *t*-butylperoxymercuration of $\alpha\beta$ -unsaturated esters and ketones with sodium borohydride, 2787.
- Bloodworth, A. J., and Bylina, G. S.** Oxymetallation. Part III. Competitive epoxidation during the hydrido-demercuration of β -mercurated dialkyl peroxides with sodium borohydride, 2433.
- Boar, R. B., Lewis, D. A., and McGhie, J. F.** Epoxides of lanosterol and some related compounds, 2231.
- Boar, R. B., McGhie, J. F., and Lewis, D. A.** The C-8 epimers of 7-oxo-5 α -lanost-9(11)-en-3 β -yl acetate, 2590.
- Boar, R. B.** See also Allen, J., 2994, Batten, P. L., 739, and Bentley, T. J., 749.
- Bognár, R., Makleit, S., Zsupán, K., Brown, B. O., Lockley, W. J. S., Toube, T. P., and Weedon, B. C. L.** Flavofungin: a mixture of 13,15,17,19,21,23,25,27-octahydroxy-31-isopropyl-14-methyl- and 13,15,17,19,21,23,25,27-octahydroxy-14-methyl-31-*s*-butyl-hentriaconta-2,4,6,8,10,28-hexaen-31-olide, 1848.
- Bone, J. A., Pritt, J. R., and Whiting, M. C.** Preparation of the 5-methyladamantan-2-ols and the 2,5-dimethyladamantan-2-ols, 2644.
- Bonini, B. F., Maccagnani, G., Wagenaar, A., Thijs, L., and Zwanenburg, B.** Sulphines. Part IV. Reactions of aromatic sulphines with diazoalkanes, 2490.
- Bonner, T. G., Hancock, R. A., and Roberts, J. C.** The *N*-nitroxymethyl derivatives of 1,3-dinitroperhydro-1,3,5-triazine, piperidine, and succinimide, 1902.
- Bonnett, R., and Dimsdale, M. J.** The *meso*-reactivity of porphyrins and related compounds. Part V. The *meso*-oxidation of metalloporphyrins, 2540.
- Bonnett, R.** See also Bender, C. O., 771.
- Borremans, F.** See Anteunis, M., 616.
- Borrow, A.** See Aldridge, D. C., 2136.
- Bose, A. K.** See Singh, Harkishan, 993.
- Bosworth, N., and Magnus, P. D.** Studies on terpenes. Part I. Rearrangement of 7-oxatricyclo[4,3,0,0^{8,9}]-nonanes into 8-substituted 1,3,3-trimethylnorbornane derivatives, 943.
- Boulton, A. J.** See Ackrell, J., 1587.
- Bourne, E. J., Finch, P., and Nagpurkar, A. G.** The synthesis and hydrolytic stability of 1-glucopyranosylimidazoles, 2202.
- Bowen, I. H., Gupta, P., Khan, M. S., and Lewis, J. R.** Oxidative coupling. Part X. Cyclisations of 2-aminobenzophenones, 2524.
- Bowen, I. H., and Lewis, J. R.** Oxidative coupling. Part IX. Cyclisation involving 3-aminobenzophenones, 683.
- Bowie, R. A., Gardner, M. D., Neilson, D. G., Watson, K. M., Mahmood, S., and Ridd, V.** Studies on some symmetrically and unsymmetrically 3,6-disubstituted 1,2-dihydro-1,2,4,5-tetrazines including their conversion into the corresponding tetrazines and 3,5-disubstituted 4-amino-1,2,4-triazoles, 2395.
- Bowie, R. A., Mullan, M. J. C., and Unsworth, J. F.** Ring transformations involving chloroheterocycles. Part I. Reaction of chloronaphthyridines with hydrazine hydrate, 1106.
- Bowie, R. A., and Thomason, D. A.** Ring transformations involving chloroheterocycles. Part III. Reaction of 4-chloroquinazolines with hydrazines, 1842.
- Bowie, R. A., and Wright, B.** Ring transformations involving chloroheterocycles. Part II. Reaction of 4-chloro-1,8-naphthyridines and 4-chloroquinolines with substituted hydrazines, 1109.
- Bowman, R. E., Evans, D. D., Guyett, J., Nagy, H., Weale, J., Weyell, D. J., and White, A. C.** 1,3,4,5-Tetrahydrobenz[*cd*]indoles and related compounds. Part II, 1926.
- Bowman, R. E., Goodhurn, T. G., and Reynolds, A. A.** 1,3,4,5-Tetrahydrobenz[*cd*]indoles and related compounds. Part I. A new synthesis of 3,4-dihydrobenz[*cd*]indol-5(1*H*)-one (Uhle's ketone), 1121.
- Bowman, R. E., Thrift, R. I., Weale, J., and White, A. C.** Preparation and cyclisation of some 3-aza-1,5-diketones, 2878.
- Boyce, R., Murphy, W. S., and Klein, K. P.** 1,1-Diphenylalkenes. Part II. Alkylation of 1,1-diphenylpropene carbanions. The principle of least motion, 1292.
- Boyd, G. V., and Dando, S. R.** The action of Δ^2 -oxazolin-5-ones on 1,3,4-oxadiazolium salts, 777.
Formation of benzanilides from pyrylium salts and 2-phenyl- Δ^2 -oxazolin-5-one, 1142.
- Boyd, G. V., and Wright, P. H.** Cyclisation of α -acylamino-acids in the presence of perchloric acid to give 5-oxo- Δ^2 -oxazolinium perchlorates, 909.
Unstable mesoionic oxazolium-5-oxides, 914.
Synthesis of *N*-(4-arylmethylene- Δ^2 -oxazolin-5-ylidene)-ammonium salts and their conversion into 5-imino- Δ^2 -oxazolines and 1,3-diazafulvenes, 1140.
- Boyd, J., and Overton, K. H.** 1,3-Elimination with rearrangement during ester pyrolysis. A simple route to protoadamantene and 2,4-didehydroadamantane, 2533.
- Boyle, P. H., Coy, J. H., and Dobbs, H. N.** Reaction of allyl and benzyl alcohols, and their toluene-*p*-sulphonates, with furan, 1617.
- Bradamante, S., Maiorana, S., and Pagani, G.** Reaction of prop-2-ene-1-sulphonyl chloride with enamines: vinylthietan 1,1-dioxides and allylsulphonyl enamines as precursors of thiopyran 1,1-dioxides, 282.
- Bradbury, S., Rees, C. W., and Storr, R. C.** Reactive intermediates. Part XVI. Dihydrobenz[*cd*]indazoles and attempted routes to benz[*cd*]indazole. Part XVII. Conversion of *peri*-substituted azidonaphthalenes into naphthoxazoles, 1,2-dihydrobenz[*cd*]indazoles and perimidines, 68, 72.
- Bradley, G., Clark, J., and Kernick, W.** 2,3-Dihydroquinolin-4(1*H*)-ones. Part I. Halogen-substituted 2,3-dihydroquinolin-4(1*H*)-ones and their 1-(2-acylethyl) derivatives, 2019.
- Bramwell, A. F., Payne, I. M., Riezebos, G., Ward, P., and Wells, R. D.** Nuclear chlorination of alkylpyrazines, 2004.
- Bratby, D. M., and Fray, G. I.** Stereochemistry of the 2 : 1 [4 + 2] adducts of tetrachlorocyclopentadienone acetals with cyclohepta-1,3,5-triene, tropone, cyclohexa-1,4-diene, and *p*-benzoquinone, 195.
- Bremner, J. B.** See Bick, I. R. C., 2884.
- Brette, R.** Citric acid chloralide, 611.
- Brewster, K., Chittenden, R. A., Pinder, R. M., and Skeels, M.** Structure of the indene-3-acetic acids. Part II. Reformatsky reactions of 6-benzyloxy-, 5,6-dimethoxy-, and 6-methoxy-indan-1-ones, 941.
- Bridson, J. N.** See Acheson, R. M., 968, 1569.
- Briggs, L. H., Bartley, J. P., and Rutledge, P. S.** The identification of Marker's ' α -ketodihydrolanosteryl acetate' as 3 β -acetoxylanost-9(11)-en-7-one, 581.

- Briggs, L. H., Castaing, D. R., Denyer, A. N., Orgias, E. F., and Small, C. W.** Chemistry of fungi. Part VIII. Constituents of *Valsaria rubricosa* and the identification of papulosin with valsarin, 1464.
- Briggs, L. H.** See also **Baker, K. M.**, 190.
- Brimacombe, J. S., Doner, L. W., and Rollins, A. J.** Syntheses of methyl 2,3,6-trideoxy- α -L-erythro-hexapyranoside (methyl α -L-amicetoside) and methyl 2,3,4,6-tetra-deoxy-4-(dimethylamino)- α -L-threo-hexopyranoside (methyl α -L-ossaminide), 2977.
- Brimacombe, J. S.** See also **Al-Radhi, A. K.**, 315.
- Britten, A. Z., and Smith, G. F.** Autoxidation of 3,3'-dimethyl-2,2'-bi-indolyl, 418.
- Broadhurst, M. J., Grigg, R., and Johnson, A. W.** Sulphur extrusion reactions applied to the synthesis of corroles and related systems, 1124.
The synthesis of 22 π -electron macrocycles. Sapphyrins and related compounds, 2111.
- Broadhurst, M. J., Grigg, R., Shelton, G., and Johnson, A. W.** Protonation, alkylation, and acetylation of corroles and 21,24-dioxacorroles, 143.
- Brooks, J. S., and Morrison, G. A.** Naturally occurring compounds related to phenalenone. Part III. The structure of herqueinone and norherqueinone and their relationships with isotherqueinone and isonorherqueinone. Part IV. Some transformations and molecular rearrangements of compounds in the herqueinone series, 421, 2990.
- Brouwer, W. G., Craig, W. A., Jeffreys, J. A. D., and Munro, A.** The reaction between isatin and some amines, 124.
- Brown, A. G., and Smale, T. C.** Synthesis of (\pm)-versimide [methyl α -(methylsuccinimido)acrylate] and related compounds, 65.
- Brown, B. O.** See **Bognár, R.**, 1848.
- Brown, D. J., and Hoskins, J. A.** Simple pyrimidines. Part XIV. The formation and reactions of some derivatives of simple pyrimidine-sulphonic acids, 522.
- Brown, D. J., Jones, R. L., Angyal, A. M., and Grigg, G. W.** Purine studies. Part VII. The synthesis of purines as amplifiers of phleomycin against *E. coli*, 1819.
- Brown, D. J., and Kershaw, J. R.** Aza-analogues of pteridine. Part VI. Some 3-alkyl-5-(and 7)-aminopyrimido-[5,4-*e*]-*as*-triazines and related compounds, 2316.
- Brown, D. J., and Sugimoto, T.** Aza-analogues of pteridine. Part V. 5-Alkylaminopyrimido[5,4-*e*]-*as*-triazines from 5-alkyl or 5-unsubstituted analogues *via* 5,6-adducts with amines, 237.
- Brown, D. M., and Taylor, C. M.** The synthesis of some 1-substituted cytosine and uracil derivatives, 2385.
- Brown, J.** See **Baker, A. J.**, 1256.
- Brown, J. P.** See **Weringa, W. D.**, 443.
- Brown, P. J. N., Stephens, R., Tatlow, J. C., and Taylor, J. R.** Polyfluorobicyclo[2,2,1]heptanes. Part V. Syntheses using bridgehead carbanions generated by removal of bridgehead hydrogen with aqueous bases, 937.
- Brown, P. M., Dewar, P. S., Forrester, A. R., and Thomson, R. H.** Persulphate oxidations. Part V. Oxidation of *o*-(arylothio)- and *o*-(arylsulphonyl)-benzoic acids, 2842.
- Brown, R. C.** See **Ackrell, J.**, 1587.
- Brown, W. V.** See **Birch, A. J.**, 2653.
- Browne, J. W.** See **Bell, A. M.**, 2930.
- Browne, P. A., and Hall, D. M.** Optical stabilities of some *oo'*-bridged *oo'*-dichlorobiphenyls, 2717.
- Bruce, J. M., and Chaudhry, A.** Light-induced and related reactions of quinones. Part IX. *t*-Butyl-1,4-benzoquinones, 372.
- Bruce, S. E., and Gall, R. E.** Acetolytic cleavage of the epimeric 2- and 6-methoxy-5 α -cholestanes involving a 1,2-hydride shift to C-2, 2319.
- Brunskill, J. S. A.** Some cyano-amides and dicyanoglutaconimides derived from pyridine aldehydes, 2946.
- Buchanan, J. G. St. C.** See **Baker, K. M.**, 190.
- Buckley, A. J.** See **Bailey, A. S.**, 1626, 2411.
- Buggle, K., Philbin, E. M., and Ryan, N. D.** Reactions of β -benzylthio- and β -benzylsulphonyl-cinnamic acids and esters, 2630.
- Bull, J. R.** Steroidal analogues of unnatural configuration. Part IV. Stereoselective additions to the 5,6-bond of 4,4,14 α -trimethyl-19(10 \rightarrow 9 β)-*abeo*-10 α -pregn-5-enes and correlation with the related 19-nor-10 α -series, 627.
- Bunce, R. J.** See **Bloodworth, A. J.**, 2787.
- Burdon, J., Coe, P. L., Marsh, C. R., and Tatlow, J. C.** Reactions of organocopper compounds. Part I, 639.
Aromatic polyfluoro-compounds. Part LIV. Copper-assisted nucleophilic displacement reactions of pentafluorohalogenobenzenes, 763.
- Busby, R. E., and Huckle, D.** Heterocyclic cyclophanes. Part I. Thiacyclophanes from thiols, 1705.
- Butler, R. N., Lambe, T. M., and Scott, F. L.** Reactions of bromine and lead tetra-acetate with 2-(substituted hydrazino)-5-phenyl-1,3,4-oxadiazoles: routes to 3-aryl-6-phenyl-1,2,4-triazolo[3,4-*b*][1,3,4]oxadiazoles, 269.
- Butler, R. N., O'Sullivan, P., and Scott, F. L.** The reactions of substituted benzothiazol-2-ylhydrazones with bromine: a route to *s*-triazolo[3,4-*b*][1,3]benzothiazoles, 1519.
- Butler, R. N.** See also **Scott, F. L.**, 1918.
- Butterworth, J. H., Morgan, E. D., and Percy, G. R.** The structure of azadirachtin; the functional groups, 2445.
- Buu-Hoï, N. P., Croisy, A., Jacquignon, P., Hien, D.-P., Martani, A., and Ricci, A.** Carcinogenic nitrogen compounds. Part LXXX. [1]Benzopyrano[4,3-*b*]indoles and 6*H*-[1]benzopyrano[4,3-*b*]quinolines, 1266.
- Buu-Hoï, N. P., Jacquignon, P., Mangane, M., Béranger, S., and Pinhas, H.** Synthesis, properties, and electron impact fragmentation of fluorinated 1-arylbiguanides, 278.
- Buu-Hoï, N. P., Jacquignon, P., Thang, D. C., and Bartnik, T.** Carcinogenic nitrogen compounds. Part LXXV. Skraup reactions with some polycyclic amines, and two cases of anti-Marcwald orientation, 263.
- Buu-Hoï, N. P., Périn-Roussel, O., and Jacquignon, P.** Carcinogenic nitrogen compounds. Part LXXIII. Cyclisation of 12-(*o*-chloroaryl)benz[*a*]acridines: a route to new condensed acridines derived from naphtho[2,1,8-*def*]quinoline (1-azapyrene), 234.
- Buu-Hoï, N. P., Périn-Roussel, O., Jacquignon, P., and Cheutin, A.** Carcinogenic nitrogen compounds. Part LXXIX. A route to new condensed acridines containing a cyclopent[*kl*]acridine nucleus, 1263.
- Buu-Hoï, N. P.** See also **André, J.**, 1261, **Bigot, P.**, 2573, **Dufour, M.**, 527, **Perche, J.-C.**, 260, **Périn-Roussel, O.**, 531, and **Thang, D. C.**, 1932.
- Bycroft, B. W., Cameron, D., Croft, L. R., Hassanali-Walji, A., Johnson, A. W., and Webb, T.** Viomycin. Part II. The structure of the chromophore, 827.
- Bycroft, B. W., Croft, L. R., Johnson, A. W., and Webb, T.** Viomycin. Part I. The structure of the guanidine-containing unit, 820.
- Bylina, G. S.** See **Bloodworth, A. J.**, 2433.

C

- Cadogan, J. I. G., Hibbert, P. G., Siddiqui, M. N. U., and Smith, D. M.** Novel redox reactions of diazonium fluoroborates. The formation of copper salt-azo-compound complexes: water-induced free radical aromatic arylation, 2555.
- Cadogan, J. I. G., Mitchell, J. R., and Sharp, J. T.** Acyl-arylnitrosamines. Part VI. Anomalous reactions with 2,5-dimethylfuran: the formation of 2-benzyl-5-methylfurans and 3-acetyl-1-aryl-4-arylazo-5-methylpyrazoles, 1304.
- Cadogan, J. I. G., Smith, D. M., and Thomson, J. B.** Acyl-arylnitrosamines. Part V. Decompositions of *N*-nitrosobenzenilides in carbon tetrachloride and benzene: the formation of carboxylic acids, anhydrides, and arynes, 1296.
- Cadogan, J. I. G.** See also **Baigrie, B.**, 2563.
- Caglioti, L., Ciranni, G., Misiti, D., Arcamone, F., and Minghetti, A.** Biosynthesis of the 3,4-dihydroxy-2,2-dimethyl-5-phenylvaleric acid residue of neoantimycin, 1235.
- Calderbank, A., Charlton, D. F., Farrington, J. A., and James, R.** Bipyridylum quaternary salts and related compounds. Part IV. Pyridones derived from paraquat and diquat, 138.
- Caló, V., Ciminale, F., Lopez, L., Naso, F., and Todesco, P. E.** Direct monobromination of imidazole and *N*-methylimidazole, 2567.
- Caló, V., Lopez, L., and Todesco, P. E.** Synthesis of carbonyl compounds *via* transamination of Schiff bases, 1652.
- Calvin, M.** See **Cavaliere, E.**, 1253.
- Camaggi, C. M.** See **Benati, L.**, 2817.
- Cambie, R. C.** See **Baker, K. M.**, 190.
- Cameron, D.** See **Bycroft, B. W.**, 827.
- Cameron, D. W.** See **Baxter, I.**, 2046.
- Cameron, T. S.** See **Acheson, R. M.**, 968.
- Campbell, N., and Wilson, N. H.** Friedel-Crafts acetylation of 3-methylfluoroanthene, 2739.
- Campbell, N.** See also **Andrew, H. F.**, 755.
- Can, C. X.** See **Thang, D. C.**, 1932.
- Cañas-Rodríguez, A.** Hydrogenations with palladium precipitated in the presence of the substrate, 554.
- Cann, P. F., Warren, S., and Williams, M. R.** Electrophilic substitution at phosphorus: reactions of diphenylphosphinyl systems with carbonyl compounds, 2377.
- Cannon, J. R., Cresp, T. M., Metcalf, B. W., Sargent, M. V., and Elix, J. A.** The structure and synthesis of 2-hydroxy-4-methoxy-6-methylphenyl 3-hydroxy-5-methylphenyl ether (LL-V125 α), a fungal diaryl ether, 1200.
- Canonica, L., Kroszczyński, W., Ranzi, B. M., Rindone, B., Santaniello, E., and Scolastico, C.** Biosynthesis of mycophenolic acid, 2639.
- Capozzi, G., and Modena, G.** Reactivity of vinyl sulphonic esters. Part IX. Cyclisation of aryloxyvinyl *p*-bromobenzenesulphonates to benzo[*b*]furans, 216.
- Capozzi, G., Modena, G., and Ronzini, L.** Reactivity of vinyl sulphonic esters. Part XI. Behaviour of amino-vinyl *p*-bromobenzenesulphonates, 1136.
- Carlisle, C. H.** See **Barton, D. H. R.**, 1584.
- Carnduff, J., Miller, J. A., Stockdale, B. R., Larkin, J., Nonhebel, D. C., and Wood, H. C. S.** Synthesis and reactions of 3,3-dimethylallyl derivatives of acetylacetone and other poly- β -carbonyl compounds, 692.
- Carrington, D. E. L., Clarke, K., Hughes, C. G., and Scrowston, R. M.** 1,2-Benzisothiazoles. Part III. 3-Substituted derivatives, 3006.
- Carrington, R. A. G.** See **Davies, J. H.**, 1983.
- Carvalho, M. L.** Bisjatrorrhizine, a new dimeric protoberberine alkaloid from *Jatrorrhiza palmata* [Lam.] Miers, 327.
- Castaing, D. R.** See **Briggs, L. H.**, 1464.
- Casy, A. F., and McErlane, K. M. J.** Stereochemistry of isomeric 1,2,5-trimethyl-4-phenylpiperidin-4-ols: a ^1H nuclear magnetic resonance study, 334.
Diastereoisomeric esters of 1,2-dimethyl-4-phenylpiperidin-4-ol and related compounds, 726.
- Casy, A. F.** See also **McErlane, K. M. J.**, 339.
- Cavaliere, E., and Calvin, M.** 220 MHz Nuclear magnetic resonance analysis and selective deutero-deprotonation of benzo[*a*]pyrene and 6-methylbenzo[*a*]pyrene, 1253.
- Cecil, T. R.** See **Acheson, R. M.**, 1569.
- Čeković, Z.** See **Mihailović, M. L.**, 2460.
- Chadwick, D. J., Chambers, J., Meakins, G. D., and Snowden, R. L.** Preparation of thiophen esters by the Hinsberg reaction, 2079.
- Chadwick, D. J., Cottrell, W. R. T., and Meakins, G. D.** Nitro-steroids. Part VI. The structure of 5 α -cholestano[2,3-*c*]furan 2'-oxide, and the preparation of 6-nitro-5 α -cholestan-7-ones, 655.
- Chadwick, J. C.** See **Akhtar, M.**, 1778.
- Chambers, J.** See **Chadwick, D. J.**, 2079.
- Chambers, R. D., and Clark, M.** Polyfluoroaryl organometallic compounds. Part XVI. Reactions of organolithium compounds with halogenated benzils, 2469.
- Chambers, R. D., Clark, M., and Spring, D. J.** Polyfluoroaryl organometallic compounds. Part XV. Synthesis and rearrangement of polyhalogenoaryl α -diketones, 2464.
- Chambers, R. D., Corbally, R. P., and Musgrave, W. K. R.** Reactions involving fluoride ion. Part IV. Synthesis and rearrangement of perfluoroisopropylpyridines, 1281.
- Chambers, R. D., Corbally, R. P., Musgrave, W. K. R., Jackson, J. A., and Matthews, R. S.** Reactions involving fluoride ion. Part V. Synthesis of perfluoroisopropylquinolines, 1286.
- Chapman, N. B., Clarke, K., and Manolis, A.** Some reactions of 7-chloro-3-methylbenzo[*b*]thiophen, 1404.
Some reactions of 7-hydroxy- and 7-mercapto-3-methylbenzo[*b*]thiophen, 2593.
- Chapman, N. B., Scrowston, R. M., and Sutton, T. M.** Synthesis of the sulphur analogue of psilocin and some related compounds, 3011.
- Charlton, D. F.** See **Calderbank, A.**, 138.
- Charlwood, B. V.** See **Banthorpe, D. V.**, 1532.
- Chaudhry, A.** See **Bruce, J. M.**, 372.
- Chaudri, T. A.** See **Barton, J. W.**, 717.
- Chelli, M.** See **Rapi, G.**, 502.
- Chen, C. T.** See **Manhas, M. S.**, 2119.
- Cherry, P. C.** See **Bell, A. M.**, 2081.
- Cheutin, A.** See **Buu-Hoi, N. P.**, 1263.
- Chhabra, S. R.** See **Uff, B. C.**, 479.
- Chip, G. K., and Grossert, J. S.** Aryl thallation as a route to substituted 1,4-benzoquinones, 1629.
- Chippendale, K. E., Iddon, B., and Suschitzky, H.** Condensed thiophen ring systems. Part VIII. Intramolecular cyclisation of azido- and nitro-substituted 2-arylbenzo[*b*]thiophens; new routes to 10*H*-[1]benzothieno[3,2-*b*]indoles. Part IX. Synthesis and some reactions of [1]benzothieno[3,2-*c*]cinnolines, 2023, 2030.

- Chittenden, R. A.** See **Brewster, K.**, 941.
- Chothia, D. S.** See **Merchant, J. R.**, 932.
- Ciminale, F.** See **Caló, V.**, 2567.
- Cinquini, M., and Colonna, S.** Synthesis of α -halogeno-sulphoxides, 1883.
- Cinquini, M., Colonna, S., Fornasier, R., and Montanari, F.** Stereochemistry of α -halogeno-sulphoxides. Part I. Inversion of chirality at the sulphinyl sulphur atom in a reaction not involving the breaking of the sulphinyl bonds at the chiral sulphur atom, 1886.
- Cinquini, M.** See also **Annunziata, R.**, 2057.
- Ciranni, G.** See **Caglioti, L.**, 1235.
- Clark, I. M., Clegg, A. S., Denny, W. A., Jones, Sir Ewart R. H., Meakins, G. D., and Pendlebury, A.** Studies in the steroid group. Part LXXXIII. 1-, 2-, 3-, 4-, 6-, 12-, 15-, and 16-monohydroxy-5 α -androstanes and their derivatives, 499.
- Clark, I. M., Denny, W. A., Jones, Sir Ewart R. H., Meakins, G. D., Pendlebury, A., and Pinhey, J. T.** Studies in the steroid group. Part LXXXIV. Preparation and reactions of 15-oxygenated androstanes, 2765.
- Clark, I. M.** See also **Bell, A. M.**, 2081.
- Clark, J., and Smith, C.** Heterocyclic studies. Part XXVI. Cleavage of pyrimido[5,4-*e*]-as-triazin-5(6H)-one by nucleophiles, 247.
- Clark, J.** See also **Bradley, G.**, 2019.
- Clark, M.** See **Chambers, R. D.**, 2464, 2469.
- Clark, M. J.** See **Armitage, D. A.**, 680.
- Clark, M. T.** See **Birchall, J. M.**, 2579.
- Clarke, K.** See **Carrington, D. E. L.**, 3006, and **Chapman, N. B.**, 1404, 2593.
- Clegg, A. S., Denny, W. A., Jones, Sir Ewart, R. H., Kumar, V., Meakins, G. D., and Thomas, V. E. M.** Studies in the steroid group. Part LXXXII. The preparation of nine mono- and eight di-oxoandrostanes, 5 α -estran-17-one, and 5 α -pregnane-2,20-dione, 492.
- Clegg, A. S.** See also **Clark, I. M.**, 499.
- Clements, J. H.** See **Battersby, A. R.**, 1741.
- Cloke, C., Pritt, J. R., and Whiting, M. C.** Configurations of the 5-methyladamantan-2-ols and the 2,5-dimethyladamantan-2-ols, 2648.
- Closs, G. L., and Goh, S. H.** Nitrophenylcarbenes. Part II. The generation and reactions of 4-nitrophenylcarbene. Nature of the reactions of 4-nitrobenzyl derivatives with sodium hydroxide, 2103.
- Cochrane, J. S., and Hanson, J. R.** Syntheses of the insect juvenile hormone, 361.
- Cocker, W., Crowley, K. J., and Srinivasan, K.** The chemistry of terpenes. Part XV. Some oxygenated derivatives of *p*-menthane, 1971.
- Coe, P. L.** See **Bagnall, R. D.**, 2277, and **Burdon, J.**, 639, 763.
- Cole, R. F. J., Coxon, J. M., and Hartshorn, M. P.** Optical rotatory dispersion and circular dichroism data for some epicamphor derivatives, 351.
- Coleman, P. C.** See **Drewes, S. E.**, 2148.
- Collins, P. M., Gardiner, D., Kumar, S., and Overend, W. G.** Arylazo-glycosides. Part I. Synthesis and reactions of some 2- and 3-arylazo-derivatives of methyl 4,6-*O*-benzylidene-2,3-dideoxy-D-hex-2-enopyranosides. Part II. Additions of dienes and dimethylsulphoxonium methylide to some 2- and 2-arylazo-derivatives of methyl 4,6-*O*-benzylidene-2,3-dideoxy-D-hex-2-enopyranosides, 2596, 2611.
- Collins, P. M., Gupta, P., and Iyer, R.** The photochemistry of ketones derived from carbohydrates. Part III. Type II reactions of some pyranosid-2- and -3-ulose derivatives, 1670.
- Colonna, S.** See **Annunziata, R.**, 2057, and **Cinquini, M.**, 1883, 1886.
- Colvin, E. W., Martin, J., Parker, W., Raphael, R. A., Shroot, B., and Doyle, M.** Bridged ring systems. Part XVI. A synthetic approach to lycopodium alkaloids, 860.
- Comrie, A. M.** 3,4,5-Triarylpyrazoles, 1193.
- Conant, R.** See **Gent, P. A.**, 248, 277, 1535, 2748.
- Connolly, J. D., and Harding, A. E.** Constituents of erythroxyton species. Part VII. Diterpenoids from *Erythroxyton australe*, 1996.
- Connolly, J. D., Okorie, D. A., and Taylor, D. A. H.** Limonoid extractives from species of *Guarea*. An unusual shielding effect on an acetyl group, 1145.
- Cook, J. D., Foulger, N. J., and Wakefield, B. J.** Polyhalogenoaromatic compounds. Part XXIII. Synthesis and reactions of heptachloro-3-lithio-4,4'-bipyridyl, 995.
- Cook, J. D.** See also **Berry, D. J.**, 2190.
- Cooke, B. J. A.** See **Shoppee, C. W.**, 2271.
- Cooper, G. H., and Moir, L. E. J.** Secosteroids. Preparation of 5-oxo-2,5-seco-A-dinorcholstan-2-amide, 2755.
- Cooper, J., and Scrowston, R. M.** Substitution reactions of benzo[*b*]thiophen derivatives. Part IV. Nitration of 3-bromo-2-methylbenzo[*b*]thiophen and 2,3-dimethylbenzo[*b*]thiophen. Part V. *t*-Butylation of benzo[*b*]thiophen and nitration of 3-*t*-butylbenzo[*b*]thiophen-2-carboxylic acid, 265, 414.
- Corbally, R. P.** See **Chambers, R. D.**, 1281, 1286.
- Corbett, R. E., Cumming, S. D., and Whitehead, E. V.** Lichens and fungi. Part X. 14 α -Taraxerane, 2827.
- Corfield, J. R., Oram, R. K., Smith, D. J. H., and Trippett, S.** The stereochemistry of nucleophilic substitution at phosphorus in P^{III} and P^V phosphetans, 713.
- Corrie, J. E. T.** See **Birch, A. J.**, 1186, 2653.
- Cort, L. A., Stace, B. C., and Thackeray, D. P. C.** Halogeno-1,4-dioxans and their derivatives. Part VI. 4,4',5,5'-Tetrachlorobi-1,3-dioxolan-2-yl, 177.
- Cottam, J.** See **Cotterill, W. D.**, 787.
- Cotterill, W. D., France, C. J., Livingstone, R., and Atkinson, J. R.** Reactions of thiocoumarin with phenylmagnesium bromide and with bromine, 817.
- Cotterill, W. D., France, C. J., Livingstone, R., Atkinson, J. R., and Cottam, J.** The stereochemistry and reactions of some 3,4-disubstituted thiochromans and related dihydronaphthothiopyrans, 787.
- Cottrell, W. R. T.** See **Chadwick, D. J.**, 655.
- Coucourakis, E. D., Gordon-Gray, C. G., and Whiteley, C. G.** The *Senecio* alkaloids. The structure and absolute configuration of isoline, 2339.
- Courtney, T., Johnston, D. E., McKervey, M. A., and Rooney, J. J.** The chemistry of diamantane. Part I. Synthesis and some functionalisation reactions, 2691.
- Cousin, J., and Hubert, A. J.** Base-catalysed prototropic isomerization. Part VI. The isomerization of acetylenic hydrocarbons, 1653.
- Cowell, R. D., and Jones, J. H.** Sequential polypeptides. Part II. The preparation of two partially protected hexapeptides for use in sequential polypeptide synthesis. Part III. The synthesis of two polyheptapeptides with functional side-chains. Part V. The use of monoesters of catechol in the synthesis of sequential polypeptides with amino- or carboxy-side-chains, 1809, 1814, 2236.

- Cowie, J. S., Landor, P. D., Landor, S. R., and Punja, N. Allenes. Part XXII. The synthesis and absolute configuration of laballenic and lamellenic acids, 2197.
- Coxon, J. M. See Cole, R. F. J., 351.
- Coy, D. H., Fleming, G. L., Haszeldine, R. N., Newlands, M. J., and Tipping, A. E. Polyfluoroalkyl derivatives of nitrogen. Part XXXVII. Reaction of *N*-bromobis-trifluoromethylamine with propene under ionic and free-radical conditions, 1880.
- Coy, D. H. See also Block, P., jun., 633.
- Coy, J. H. See Boyle, P. H., 1617.
- Crabbé, P., Díaz, E., Haro, J., Pérez, G., Salgado, D., and Santos, E. Competitive anion formation in pulegone [*p*-menth-4(8)-en-3-one] synthesis of phenylmethylene-pyrans, 46.
- Craig, W. A. See Brouwer, W. G., 124.
- Crawforth, C. E., Meth-Cohn, O., and Russell, C. A. Organolithium chemistry of *N*-heterocycles. Part IV. Formation of 1,2,4,5-tetrahydro-4,4-diphenyl-2,5-methano-3,1-benzoxazepines from quinolines, 1176.
- The question of 1,2- or 1,4-addition of organolithium compounds to quinolines, 2807.
- Cremllyn, R. J. W., David, J., and Kishore, N. Studies of organophosphorochloridates. Part V. Some derivatives of 2,4-dichlorophenyl and pentachlorophenyl phosphorodichloridates, 583.
- Cremllyn, R. J. W., Dewhurst, B. B., Wakeford, D. H., and Raja, R. A. Studies of organophosphorochloridates. Part VI. Reactions of steroid phosphorochloridates with amines and some alcohols, 1171.
- Cremllyn, R. J. W., Ellam, R. M., and Mitra, T. K. Deamination of amino-substituted cyclohexane-methanols and -carboxylic esters, 1727.
- Cresp, T. M. See Cannon, J. R., 1200.
- Croft, L. R. See Bycroft, B. W., 820, 827.
- Croisy, A. See Buu-Hoï, N. P., 1266.
- Cromarty, A., Proctor, G. R., and Shabbir, M. Azabenzocycloheptenones. Part XV. Synthesis of benzazotropones and a quinoline aldehyde by the dehydrogenation of certain tetrahydro-1-benzazepine derivatives, 2012.
- Crombie, L., Firth, P. A., Houghton, R. P., Whiting, D. A., and Woods, D. K. Cyclopropane cleavage of chrysanthemic acid relatives to santolinyl, artemisyl, and lavandulyl structures: acid-catalysed and biosynthetic experiments, 642.
- Crombie, L., Games, D. E., Haskins, N. J., and Reed, G. F. Extractives of *Mammea americana* L. Part III. Identification of new coumarin relatives of mammea B/BA, B/BB, and B/BC having 5,6-annulation and higher oxidation levels. Part IV. Identification of new 7,8-annulated relatives of the coumarins mammea A/AA, A/AB, B/AA, and B/AB, and new members of the 6-acyl family B/AA, B/AB, and B/AC. Part V. The insecticidal compounds, 2241, 2248, 2255.
- Cronin, D. A. See O'Halloran, J. K., 2214.
- Cronin, J. See O'Halloran, J. K., 2214.
- Cross, B. E., Edinberry, M. N., and Turner, W. B. Pigments of *Gnomonia erythrostroma*. Part I. The structures of erythrostominone, deoxyerythrostominone, and deoxyerythrostominol, 380.
- Cross, B. E. See also Bateson, J. H., 1117.
- Crout, D. H. G. Pyrrolizidine and seco-pyrrolizidine alkaloids of *Crotalaria laburnifolia* L. subspecies *eldomae*, 1602.
- Crout, D. H. G., Davies, N. M., Smith, E. H., and Whitehouse, D. Pyrrolizidine alkaloids. The biosynthesis of senecic acid, 671.
- Crowley, K. J. See Cocker, W., 1971.
- Cuddy, B. D., Grant, D., Karim, A., McKervey, M. A., and Rea, E. J. F. Hydride transfer reactions of substituted adamantyl cations, 2701.
- Cuddy, B. D. See also Alford, J. R., 2707.
- Cum, G. See Aversa, M. C., 222.
- Cumming, S. D. See Corbett, R. E., 2827.
- Cuppen, T. J. H. M. See Laarhoven, W. H., 2074.
- Curtis, R. F., Hassall, C. H., and Parry, D. R. The biosynthesis of phenols. Part XXIV. The conversion of the anthraquinone questin into the benzophenone, sulochrin, in cultures of *Aspergillus terreus*, 240.

D

- D'Agostino, M. See Protta, G., 1614.
- Dando, S. R. See Boyd, G. V., 777, 1142.
- Datta, S. K. The use of a nitro-group to ensure intermolecular acylation by *p*-nitrohydrocinnamic acid and *p*-nitro- γ -phenylbutyric acid, 62.
- David, J. See Cremllyn, R. J. W., 583.
- Davies, D. I. See Adams, D. R., 1237.
- Davies, J. H., Davis, R. H., and Carrington, R. A. G. Structure and reactivity of 2-alkyl- and 2-alkoxy-thiazolin-5-ones, 1983.
- Davies, N. M. See Crout, D. H. G., 671.
- Davies, P. J. See Barton, D. H. R., 1231.
- Davis, A., Morgan, M. H., Richards, D. H., and Scilly, N. F. Synthesis of dialkyl adducts of activated olefins and dienes, 286.
- Davis, B. R. See Baker, K. M., 190.
- Davis, M., Parnell, E. W., and Rosenbaum, J. Steroid amines. Part V. 20-Pyrrolidin-1-ylpregnane derivatives, 1420.
- Davis, M., and Gordon, J. A. The preparation of 5-substituted and 3,5-disubstituted isothiazoles by nucleophilic displacement reactions of the corresponding methylsulphonyl compounds, 638.
- Davis, M., and Srivastava, K. S. L. The chemistry of 2,1-benzisothiazoles. Part V. Diels-Alder reactions of 2,1-benzisothiazoles, 935.
- Davis, R. H. See Davies, J. H., 1983.
- Davison, B. E., and Guthrie, R. D. Nitrogen-containing carbohydrate derivatives. Part XXVII. Synthesis and reactions of 3-cyano-3-deoxyglycose derivatives, 658.
- Dean, F. M., Hindley, K. B., and Small, S. Synthesis of *cis*-disalicylide and of flavones containing a chromeno-[4,3-*b*]chromen nucleus, 2007.
- De Luca, P., De Rosa, M., Minale, L., and Sodano, G. Marine sterols with a new pattern of side-chain alkylation from the sponge *Aplysina* (= *Verongia*) *aerophoba*, 2132.
- De Martino, G., Massa, S., Scalzo, M., Giuliano, R., and Artico, M. Derivatives of 6,11-dihydropyrrolo[1,2-*b*]-[2,5]benzodiazocine, 2504.
- De Micheli, C. See Bianchi, G., 1711.
- Dennis, N., Katritzky, A. R., and Takeuchi, Y. 1,3-Dipolar character of six-membered aromatic rings. Part III. 2-Methyl-3-oxidoisoquinolinium. A novel route to benzotropones, 2054.

- Denny, W. A., Kumar, V., Meakins, G. D., Pragnell, J., and Wicha, J. Hydroxy-steroids. Part XVIII. Reactions of 17 β -chloro-16 α ,17 α -epoxy-5 α -androstane and the preparation of 17 β -iodo-16 α ,17 α -epoxy-5 α -androstane, 486.
- Denny, W. A. See also Bell, A. M., 2081, 2759, 2930, Clark, I. M., 499, 2765, and Clegg, A. S., 492.
- Denyer, A. N. See Briggs, L. H., 1464.
- Derenberg, M., and Hodge, P. Action of sodium and lithium chlorodifluoroacetates on phenanthrene-9,10-quinone, 1056.
- De Rosa, M. See De Luca, P., 2132.
- Desai, R. B. See Manger, A. B., 2146.
- De Sio, F. See Adembri, G., 953.
- Devlin, C. J., and Walker, B. J. The stereochemistry of phosphine-induced debromination reactions, 1249.
- de Vries, J. X. See Baldas, J., 597.
- Dewar, P. S., Forrester, A. R., and Thomson, R. H. Per-sulphate oxidations. Part VIII. Oxidation of arylthio-, arylsulphonyl-, and arylamino-acetic acids. Part IX. Oxidation of biphenyl-2-sulphonamides and *o*-phenoxy-benzenesulphonamides, 2857, 2862.
- Dewar, P. S. See also Brown, P. M., 2842.
- Dewhurst, B. B. See Cremllyn, R. J. W., 1171.
- Dewhurst, F., and Kitchen, D. A. Synthesis and properties of 6-substituted benzo[*a*]pyrene derivatives, 710.
- Dharamshi, S. S. See Bendall, V. I., 2732.
- Díaz, E. See Crabbé, P., 46.
- Dimsdale, M. J. See Bonnett, R., 2540.
- Dingwall, J. G., Dunn, A. R., Reid, D. H., and Wade, K. O. Studies of heterocyclic compounds. Part XI. 1-Oxa-6,6a-dithia-2-azapentalenes, 1-oxa-6,6a-diselena-2-azapentalenes, and 3-nitromethylene-3*H*-1,2-dithioles, 1360.
- Dipple, A. Model studies for azo dye carcinogenesis, 447.
- Djerassi, C. See Gebreyesus, T., 849, and Midgley, I., 2771.
- Dobbs, H. N. See Boyle, P. H., 1617.
- Dobson, T. A. See Battersby, A. R., 1730.
- Dodds, W. D. See Ames, D. E., 705.
- Doner, L. W. See Brimacombe, J. S., 2977.
- Donnelly, J. A., and O'Donnell, R. Brominative cleavage of α -ketols, 1875.
- Donnelly, J. A. See also Bennett, P., 1554, 2982.
- Donnelly, W. J., and Grundon, M. F. Quinoline alkaloids. Part XII. Alkaloids and coumarins of *Orixa japonica* Thunb. Identification of a new quinoline alkaloid, orixinone, 2116.
- Donnelly, W. J. G., and Shannon, P. V. R. Synthetic approaches to the deoxyhumulones; some new 2,2-dimethylchromens from phloracetophenone, 25.
- Doonan, H. J. See Banthorpe, D. V., 1764.
- Doss, N. L. See Badder, F. G., 1091.
- Doyle, M. See Colvin, E. W., 860.
- Drakesmith, F. G. Electrochemical reduction of fluorinated aromatic carboxylic acids, 184.
- Draper, R. W. See Batten, P. L., 739, and Bentley, T. J., 749.
- Drewes, S. E., and Coleman, P. C. Synthesis of new macrocycles. Part I. Monomeric and dimeric *o*-phthalate esters, 2148.
- Dufour, M., Buu-Hoi, N. P., Jacquignon, P., and Hien, D.-P. Carcinogenic nitrogen compounds. Part LXXVI. Penta- and hexa-cyclic indenoindoles, 527.
- Duggleby, P. M., Holt, G., Hope, M. A., and Lewis, A. The influence of catalysts on the rearrangement of acyldiazoethanes 3020.
- Dunn, A. R., and Stoodley, R. J. Studies related to dihydro-1,4-thiazines. Part I. Rearrangements involving 1,3-sulphur migrations, 2509.
- Dunn, A. R. See also Dingwall, J. G., 1360.
- Durrant, G., and Sutherland, J. K. Some observations on the Wadsworth-Emmons olefination reaction, 2582.
- Dutta, P. C. See Mukherjee, S., 1325.

E

- Eaborn, C., Najam, A. A., and Walton, D. R. M. 1,2-Dihydrobenzocyclobutene ('benzocyclobutene'): lithiation, and the preparation of some 3-substituted derivatives, 2481.
- Earl, R. A., Panzica, R. P., and Townsend, L. B. Pyrazolo-pyrimidine nucleosides. Part III. Synthesis of 1- and 2-(β -D-ribofuranosyl)pyrazolo[3,4-*d*]pyrimidines from pyrazole nucleoside derivatives, 2672.
- Easton, D. B. J., Leaver, D., and Rawlings, T. J. The dithiole series. Part V. Reactions of 1,2-dithiole-3-thiones and 1,3-dithiolan-2-thiones with acetylenic esters and with benzyne, 41.
- Edge, M. D., Hodgson, A., Jones, A. S., and Walker, R. T. Synthetic analogues of polynucleotides. Part VIII. Analogues of oligonucleotides containing carboxymethyl-thymidine, 1991.
- Edinberry, M. N. See Cross, B. E., 380.
- Edmundson, R. S. Cyclic organophosphorus compounds. Part XIV. A proton magnetic resonance study of the stereochemistry of some 5,5-di- and 4,5,5-tri-substituted 1,3,2-dioxaphosph(v)orinans, 1660.
- Eisner, U., Haq, M. Z., Flippen, J., and Karle, I. Heterocyclic rearrangements. Part VI. Structure and stereochemistry of a sulphur-bridged tetrahydroazepine and derived sulphoxides, by X-ray crystallography and nuclear magnetic resonance spectroscopy, 357.
- Ekong, D. E. U., Okogun, J. I., and Shok, M. The meliacins (limonoids). Tris(dipivalomethanato)europium-induced upfield and downfield shifts in the nuclear magnetic resonance spectra of the meliacins, 953.
- Ekong, D. E. U., and Selema, M. D. The meliacins (limonoids). Acid-catalysed reactions of meliacin epoxides, 1084.
- Ekong, D. E. U. See also Obasi, M. E., 1943.
- Elix, J. A. See Cannon, J. R., 1200, and Lam, J. K. K., 1466.
- Ellam, R. M. See Cremllyn, R. J. W., 1727.
- Elliott, A. J., and Gibson, M. S. A new synthesis of 4*H*-1,3,4-benzoxadiazines, 2915.
- Elliott, D. F., Moritz, P., and Wade, R. The solid-phase synthesis of some highly active aliphatic analogues of bradykinin, 1862.
- Ellis, F., and Sammes, P. G. Preparation and structure of some *cis*-fused ureas: *cis*-perhydrothieno[3,4-*d*]imidazol-2-one *SS*-dioxides, 2866.
- Ellis, F., Sammes, P. G., Hursthouse, M. B., and Neidle, S. On the preparation and structure of some *trans*-fused ureas: perhydro-*trans*-thieno[3,4-*d*]imidazol-2-one *SS*-dioxides, 1560.
- Ellis, G. P., and Shaw, D. Benzopyrones. Part VIII. Mono- and di-tetrazol-5-ylchromones. The infrared cyano-absorption of some 4-oxochromencarbonitriles, 779.
- Ellis, K., Smith, D. J. H., and Trippett, S. The preparation of phosphinic chlorides from phosphinic amides, 1184.

- Elvidge, J. A., and Pickett, J. A.** Heterocyclic imines and amines. Part XIII. 3,6-Dihydrazinyridazine and the nature of the reaction between 3,6-dimethoxy-pyridazine and hydrazine. Part XIV. Products from 2,5-di-imino-pyrrolidine (succinimidine) and hydrazine, 1483, 2346.
- Elvidge, J. A., and Redman, A. P.** Heterocyclic imines and amines. Part XV. Reactions of hydrazines with 1,3-diminoisindoline and related compounds, 2820.
- Elvidge, J. A.** See also **Barot, N. R.**, 1009.
- Engel, R., and Gelbaum, L.** ^{31}P Nuclear magnetic resonance spectra of phosphorus-containing esters in the presence of transition-metal ions, 1233.
- Erdman, T. R., and Thomson, R. H.** Naturally occurring quinones. Part XXI. Anthraquinones in the crinoids *Hevelometra savignii* (J. Müller) and *Lamprometra klunzingeri* (Hartlaub), 1291.
- Evans, D. D.** See **Bowman, R. E.**, 1926.
- Evans, J. B., and Marr, G.** Organometallic derivatives. Part IV. The lithiation of ferrocenylmethyl phenyl sulphone and the cleavage of carbon-sulphur bonds by aniline, 2502.
- Evans, R., and Hanson, J. R.** The formation of (–)-kaurene in a cell-free system from *Gibberella fujikuroi*, 2382.
- Evans, W. C., Ghani, A., and Woolley, V. A.** Alkaloids of *Cyphomandra betacea* Sendt., 2017.
- F**
- Fairweather, R., and Jones, J. H.** Sequential polypeptides. Part IV. The synthesis of poly-(L-alanylglycyl-L-proline) and its stereoisomers. Part VI. The synthesis of some sequential polypeptide collagen models containing proline analogues, 1908, 2475.
- Falco, M. R.** See **Baldas, J.**, 597.
- Farrington, J. A.** See **Calderbank, A.**, 138.
- Fattorusso, E., Minale, L., and Sodano, G.** Aeroplysinin-1, an antibacterial bromo-compound from the sponge *Verongia aerophoba*, 16.
- Fattorusso, E.** See also **Moody, K.**, 18.
- Faulkner, D.** See **Blaney, F.**, 2697.
- Feast, W. J., Musgrave, W. K. R., and Preston, W. E.** Diels-Alder reactions of polyfluorocyclohexa-1,3-dienes. Part V. Addition of cycloalkenes to octafluorocyclohexa-1,3-diene and dehydrofluorination of some of the adducts. Part VI. Reactions of dodecafluorotricyclo-[5,2,2,0^{2,6}]undeca-2,5,8-triene with ethylene and alkynes. A synthesis of polyfluorotricyclo[6,2,2,0^{2,7}]dodeca-2,4,6,9-tetraenes and 2,3-disubstituted hexafluoronaphthalenes, 1527, 1830.
- Feeney, J.** See **Weringa, W. D.**, 443.
- Fenton, R. S., Landquist, J. K., and Meek, S. E.** Pyridazines. Part III. Reaction of di- and tri-chlorodialkylaminopyridazines with nucleophiles, 2323.
- Ferè, A.** See **Ferruti, P.**, 2001.
- Ferri, R. J.** See **Bethell, G. S.**, 1033, 2873.
- Ferruti, P., Ferè, A., Bettelli, A., Zocchi, M., Tieghi, G., and Albinati, A.** Substituted 3-anilinoindoles and anilinoacetanilides from the reaction of glyoxal with *N*-alkylanilines: crystal structure of 5-chloro-3-(4-chloro-*N*-methylanilino)-1-methylindole, 2001.
- Fields, R., Haszeldine, R. N., and Hubbard, A. F.** Organosilicon chemistry. Part IX. Reaction of bis(trimethylsilyl)mercury with some polyfluoro-olefins, 847.
- Finch, P.** See **Bourne, E. J.**, 2202.
- Findlay, J. A., and Kwan, D.** Synthesis of a flavipucine reduction product, 2962.
- Findlay, J. A., and Radics, L.** Flavipucine [3'-isovaleryl-6-methylpyridine-3-spiro-2'-oxiran-2(1*H*,-4(3*H*)-dione], an antibiotic from *Aspergillus flavipes*, 2071.
- Finnegan, R. A., and Patel, J. K.** Constituents of *Mammea americana* L. Part X. The isolation of some mono- and di-hydroxyxanthenes. Observations on the synthesis of 1,5-, 3,5-, and 1,7-dihydroxyxanthone, 1896.
- Finucane, B. W., and Thomson, J. B.** Triterpenoids. Part VIII. Allylic oxidation of *N*-bromosuccinimide, 1856.
- Firth, P. A.** See **Crombie, L.**, 642.
- Fitton, A. O., Hill, J., Qutob, M., and Thompson, A.** Studies in the dithiocarbamate series. Part IV. Photolysis of some 4-hydroxybenzyl dithiocarbamates, 2658.
- Fitton, A. O., and Qutob, M.** Studies in the dithiocarbamate series. Part V. The reactions of some *N*-(4-hydroxybenzyl)-piperidines and -pyrrolidines with carbonyl sulphide, 2660.
- Fleming, G. L., Haszeldine, R. N., and Tipping, A. E.** Polyfluoroalkyl derivatives of nitrogen. Part XXXVI. Photochemical reaction of *N*-bromo- and *N*-chlorobistrifluoromethylamine with *cis*- or *trans*-but-2-ene, and the synthesis of 1,2-di(bistrifluoromethylamino)difluoroethylene and 2-bromo-1,2-difluoro-*NN*-bistrifluoromethylvinylamine, 1877.
- Fleming, G. L.** See also **Coy, D. H.**, 1880.
- Fletcher, G. A., and Young, G. T.** Amino-acids and peptides. Part XXXVI. The synthesis of analogues of bradykinin by the picolyl ester method, 1867.
- Flippen, J.** See **Eisner, U.**, 357.
- Flood, M. E., Herbert, R. B., and Holliman, F. G.** Pigments of *Pseudomonas* species. Part V. Biosynthesis of pyocyanin and the pigments of *Ps. aureofaciens*, 622.
- Fornasier, R.** See **Cinquini, M.**, 1886.
- Forrester, A. R., Ingram, A. S., and Thomson, R. H.** Persulphate oxidations. Part VI. Oxidation of biphenyl-2-carboxamides. Part VII. Oxidation of *o*-benzyl- and *o*-benzoyl-benzamides, 2847, 2853.
- Forrester, A. R.** See also **Brown, P. M.**, 2842, and **Dewar, P. S.**, 2857, 2862.
- Forshaw, T. P., and Tipping, A. E.** Unsaturated nitrogen compounds containing fluorine. Part II. The reactions of hexafluoroacetone azine with *cis*- or *trans*-but-2-ene and cyclohexene, 1059.
- Foster, R.** See **Mulholland, T. P. C.**, 1225, 2121.
- Foster, R. G.** See **Aldridge, D. C.**, 2136.
- Foulger, N. J.** See **Cook, J. D.**, 995.
- Foulkes, D. M.** See **Battersby, A. R.**, 1730.
- Fox, J. E., Scott, A. I., and Young, D. W.** Photo-oxygenation of lanosteryl acetate, 799.
- Fox, J. E., and Young, D. W.** Reaction of diphenylmethylenes with non-conjugated dienes, 507.
- Foxtton, M. W.** See **Abbott, P. J.**, 2182.
- France, C. J.** See **Cotterill, W. D.**, 787, 817.
- Francis, E., Rahman, R., Safe, S., and Taylor, A.** Sporidesmins. Part XII. Isolation and structure of sporidesmin G, a naturally-occurring 3,6-epitetrahydropiperazine-2,5-dione, 470.
- Franich, R. A., Lowe, G., and Parker, J.** Photochemical interconversion of some diazo-amides and diazirine-carboxamides, 2034.
- Fray, G. I.** See **Bratby, D. M.**, 195.

- Fringuelli, F., and Taticchi, A.** Tellurophen and some of its derivatives, 199.
- Fujihara, M.** See **Kametani, T.**, 394.
- Fujita, E., and Saeki, Y.** Lythraceous alkaloids. Part VI. The structures of luthrancine-I, -II, -III, and -IV and lythrancepine-I, -II, and -III, 2141.
- Fujiyama, F.** See **Nishiwaki, T.**, 1456.
- Fukumoto, K.** See **Kametani, T.**, 394, 1435, 1513, 2160.
- G**
- Gall, R. E.** See **Bruce, S. E.**, 2319.
- Games, D. E.** See **Crombie, L.**, 2241, 2248, 2255.
- Gandolfi, R.** See **Bianchi, G.**, 1711.
- Gardiner, D.** See **Collins, P. M.**, 2596, 2611.
- Gardner, D., Glen, A. T., and Turner, W. B.** Calonectrin and 15-deacetylcalonectrin, new trichothecanes from *Calonectria nivalis*, 2576.
- Gardner, M. D.** See **Bowie, R. A.**, 2395.
- Gardner, R. J.** See **Blair, J. A.**, 485.
- Gaskin, P.** See **Barton, J. W.**, 717.
- Gebreyesus, T., and Djerassi, C.** Alkaloid studies. Part LXVI. Reactions of some *Aspidosperma* alkaloids with *m*-chloroperbenzoic acid. Removal of the angular ethyl group of aspidospermine, 849.
- Gelbaum, L.** See **Engel, R.**, 1233.
- Gent, P. A., Gigg, R., and Conant, R.** Phenylloxazoline derivatives of amino-sugars, 248.
A new synthesis of D-galactosamine from D-glucosamine, 277.
The allyl ether as a protecting group in carbohydrate chemistry. Part III. The but-2-enyl ether group, 1535.
- Gent, P. A., Gigg, R., May, S., and Conant, R.** Phenylloxazoline derivatives of amino-sugars. Part II. The fission of phenylloxazolines under basic conditions, 2748.
- Ghani, A.** See **Evans, W. C.**, 2017.
- Ghisla, S., Hemmerich, P., and Jefcoate, C.** Studies in the flavin series. Part XVII, 1564.
- Gibson, K. H., and Saxton, J. E.** Synthesis of (\pm)-homoeburnamenine, (\pm)-21-*epi*-homoeburnamenine, (\pm)-eburnamine, and (\pm)-*epi*-eburnamine, 2776.
- Gibson, M. S.** See **Elliott, A. J.**, 2915.
- Gigg, R.** See **Gent, P. A.**, 248, 277, 1535, 2748.
- Gilchrist, T. L., Mente, P. G., and Rees, C. W.** The reaction of 1,2,3-thiadiazoles and 1,2,3-selenadiazoles with nona-carbonyl-di-iron, 2165.
- Gilchrist, T. L.** See also **Anderson, D. J.**, 1317.
- Ginanneschi, M.** See **Rapi, G.**, 502.
- Girjavallabhan, M.** See **Barton, D. H. R.**, 929.
- Giuliano, R.** See **De Martino, G.**, 2504.
- Glen, A. T.** See **Gardner, D.**, 2576.
- Gliobrial, S. S.** See **Anteunis, M.**, 616.
- Glotter, E.** See **Kirson, I.**, 2109.
- Glover, E. E., Rowbottom, K. T., and Bishop, D. C.** Synthesis and oxidation of quaternary salts of 1-aminoimidazoles, 2927.
- Goh, S. H.** See **Closs, G. L.**, 2103.
- Gojković, S.** See **Mihailović, M. L.**, 2460.
- Goldberg, O.** See **Bachi, M. D.**, 2332.
- Golding, B. T.** See **Begbie, A. L.**, 602.
- Goldschmidt, Z.** See **Ikan, R.**, 2423.
- Goldwhite, H.** See **Birchall, J. M.**, 2579.
- Good, R. H., Jones, G., and Phipps, J. R.** Syntheses with isoxazoles. Part II. Rearrangement of isoxazo- $[2,3-a]$ pyridinium salts into 5,6-dihydro-4*H*-furo $[3,2-b]$ pyridin-2-ones, 2441.
- Goodburn, T. G.** See **Bowman, R. E.**, 1121.
- Goodings, E. P., Mitchard, D. A., and Owen, G.** Synthesis, structure, and electrical properties of naphthacene, pentacene, and hexacene sulphides, 1310.
- Goosen, A., and Scheffer, A.** Thermal decomposition of oxalate diesters in the presence of iodine, 369.
- Gordon, J. A.** See **Davis, M.**, 638.
- Gordon-Gray, C. G.** See **Coucourakis, E. D.**, 2339.
- Gore, P. H., and Siddiquei, A. S.** Friedel-Crafts acylations of aromatic hydrocarbons. Part XIV. Monoacetylation and monobenzoylation of 2,7-dimethylnaphthalene, 1442.
A study of the sulphonation of 2-methylnaphthalene, 2344.
- Gore, P. H., Siddiquei, A. S., and Thorburn, S.** Friedel-Crafts acylations of aromatic hydrocarbons. Part XV. Acetylation of 2-methylnaphthalene, 1781.
- Gore, P. H.** See also **Aslam, F. M.**, 892.
- Grant, D.** See **Alford, J. R.**, 2707, and **Cuddy, B. D.**, 2701.
- Gray, C. H., Kulczycka, A., and Nicholson, D. C.** The photo-decomposition of bilirubin and other bile pigments, 288.
- Greco, C. V., and Pellegrini, F.** Reduction of some esters of pyrazole-3,4-dicarboxylic acid, 720.
- Greco, C. V., Pellegrini, F. C., and Pesce, M. A.** An approach to the synthesis of a cycloheptapyrazole (1,2-diazazulene), 1623.
- Green, R. J. S.** See **Blatchly, J. M.**, 2286.
- Greenhill, J. V., Ingle, P. H. B., and Ramli, M.** Mannich reactions on 1,2-diketones, 1667.
- Grigg, G. W.** See **Brown, D. J.**, 1819.
- Grigg, R., Shelton, G., Sweeney, A., and Johnson, A. W.** *N*-Methylation and electrophilic substitution reactions of octa-alkylporphins, octaethylchlorin, and metalloporphins, 1789.
- Grigg, R.** See also **Broadhurst, M. J.**, 143, 1124, 2111.
- Grimshaw, J., and Juneja, H. R.** Electrochemical reactions. Part XI. Reduction of apoverbenone (6,6-dimethylnorpin-3-en-2-one), 2529.
- Grimshaw, J., and Trocha-Grimshaw, J.** Characterisation of 1,6- and 1,8-dibromopyrenes, 1622.
- Grimshaw, J., Trocha-Grimshaw, J., and Juneja, H. R.** Apoverbenone (6,6-dimethylnorpin-3-en-2-one). An investigation into its preparation by dehydrobromination of a sterically hindered bromoketone, 50.
- Grimshaw, J.** See also **Alexander, C. W.**, 1372, 1374, 1380.
- Grinham, A. R.** See **Barton, J. W.**, 634.
- Grossert, J. S.** See **Chip, G. K.**, 1629.
- Grove, J. F.** New metabolic products of *Aspergillus flavus*. Part I. Asperentin, its methyl ethers, and 5'-hydroxy-asperentin. Part II. Asperflavin, anhydroasperflavin, and 5,7-dihydroxy-4-methylphthalide, 2400, 2406.
- Grundon, M. F.** See **Donnelly, W. J.**, 2116.
- Gumiro, I. T.** See **Letcher, R. M.**, 206.
- Gupta, P.** See **Bowen, I. H.**, 2524, and **Collins, P. M.**, 1670.
- Gupta, S. K.** See **Harmon, R. E.**, 1746.
- Guthrie, R. D., and Williams, G. J.** Nitrogen-containing carbohydrate derivatives. Part XXIX. Derivatives of 2,6-diamino-2,3,4,6-tetra-deoxy-D-*threo*-hexose (*epi*-purpurosamine C), 2619.
- Guthrie, R. D.** See also **Davison, B. E.**, 658, and **Johnson, A. W.**, 2153.
- Guyett, J.** See **Bowman, R. E.**, 1926.

H

- Haddadin**, M. J. See **Muffarij**, N. A., 965.
- Haddelsey**, D. I., **Lewis**, J. W., and **Mayor**, P. A. Novel analgesics and molecular rearrangements in the morphine-thebaine group. Part XXV. Substitution of the piperidine ring in derivatives of 6,14-endo-ethenotetrahydrothebaine, 875.
- Haddelsey**, D. I., **Lewis**, J. W., **Mayor**, P. A., and **Young**, G. R. Novel analgesics and molecular rearrangements in the morphine-thebaine group. Part XXIV. 15,16-Didehydro-6,14-endo-etheno-6,7,8,14-tetrahydro-thebaines and -oripavines, 872.
- Haines**, A. H., and **Jenkins**, C. S. P. The circular dichroism of the $n \rightarrow \pi^*$ band of cyclic thionocarbonates. Part II. Studies on the thionocarbonates of some acyclic vicinal diols, 273.
- Hall**, D. M. See **Browne**, P. A., 2717.
- Ham**, P. J., and **Whiting**, D. A. X-Ray analysis of pristimerol bis-*p*-bromobenzoate, a derivative of the triterpene quinone methide pristimerin, 330.
- Hamer**, N. K., and **Stubbs**, M. E. Rearrangements in the cycloaddition of tetracyanoethylene to 3-methylene-cyclohexa-1,4-dienes and homofulvenes, 2971.
- Hamilton**, S. D. See **Bacon**, R. G. R., 2391.
- Hammerich**, O., and **Parker**, V. D. Anodic oxidation of organic nitrogen compounds. Part I. Cyclization of 1-arylmethylenesemicarbazides, 1718.
- Hancock**, R. A. See **Bonner**, T. G., 1902.
- Hands**, A. R. See **Acheson**, R. M., 1569.
- Hankinson**, B., **Heaney**, H., and **Sharma**, R. P. Aryne chemistry. Part XXX. Approaches to the synthesis of 9-alkyl- and 9,10-dialkyl-1,2,3,4,5,6,7,8-octafluoro-9,10-dihydro-9,10-*o*-benzenoanthracenes (9-alkyl- and 9,10-dialkyl-1,2,3,4,5,6,7,8-octafluorotriptycenes), 2372.
- Hansford**, G. S., **Holliman**, F. G., and **Herbert**, R. B. Pigments of *Pseudomonas* species. Part IV. *in vitro* and *in vivo* Conversion of 5-methylphenazinium-1-carboxylate into aeruginosin A, 103.
- Hanson**, J. R., **Hawker**, J., and **White**, A. F. Studies in terpenoid biosynthesis. Part IX. The sequence of oxidation on ring B in kaurene-gibberellin biosynthesis, 1892.
- Hanson**, J. R., and **Ogilvie**, A. G. An unusual oxidation of some 5 α -hydroxyandrost-2-enes, 590.
- Hanson**, J. R., and **Shapter**, H. J. The aromatization of some 2 α ,3 α -epoxy-5 α -hydroxy-steroids, 1445.
- Hanson**, J. R. See also **Achilladelis**, B. A., 1425, **Adams**, P. M., 586, 2283, **Baldwin**, D., 1889, 2051, **Cochrane**, J. S., 361, **Evans**, R., 2382, and **Ogilvie**, A. G., 1981.
- Hanson**, K. R. See **Strange**, P. G., 2364, and **Wightman**, R. H., 2355.
- Haq**, M. Z. See **Eisner**, U., 357.
- Haque**, K. E., **Hardie**, K. M., and **Proctor**, G. R. Novel aromatic systems. Part IX. Synthesis and substitutions of dibenzo[*b*,*f*]azepin-2-one, 539.
- Haran**, G., and **Sharp**, D. W. A. Photochemically initiated reactions of bistrifluoromethyl disulphide with olefins, 34.
- Hardie**, K. M. See **Haque**, K. E., 539.
- Harding**, A. E. See **Connolly**, J. D., 1996.
- Hardy**, P. M., **Haylock**, J. C., and **Rydon**, H. N. Polypeptides. Part XVIII. Syntheses of poly-(β -aspartic acid) and poly-(γ -glutamic acid) and their benzyl esters, 605.
- Hardy**, P. M., **Rydon**, H. N., and **Storey**, H. T. Polypeptides. Part XX. The synthesis of some diastereoisomeric poly-(γ -benzyl glutamate)s, 1523.
- Hardy**, P. M., **Rydon**, H. N., and **Thompson**, R. C. Polypeptides. Part XVII. The synthesis of some sequential polypeptides of γ -benzyl D-glutamate and L-leucine, 5.
- Hardy**, P. M. See also **Ali**, 1070, and **Barrett**, G. C., 2634.
- Harmon**, R. E. **Suder**, R., and **Gupta**, S. K. Preparation and properties of some benzotropylium perchlorates, 1746.
- Harness**, J., and **Hughes**, N. A. Epimerisations accompanying the reductive desulphurisation of some 5-S-alkyl-5-thiopentose dialkyl dithioacetals, 38.
- Haro**, J. See **Crabbé**, P., 46.
- Harris**, J. A. See **Ayres**, D. C., 1343.
- Harrison**, P. G. Some addition reactions of *N*-tributylstannyldiphenylmethyleamine, 130.
- Harrow**, T. A. See **Barrett**, G. C., 2634.
- Hart**, R. J., and **Heller**, H. G. Overcrowded molecules. Part VII. Thermal and photochemical reactions of photochromic (*E*)- and (*Z*)-benzylidene(diphenylmethyle)succinic anhydrides and imides, 1321.
- Hartshorn**, M. P. See **Cole**, R. F. J., 351.
- Harvey**, D. J., **Horning**, M. G., and **Vouros**, P. The mass spectra of the trimethylsilyl derivatives of glycerophosphoric acids. Inter- and intra-molecular rearrangements of siliconium ions, 1074.
- Haskins**, N. J. See **Crombie**, L., 2241, 2248, 2255.
- Haslam**, E. See **Thompson**, R. S., 1387.
- Hassall**, C. H. See **Curtis**, R. F., 240.
- Hassanali-Walji**, A. See **Bycroft**, B. W., 827.
- Hastings**, J. S., and **Heller**, H. G. Overcrowded molecules. Part VIII. Addition of diphenylketen to (*Z*)-2-benzylidene-3-diphenylmethyle-2,3-dihydro-5-methylbenzofuran, 1839.
- The stereochemistry of auronones [2-substituted benzylidenebenzofuran-3(2*H*)-ones], 2128.
- Haszeldine**, R. N., **Higginbottom**, B., **Rigby**, R. B., and **Tipping**, A. E. Perfluoroalkyl derivatives of sulphur. Part X. The reaction of polyfluoromonoiodoalkanes with dimethyl sulphide to give methyl polyfluoroalkyl sulphides, 155.
- Haszeldine**, R. N., **Rigby**, R. B., and **Tipping**, A. E. Perfluoroalkyl derivatives of sulphur. Part XI. The reaction of polyfluoromonoiodoalkanes with dimethyl disulphide. Part XII. The reaction of heptafluoro-1-iodopropane with ethyl methyl sulphide, methyl trifluoromethyl sulphide, and methanethiol. Part XIII. The reaction of polyfluoromonoiodoalkanes with diethyl disulphide and of pentafluoroiodobenzene with bis(trifluoromethyl) disulphide. Part XIV. The reactions of tetrafluoro-1,2-di-iodoethane and octafluoro-1,4-di-iodobutane with dimethyl sulphide and dimethyl disulphide, 159, 1506, 2180, 2438.
- Haszeldine**, R. N. See also **Banks**, R. E., 1449, 2336, **Barlow**, M. G., 2170, **Coy**, D. H., 1880, **Fields**, R., 847, and **Fleming**, G. L., 1877.
- Havir**, E. A. See **Strange**, P. G., 2364.
- Hawker**, J. See **Hanson**, J. R., 1892.
- Hawkins**, E. G. E. Reactions of organic peroxides. Part XVIII. Photo-oxidation of cyclohexylamine and dicyclohexylamine. Part XIX. Hydroperoxides from alkylpyridines, 13, 2882.
- Hayakawa**, K. See **Sasaki**, T., 783, 1951, 2750.
- Haydock**, D. B. See **Mulholland**, T. P. C., 1225, 2121.

- Haylock, J. C.** See **Hardy, P. M.**, 605.
- Haynes, R. K., and Hewgill, F. R.** Amine oxidation and the chemistry of quinone imines. Part I. 3-Methoxy-4-t-butylaniline. Part II. 2,5-Dimethoxy-4-t-butylaniline. Part III. 2,4-Dimethoxy-5-t-butylaniline, 396, 408, 813.
- Hayward, R. C.** See **Baker, K. M.**, 190.
- Heaney, H., Jablonski, J. M., and McCarty, C. T.** Aryne chemistry. Part XXXI. Reactions of arynes with $\alpha\beta$ -unsaturated aldehydes, 2903.
- Heaney, H., and Price, A. P.** Thermal cyclisation of *trans*-*o*-fluorocinnamic acids to coumarins. An apparent similarity between mass spectral and thermal fragmentations, 2911.
- Heaney, H.** See also **Hankinson, B.**, 2372.
- Hegarty, A. F.** See **Scott, F. L.**, 2224.
- Heller, H. G.** See **Hart, R. J.**, 1321, and **Hastings, J. S.**, 1839, 2128.
- Helmy, E.** See **Jones, D. N.**, 1329.
- Hemmerich, P.** See **Ghisla, S.**, 1564.
- Herbert, R. B.** See **Battersby, A. R.**, 1730, 1736, 1741, **Flood, M. E.**, 622, and **Hansford, G. S.**, 103.
- Hesse, R. H.** See **Barton, D. H. R.**, 2889.
- Hewgill, F. R.** See **Haynes, R. K.**, 396, 408, 813.
- Hey, D. H., Jones, G. H., and Perkins, M. J.** Internuclear cyclisation. Part XXVII. Further studies on the aromatisation of spirocyclohexadienyl dimers. Part XXVIII. Free radical reactions of some spirocyclohexadiene lactams. Part XXIX. Oxidation of some *N*-methylbiphenyl-2-carboxamides with persulphate. Part XXX. The photolysis of 2-iodo-2', -3', and -4'-methoxy-*N*-alkylbenzanilides in benzene. Part XXXI. Cyclisation of 2-(*N*-alkyl-*N*-phenylcarbamoyl)phenyl radicals: formation of cyclohexadienones and cyclohexadienyl iodides by scavenging of the spiro- γ -lactam intermediate. Part XXXII. Dienol-benzene and related rearrangements of some spirocyclohexadiene-lactams, 105, 113, 118, 1150, 1155, 1162.
- The formation of *N*-methylbenzanilide in the decomposition of 2-(*N*-methyl-*N*-phenylcarbamoyl)benzenediazonium fluoroborate in acetic acid, 1170.
- Heyes, G., Holt, G., and Lewis, A.** Preparation and reactivity of *N*-phenyl- and *N*-methyl-*o*-diazoacetylbenzenesulphonamide. A novel synthesis of benzothiazine dioxides, 2351.
- Hibbert, P. G.** See **Cadogan, J. C. G.**, 2555.
- Hibino, S.** See **Kametani, T.**, 391.
- Hibino, T.** See **Inubushi, Y.**, 1682.
- Hickman, J. A., and Wibberley, D. G.** Indolizines. Part V. The synthesis of 3-amino- and 3-acetamido-indolizines and their precursors, the 3-azo-, -nitroso-, -nitro-, and -acetyl-indolizines. Part VI. Ring-opening reactions of 3-amino- and 3-nitroso-indolizines, 2954, 2958.
- Hickmott, P. W., Hopkins, B. J., Sheppard, G., and Barraclough, D. J.** Enamine chemistry. Part XVI. Reaction of $\alpha\beta$ -unsaturated acid chlorides with 1,4-dimorpholinocyclohexa-1,3-diene. Synthesis of 7-morpholino- and 4,7-dimorpholino-indan-1-ones, 1639.
- Hickmott, P. W., and Sheppard, G.** Enamine chemistry. Part XIV. Reaction of $\alpha\beta$ -unsaturated acid chlorides with tertiary enamino-ketones and -esters, 1038.
- Hider, R. C., and John, D. I.** Synthesis of *trans*-4,5-didehydro-DL-lysine (2,6-diaminohex-4-enoic acid) and of 4-oxo-L-lysine (2,6-diamino-4-oxohexanoic acid), 1825.
- Hien, D.-P.** See **Buu-Hoi, N. P.**, 1266, and **Dufour, M.**, 527.
- Higginbottom, B.** See **Haszeldine, R. N.**, 155.
- Hill, J., and Townend, J.** Light-induced reactions of α -*N*-alkylanilino-ketones: formation of di-indolylmethanes, 1210.
- Hill, J.** See also **Fitton, A. O.**, 2658.
- Hindley, K. B.** See **Dean, F. M.**, 2007.
- Hirata, T.** See **Suga, T.**, 258.
- Hobson, J. D.** See **Bastable, J. W.**, 2205.
- Hodge, P.** See **Derenberg, M.**, 1056.
- Hodgkinson, A. J.** See **Perold, G. W.**, 2450, 2457.
- Hodgson, A.** See **Edge, M. D.**, 1991.
- Holliman, F. G.** See **Flood, M. E.**, 622, and **Hansford, G. S.**, 103.
- Holt, G.** See **Duggleby, P. M.**, 3020, and **Heyes, G.**, 2351.
- Holton, A. G.** See **Bailey, A. S.**, 1003.
- Hooper, M., and Pitkethly, W. N.** 2-Arylmethylideneindolin-3-ones: stereochemistry and reduction with sodium borohydride, 1607.
- Hope, D. B.** See **Wälti, M.**, 1946.
- Hope, M. A.** See **Duggleby, P. M.**, 3020.
- Hopkins, B. J.** See **Hickmott, P. W.**, 1639.
- Horning, M. G.** See **Harvey, D. J.**, 1074.
- Horspool, W. M., McNeilly, S. T., Miller, J. A., and Young, I. M.** Reactions of carbonyl compounds with trivalent phosphorus reagents. Part III. The formation of olefins by deoxygenation of carbonyl compounds with diphenylphosphine oxide, 1113.
- Horspool, W. M., Smith, P. I., and Tedder, J. M.** The chemistry of *ortho*-benzoquinones. Part VI. The reaction of primary aromatic amines with alkyl substituted 1,2-benzoquinones: the displacement of alkyl groups in the 4- and 5-positions, 1024.
- Horspool, W. M.** See also **Anderson, D. T.**, 532, 536.
- Horwell, D. C.** See **Anderson, D. J.**, 1317.
- Hoskins, J. A.** See **Brown, D. J.**, 522.
- Hough, L., Palmer, A. K., and Richardson, A. C.** Chemical modification of trehalose. Part XI. 6,6'-Dideoxy-6,6'-difluoro- $\alpha\alpha$ -trehalose and its *galacto*-analogue, 2513.
- Houghton, R. P.** See **Crombie, L.**, 642.
- Houminer, Y.** See **Barton, D. H. R.**, 919.
- Howard, A. S.** See **Perold, G. W.**, 2450, 2457.
- Howe, R., and Johnson, D.** Oxidative fission of some α -substituted β -diketones by selenium dioxide, 977.
- Hubbard, A. F.** See **Fields, R.**, 847.
- Hubert, A. J.** See **Cousin, J.**, 1653.
- Huckle, D., Lockhart, I. M., and Wright, M.** 4,5-Dihydro-1-benzoxepin-3(2*H*)-one, *N*-substituted 2,3-dihydro-1,5-benzoxazepin-4(5*H*)-ones, and related compounds, 2425.
- Huckle, D.** See also **Busby, R. E.**, 1705.
- Hudson, H. R., Qureshi, A. R., and Ragoonanan, D.** Factors in the formation of isomerically and optically pure alkyl halides. Part IX. Reactions of (1-substituted *n*-alkyl) diphenylphosphinites with hydrogen halides and with halogens, 1595.
- Huff, R. K., Moppett, C. E., and Sutherland, J. K.** The nonadrides. Part VI. Dimerisation of the C₉ unit *in vivo* and *in vitro*, 2548.
- Hughes, C. G.** See **Carrington, D. E. L.**, 3006.
- Hughes, N. A.** See **Harness, J.**, 38.
- Humphreys, D. J., and Proctor, G. R.** Novel aromatic systems. Part X. Some aspects of the chemistry of 2,3-dihydroxybenzocycloheptenes, 722.

- Hunt, R., and Reid, S. T. Photochemical transformations. Part VI. The photorearrangement of 2-nitrofur and 2-nitropyrrole, 2527.
- Hursthouse, M. B. See Ellis, F., 1560.
- Hutchinson, E. G. See Birch, A. J., 1546.
- Hutzinger, O. See Safe, S., 686.

I

- Ibuka, T. See Baldas, J., 592, 599.
- Iddon, B. See Ager, E., 133, and Chippendale, K. E., 2023, 2030.
- Ikan, R., Markus, A., and Goldschmidt, Z. Synthesis of steroidal cyclopropanes, 2423.
- Imamura, K. See Suga, T., 962.
- Inamoto, N. See Yoshifuji, M., 559.
- Ingle, P. H. B. See Greenhill, J. V., 1667.
- Ingram, A. S. See Forrester, A. R., 2847, 2853.
- Inoue, I. See Okumura, K., 173.
- Inubushi, Y., Hibino, T., and Shingu, T. Application of tris(dipivaloylmethanato)europium(III) to the assignments of the methyl resonances of triterpenes related to serratenediol [c(14a)-homo-27-norgammacer-14-ene-3 β ,21 α -diol], 1682.
- Irie, H., Nishitani, Y., Sugita, M., Tamoto, K., and Uyeo, S. Synthesis of δ -lycorane derived from the alkaloid caranine, 588.
- Irie, H., Tani, S., and Yamane, H. Total synthesis of the alkaloids rheadine and alpinigenine, 2986.
- Irwin, W. J. Reduction of some fused (benzo[d]- and pyrido[3,2-d]-) pyrimidinones, 353.
- Ishibashi, T. See Ogata, Y., 180.
- Ishibe, N., Odani, M., and Tanuma, R. Photoconversion of 2,6-bis(alkylthio)-3,5-diphenyl-4H-thiopyran-4-ones into 3,4-bis(alkylthio)-2,5-diphenylcyclopentadienones, 1203.
- Ishii, Y. See Matsuda, I., 1678.
- Issidorides, C. H. See Muffarij, N. A., 965.
- Itoh, K. See Matsuda, I., 1678.
- Iyer, R. See Collins, P. M., 1670.
- John, J. P. See Ramani, P. V., 1516.
- Johnson, A. W., and Overend, W. R. Synthesis of corrins. Part I. Nickel and cobalt 1,19-dimethylcorrin and 1,19-dimethyl-4,5-dihydrocorrin perchlorates, 2681.
- Johnson, A. W., Smith, R. M., and Guthrie, R. D. Vancosamine: the structure and configuration of a novel amino-sugar from vancomycin, 2153.
- Johnson, A. W. See also Broadhurst, M. J., 143, 1124, 2111, Bycroft, B. W., 820, 827, and Grigg, R., 1789.
- Johnson, D., and Jones, G. Reaction between 3H-pyrrolizines and acetylenedicarboxylic esters. Part I. Preparation of 3-(alkoxycarbonylmethylene)-3H-pyrrolizines. Part II. Preparation of derivatives of cycl-[4,2,2]azine (azepino[2,1,7-cd]pyrrolizine). Part III. The photochemical reaction, 840, 844, 2517.
- Johnson, D. See also Howe, R., 977.
- Johnston, D. E. See Courtney, T., 2691.
- Johnston, J. D. See Muffarij, N. A., 965.
- Johnston, J. P., and Overton, K. H. A laboratory model for the atisane \rightarrow aconane conversion, 1490.
- Johnston, K. M., Luker, R. M., and Williams, G. H. Friedel-Crafts cyclisations. Part III. Synthesis of derivatives of 2(1H)-quinolone (carbostyryl) by aluminium chloride-catalysed cycloeliminations of cinnamanilide and related compounds, 1648.
- Jones, A. S. See Edge, M. D., 1991.
- Jones, D. N., Helmy, E., and Whitehouse, R. D. Steroidal sulphur compounds. Part VIII. Pummerer reactions of steroidal sulphoxides induced by acetic anhydride, 1329.
- Jones, D. S. Polypeptides. Part XIII. Peptides related to the C-terminal tetrapeptide sequence of the gastrins by complementary reading of the genetic message, 1407.
- Jones, D. W. Preparation and thermal rearrangement of a benzofuran-nitrene adduct, 225.
- Reaction of phthalimidonitrene with furans, 2728.
- Jones, D. W., and Wife, R. L. o-Quinonoid compounds. Part V. Derivatives of 2,3-naphthoquinone dimethide, 2722.
- Jones, Sir Ewart R. H. See Bell, A. M., 2081, 2759, 2930, Clark, I. M., 499, 2765, and Clegg, A. S., 492.
- Jones, G. See Good, R. H., 2441, and Johnson, D., 840, 844, 2517.
- Jones, G. H. See Hey, D. H., 105, 113, 118, 1150, 1155, 1162, 1170.
- Jones, J. G. L., and Marples, B. A. Steroids. Part XV. Rearrangements of 9- and 10-hydroxy-5 β -methyl-19-norsteroids, 792.
- Jones, J. H., and Walker, J. Sequential polypeptides. Part VII. The synthesis of poly-(L-glutaminy-L-alanine), a model of the silks produced by sawflies of the family *Argidae*, 2923.
- Jones, J. H. See also Cowell, R. D., 1809, 1814, 2236, and Fairweather, R., 1908, 2475.
- Jones, R. L. See Brown, D. J., 1819.
- Joule, J. A. See Scopes, D. I. C., 2810.
- Juneja, H. R. See Grimshaw, J., 50, 2529.

J

- Jablonski, J. M. See Heaney, H., 2903.
- Jackson, A. H., Kenner, G. W., and Wass, J. Pyrroles and related compounds. Part XX. Syntheses of coproporphyrins, 1475.
- Jackson, J. A. See Chambers, R. D., 1286.
- Jackson, J. R., and Stoodley, R. J. Studies related to penicillins. Part VII. The structure of the epimers derived from 6 β -substituted penicillanic acids. Part VIII. The rearrangement of penicillanic acid derivatives to 1,3-thiazines, 895, 1063.
- Jacquignon, P. See André, J., 1261, Buu-Hoï, N. P., 234, 263, 278, 1263, 1266, Dufour, M., 527, Périn-Roussel, O., 531, and Thang, D. C., 1932.
- James, R. See Calderbank, A., 138.
- Jaques, D. See Thompson, R. S., 1387.
- Jefcoate, C. See Ghisla, S., 1564.
- Jeffreys, J. A. D. See Brouwer, W. G., 124.
- Jehangir, M. See Aslam, F. M., 892.
- Jenkins, C. S. P. See Haines, A. H., 273.
- Jenkins, P. N. See Ayres, D. C., 1343.
- John, D. I. See Hider, R. C., 1825.

K

- Kakushima, M. See Strunz, G. M., 2280.
- Kametani, T., Fukumoto, K., and Fujihara, M. Studies on the syntheses of heterocyclic compounds. Part CDLIV. Abnormal dienone-phenol rearrangement of proclarine, 394.

- Kametani, T., Fukumoto, K., Shibuya, S., Nemoto, H., Nakano, T., Sugahara, T., Takahashi, T., Aizawa, Y., and Toriyama, M.** Studies on the syntheses of heterocyclic compounds. Part CDLXII. Total photolytic syntheses of aporphine [(±)-*N*-methyl-laurotetanine, (±)-cassythicine, and (±)-pukateine], proaporphine [(±)-orientalinone], and morphinandienone [(±)-pallidine and (±)-salutaridine] alkaloids, 1435.
- Kametani, T., Hibino, S., and Takano, S.** Studies on the syntheses of heterocyclic compounds. Part CDLIII. Total synthesis of (±)-ochrobirine, 391.
- Kametani, T., Satoh, Y., and Fukumoto, K.** Total syntheses of (−)-*O*-methylandrocymbine, (−)-kreysigine, and alkaloid CC-10 methyl ether, 2160.
- Kametani, T., Takeshita, M., and Takano, S.** Total synthesis of (−)-discretine (2,10,11-trimethoxy-13α-berbin-3-ol), 2834.
- Kametani, T., Yamaki, K., Terui, T., Shibuya, S., and Fukumoto, K.** Studies on the syntheses of heterocyclic compounds. Part CDLXVI. Synthesis of narwedine-type enones by photochemical cyclisation, 1513.
- Kampouris, E. M.** Nitro- and amino-pyrocatechols, 1088.
- Kanematsu, K.** See **Sasaki, T.**, 783, 1951, 2750.
- Kapil, R. S.** See **Baldas, J.**, 592, 599.
- Karim, A.** See **Cuddy, B. D.**, 2701.
- Karle, I.** See **Eisner, U.**, 357.
- Kasal, A.** See **Bell, A. M.**, 2930.
- Katritzky, A. R.** See **Dennis, N.**, 2054.
- Kazlauskas, R., Pinhey, J. T., and Simes, J. J. H.** Conversion of lanosterol into a compound with the carbon skeleton of fusicidic acid, 1243.
- Keating, M., Peek, M. E., Rees, C. W., and Storr, R. C.** Reactive intermediates. Part XIX. The lithium salt of 1-(benzotriazol-1-yl)-4-*p*-tolylsulphonyltetrazenes: a new benzyne precursor, 1315.
- Kell, D. R., and McQuillin, F. J.** A study of the Koch synthesis of carboxylic acids, 2096.
The reaction of carbonium ions in sulphuric acid with acetylene and substituted acetylenes, 2100.
- Kemp, W., and Spanswick, J.** Some derivatives of indan-1-one. Part II, 151.
- Kepe, U. M.** See **Barton, D. H. R.**, 513, 1231.
- Kennedy, J. F., Barker, S. A., and Rosevear, A.** The use of a poly(allyl carbonate) for the preparation of active, water-insoluble derivatives of enzymes, 2568.
- Kenner, G. W.** See **Jackson, A. H.**, 1475.
- Kernick, W.** See **Bradley, G.**, 2019.
- Kershaw, J. R.** See **Brown, D. J.**, 2316, and **Uff, B. C.**, 479.
- Kevill, D. N., and Weitzel, F. L.** A comparison of decomposition and solvolysis reactions of 1-adamantyl chloroglyoxylate and 1-adamantyl chloroformate, 2162.
- Khan, M. S., and Owen, L. N.** Cytotoxic compounds. Part XIV. Reactions of the bismethanesulphonates of 3-arylthiopropene-1,2-diols and of 2-arylthiopropene-1,3-diols with nucleophiles. Part XV. Reactions of the methanesulphonates of 1-arylthiopropene-2-ols and of 2-(2,4-dinitrophenylthio)propan-1-ol with nucleophiles, 2060, 2067.
- Khan, M. S.** See also **Bowen, I. H.**, 2524.
- Kido, F., Uda, H., and Yoshikoshi, A.** Synthetic study of zizaane-type sesquiterpenoids, 1755.
- Kilminster, K. N., and Sainsbury, M.** A new synthesis of ellipticine, 2264.
Configurational and conformational isomerism in 2-γ-picolinylideneindolin-3(2*H*)-one derivatives, 2415.
- King, G. S., Magnus, P. D., and Rzepa, H. S.** Reductive and oxidative cleavage of 5-phenyl-Δ²-isoxazoline-3-carboxylic acid, 437.
- King, R. W.** See **Weringa, W. D.**, 443.
- Kirby, G. W., Massey, S. R., and Steinreich, P.** Biosynthesis of unnatural morphine derivatives in *Papaver somniferum*, 1642.
- Kirby, G. W., Michael, J., and Narayanaswami, S.** Stereospecific hydrogenation of (*Z*)-α-benzoylamino-*o*-benzyl-oxy[β-²H]cinnamic acid, 203.
- Kirby, G. W.** See also **Bentley, K. W.**, 302.
- Kirson, I., Lavie, D., Subramanian, S. S., Sethi, P. D., and Glotter, E.** Withanicandrin, a ring-c-substituted withanolide from *Nicandra physaloides* (Solanaceae), 2109.
- Kishore, N.** See **Cremlyng, R. J. W.**, 583.
- Kitchen, D. A.** See **Dewhurst, F.**, 710.
- Klein, K. P.** See **Boyce, R.**, 1292.
- Knott, P. A., and Mellor, J. M.** Photochemical rearrangement of bicyclo[3,3,1]nona-3,7-diene-2,6-diones, 1030.
- Knowles, A. M., and Lawson, A.** The action of isoxazol-5-ones on enamines, 1240.
- Knowles, P., and Wooldridge, K. R. H.** The synthesis of some reduced pyrido- and pyrrolo-benzodiazepines, 975.
- Kodicek, E.** See **Pelc, B.**, 244, 1915, 2980.
- Kondo, K.** See **Nishiwaki, T.**, 90, and **Okumura, K.**, 173.
- Kricka, L. J., and Ledwith, A.** Reactions of condensed *N*-heteroaromatic molecules. Part I. Alkylation by thallium(i) ethoxide, 2292.
- Kricka, L. J., and Vernon, J. M.** Reactions of some isoindoles with acetylenic esters, 904.
- Kroszczynski, W.** See **Canonica, L.**, 2639.
- Kruger, P. E. J.** See **Perold, G. W.**, 2457.
- Kub, M. E.** See **Worman, J. J.**, 1209.
- Kugajevsky, I.** See **Singh, Harkishan**, 993.
- Kulczycka, A.** See **Gray, C. H.**, 288.
- Kumar, S.** See **Collins, P. M.**, 2596, 2611.
- Kumar, V.** See **Clegg, A. S.**, 492, and **Denny, W. A.**, 486.
- Kwan, D.** See **Findlay, J. A.**, 2962.

L

- Laarhoven, W. H., and Cuppen, T. J. H. M.** Photodehydrocyclizations in stilbene-like compounds. Part V. Photochemistry of 2,2'-distyrylbiphenyl, 2074.
- Laing, D. G.** See **Battersby, A. R.**, 2743.
- Lal, K.** See **Singh, Harjit**, 1799.
- Lam, J. K. K., Sargent, M. V., Elix, J. A., and Smith, D. O'N.** Synthesis of valsarin and 5,7-dichloroemodin, 1466.
- Lambe, T. M.** See **Butler, R. N.**, 269, and **Scott, F. L.**, 1918.
- Lambourne, D. R.** See **Adamson, G. W.**, 2428.
- Lamm, B.** See **Samuelsson, B.**, 652.
- Landor, P. D.** See **Cowie, J. S.**, 2197.
- Landor, S. R.** See **Cowie, J. S.**, 2197.
- Landquist, J. K., and Meek, S. E.** Pyridazines. Part IV. Reaction of alkoxydichloropyridazines and dialkoxychloropyridazines with amines, 2735.
- Landquist, J. K.** See also **Fenton, R. S.**, 2323.
- Large, M. S.** See **Aldridge, D. C.**, 2136.
- Larkin, J.** See **Carnduff, J.**, 692.
- Latif, N., and Meguid, S. A.** Carbonyl and thiocarbonyl compounds. Part XIII. 2-Aroyl-1,3-benzodioxoles of potential pesticidal activity and their cleavage with hydrazines, 1095.
- Latrofa, A.** See **Bartoli, G.**, 2671.
- Lavie, D.** See **Kirson, I.**, 2109.

- Lawson, A. See Knowles, A. M., 1240.
- Leaver, D. See Easton, D. B. J., 41.
- Ledwith, A. See Kricka, L. J., 2292.
- Leow, H. M. See Bick, I. R. C., 2884.
- Letcher, R. M., and Nhamo, L. R. M. Chemical constituents of the *Combretaceae*. Part III. Substituted phenanthrenes, 9,10-dihydrophenanthrenes, and bibenzyls from the heartwood of *Combretum psidioides*, 2941.
- Letcher, R. M., Nhamo, L. R. M., and Gumiro, I. T. Chemical constituents of the *Combretaceae*. Part II. Substituted phenanthrenes and 9,10-dihydrophenanthrenes and a substituted bibenzyl from the heartwood of *Combretum molle*, 206.
- Lewis, A. See Duggleby, P. M., 3020, and Heyes, G., 2351.
- Lewis, D. A. See Boar, R. B., 2231, 2590.
- Lewis, J. R. See Bowen, I. H., 683, 2524.
- Lewis, J. W., Myers, P. L., and Ormerod, J. A. The reaction of aromatic nitroso-compounds with enamines. Part I. The reaction of nitrosobenzene with 1-morpholin-1-ylcyclohexene, 2521.
- Lewis, J. W., Myers, P. L., Ormerod, J. A., and Selby, I. A. Reaction of enamines with benzylidene ketones. Part II, 1549.
- Lewis, J. W., and Readhead, M. J. Novel analgesics and molecular rearrangements in the morphine-thebaine group. Part XXVII. 7-Alkylidene- and 7 α -vinyl-6,14-endo-6,7,8,14-tetrahydrothebaines, 881.
- Lewis, J. W., Readhead, M. J., and Smith, A. C. B. Novel analgesics and molecular rearrangements in the morphine-thebaine group. Part XXVI. Some reactions of the thebaine-2-chloroacrylonitrile adduct, 878.
- Lewis, J. W. See also Bentley, K. W., 870, and Haddlesey, D. I., 872, 875.
- Lichtenberg, D., Bergmann, F., Rahat, M., and Neiman, Z. Tautomerism and ionisation of purin-8-one and its *N*-methyl derivatives, 2950.
- Lim, C. K. See Ayres, D. C., 1350.
- Lindsey, A. S. Chloro-derivatives of indazolo[2,3-*a*][3,1]-benzoxazin-5-one and indazolo[2,1-*a*]indazole-6,12-dione, 2498.
- Livingstone, R. See Cotterill, W. D., 787, 817.
- Lockhart, I. M. See Huckle, D., 2425.
- Lockley, W. J. S. See Bognár, R., 1848.
- Locksley, H. D., Rainey, D. K., and Rohan, T. A. Pungent compounds. Part I. An improved synthesis of the paradols (alkyl 4-hydroxy-3-methoxyphenethyl ketones) and an assessment of their pungency, 3001.
- Long, G. A. S. See Baker, K. M., 190.
- Lopez, L. See Caló, V., 1652, 2567.
- Lowe, G. See Franich, R. A., 2034.
- Lown, J. W., and Akhtar, M. H. One-step synthesis of 3,5-dihydro-2*H*-pyrrolo[3,4-*d*]oxazoles by reaction of *p*-nitrosophenols with 2-arylaziridines, 1459.
- Luker, R. M. See Johnston, K. M., 1648.
- Lunazzi, L., Mangini, A., Placucci, G., and Vincenzi, C. Hindered rotation in xanthenyl-type radicals, 2418.
- Lynch, M. F. See Adamson, G. W., 2428.
- McClelland, R. A., Norman, R. O. C., and Thomas, C. B. Reactions of lead(IV). Part XXII. Radical-initiated oxidation of anisole. Part XXIII. Reactions of lead tetrabenzoate with some benzenoid compounds, and comparison with those of dibenzoyl peroxide. Part XXIV. Reactions with some benzenoid compounds in the presence of monomethyl oxalate, 562, 570, 578.
- McCormick, J. E., and McElhinney, R. S. 3-Heteroglutaraldehydes. Part II. Tetrahydrothiophen-3,4-diol 1,1-dioxides and the chemistry of their oxidation product, 3-thiaglutaraldehyde 3,3-dioxide, and its derivatives. Part III. The 1,2-dithian-4,5-diols and tetrahydrothiophen-3,4-diols and their oxidation by periodate, 1335, 2795.
- McDonald, E. See Battersby, A. R., 1741.
- Macdonald, P. L. See Birch, A. J., 1186.
- McElhinney, R. S. See McCormick, J. E., 1335, 2795.
- McErlane, K. M. J., and Casey, A. F. Stereochemical studies on isomeric 1,2,5-trimethyl-4-phenylpiperidin-4-ols: reactions with acyl chlorides and thionyl chloride, 339.
- McErlane, K. M. J. See also Casey, A. F., 334, 726.
- McFarland, J. W. See Muffarij, N. A., 965.
- McGarrity, J. F. See Barton, D. H. R., 1231.
- McGhie, J. F. See Allen, J., 2994, Batten, P. L., 739, Bentley, T. J., 749, and Boar, R. B., 2231, 2590.
- MacGrillen, H. See Barton, D. H. R., 1584.
- Mackenzie, S. M., and Stevens, M. F. G. Triazines and related products. Part IX. Potential irreversible dihydrofolate reductase inhibitors: 2,4-diamino-*z*-triazines with a masked covalent labelling group, 295.
- McKervey, M. A. See Alford, J. R., 2707, Blaney, F., 2697, Courtney, T., 2691, and Cuddy, B. D., 2701.
- MacMillan, J., Simpson, T. J., Vanstone, A. E., and Yeboah, S. K. Fungal products. Part II. Structure and stereochemistry of the acid C₁₈H₁₆O₅, a degradation product of wortmannin, 2892.
- MacMillan, J., Vanstone, A. E., and Yeboah, S. K. Fungal products. Part III. Structure of wortmannin and some hydrolysis products, 2898.
- MacMillan, J., and Walker, E. R. H. Terpenoids. Part II. Some ring D derivatives of 13 β -kaurane. Part III. The enolisation-ketonisation and optical rotatory dispersion of the *ent*-kauran-15-ones and 13 β -kauran-15-ones. Part IV. The nuclear magnetic resonance properties of the stereoisomeric *ent*-kauran-15-ols and 13 β -kauran-15-ols. Part V. Rearrangement of *ent*-kaurane 15 β ,16 β -epoxide to *ent*-(16*R*)-*atisan*-15-one, 981, 986, 1272, 1274.
- McMurry, T. B. H. See Pregosin, P. S., 299.
- McNeilly, S. T. See Horspool, W. M., 1113.
- McOmie, J. F. W. See Blatchly, J. M., 2286.
- McQuillin, F. J. See Kell, D. R., 2096, 2100.
- Magnus, P. D. See Barton, D. H. R., 542, 614, 1103, 1584, Bosworth, N., 943, and King, G. S., 437.
- Mahmood, M. See Armenakian, A., 63.
- Mahmood, S. See Bowie, R. A., 2395.
- Maiorana, S. See Bradamante, S., 282.
- Mair, A. C., and Stevens, M. F. G. Azidoacridines: potential nucleic acid mutagens, 161.
- Makleit, S. See Bognár, R., 1848.
- Mangane, M. See Buu-Hoi, N. P., 278.
- Mangini, A. See Lunazzi, L., 2418.
- Manhas, M. S., Chen, C. T., Rao, V. V., Trehan, I. R., and Sharma, S. D. Synthesis and reactions of 10-bromo-7,8,9,10-tetrahydrophenanthridines, 2119.

M

- Mann, F. G., and Mercer, A. J. H. Further studies in the chemistry of 2,3-dihydro-1,2,3-triphenyl-1*H*-1,2,3-benzotriphosphole and related compounds. Part I. Part II, 1631, 2548.
- Mann, F. G. See also Allen, D. W., 2793.
- Manolis, A. See Chapman, N. B., 1404, 2593.
- Marino, M. L. See Piozzi, F., 759.
- Markus, A. See Ikan, R., 2423.
- Marlborough, D. I., and Rydon, H. N. Polypeptides. Part XVI. The synthesis of some diastereoisomeric poly-(γ -*t*-butyl glutamate)s, 1.
- Marples, B. A. See Jones, T. G. L., 792.
- Marr, G. See Evans, J. B., 2502.
- Marsh, C. R. See Burdon, J., 639, 763.
- Martani, A. See Buu-Hoi, N. P., 1266.
- Martelli, G. See Spagnolo, P., 93, 556.
- Martin, J., Parker, W., Stewart, T., and Stevenson, J. R. The solvolytic behaviour of *exo*- and *endo*-1,5-dimethyl-9-oxobicyclo[3,3,1]nonan-2-yl toluene-*p*-sulphonates, 1760.
- Martin, J. See also Colvin, E. W., 860.
- Martin, R. L. See Ariyan, Z. S., 1687.
- Martinelli, M. See Rapi, G., 502.
- Massa, S. See De Martino, G., 2504.
- Massey, S. R. See Kirby, G. W., 1642.
- Masui, M., Miyata, H., Suda, K., and Yamauchi, M. Convenient syntheses of 2,4(5)-dialkylimidazoles and 1-methyl-2,4-dialkylimidazoles, 1960.
- Masui, M., Suda, K., Yamauchi, M., and Yijima, C. Reactions of *N*-(1-cyanoalkyl)alkylideneamine *N*-oxides with dipolarophiles and nucleophiles. Part I. A novel synthesis of 2,4(5)-dialkyl-5(4)-phenylthioimidazoles, 1955.
- Mathur, R. B. See Singh, Harkishan, 990.
- Matlin, S. A., and Sammes, P. G. Decomposition of α -diazo-ketones: the oxiren-oxocarbene equilibrium, 2623.
- Matsuda, I., Itoh, K., and Ishii, Y. Reactions of Group IV organometallic compounds. Part XXVI. Insertion reactions of isocyanates and isothiocyanates to *N*-trimethylsilyl(diphenylmethylene)amine and subsequent [4 + 2] cycloadditions of isocyanates with their adducts, 1678.
- Matsuura, T. See Suga, T., 171, 258.
- Matthews, R. S. See Chambers, R. D., 1286.
- Mauger, A. B., Desai, R. B., Rittner, I., and Rzeszotarski, W. J. *N*-Methylated dioxopiperazines, 2146.
- May, S. See Gent, P. A., 2748.
- Mayor, P. A. See Haddelsey, D. I., 872, 875.
- Mazzeo, P., and Romeo, A. Enzymic and chemical transformations of the side chain of cephalosporin C, 2532.
- Meakins, G. D. See Bell, A. M., 2081, 2759, 2930, Chadwick, D. J., 655, 2079, Clark, I. M., 499, 2765, Clegg, A. S., 492, and Denny, W. A., 486.
- Meaney, D. C. See Bennett, P., 1554, 2982.
- Meek, S. E. See Fenton, R. S., 2323, and Landquist, J. K., 2735.
- Mequid, S. A. See Latif, N., 1095.
- Melloni, G., and Modena, G. Reactivity of vinyl sulphonic esters. Part X. Effect of the substituents on the cyclisation of arylthiovinyl sulphonates to benzo[*b*]thiophens. Part XII. Cyclisation of arylsulphonylvinyl sulphonates to benzo[*b*]thiophen 1,1-dioxides. A novel 1,2-sulphonyl shift, 218, 1355.
- Mellor, J. M., and Webb, C. F. Synthesis and photo-rearrangement of 9-thiabicyclo[3,3,1]nona-3,7-diene-2,6-dione, 211.
- Mellor, J. M. See also Knott, P. A., 1030.
- Mente, P. G. See Gilchrist, P. L., 2165.
- Mercer, A. J. H. See Mann, F. G., 1631, 2548.
- Merchant, J. R., and Chothia, D. S. Reactions of nitriles. Part VIII. Synthesis of 2,3-dihydroquinolin-4(1*H*)-ones, 932.
- Messiha, N. N. See Baddar, F. G., 1091.
- Mestres, R. Addition of secondary amines to diacetylenic ketones, 805.
- Metcalf, B. W. See Cannon, J. R., 1200.
- Meth-Cohn, O. See Crawforth, C. E., 1176, 2807.
- Michael, J. See Kirby, G. W., 203.
- Midgley, I., and Djerassi, C. Mass spectrometry in structural and stereochemical problems. Part CCXX. Synthesis and mass spectra of 5 α -cholest-8(9)- and 8(14)-en-7-ones, 2771.
- Mihailović, M. L., Gojković, S., and Čeković, Z. Stereochemistry of cyclic ether formation. Part I. Stereoselective intramolecular cyclisation of aliphatic disubstituted 1,4-diols and their sulphionate esters to tetrahydrofurans, 2460.
- Miller, J. A. See Carnduff, J., 692, and Horspool, W. M., 1113.
- Milloy, B. A. See Armarego, W. L. F., 2485.
- Milne, G. H., and Townsend, L. B. Pyrazolopyrimidine nucleosides. Part IV. Synthesis and chemical reactivity of the *C*-nucleoside selenoformycin B and derivatives, 2677.
- Minale, L. See De Luca, P., 2132, Fattorusso, E., 16, and Moody, K., 18.
- Minato, H. See Takeda, K., 957.
- Minghetti, A. See Caglioti, L., 1235.
- Misiti, D. See Caglioti, L., 1235.
- Misuraca, G. See Prota, G., 1614.
- Mitchard, D. A. See Goodings, E. P., 1310.
- Mitchell, J. R. See Baigrie, B., 2563, and Cadogan, J. I. G., 1304.
- Mitra, K. See Nasipuri, D., 1836.
- Mitra, T. K. See Cremllyn, R. J. W., 1727.
- Miyake, A., and Tomoeda, M. Studies on conformation and reactivity. Part XI. Photochemical oxidation, ozonolysis, and rearrangement of 5',6'-dihydrocholesta-3,5-dieno[3,4-*b*][1,4]oxathiin, 663.
- Miyata, H. See Masui, M., 1960.
- Modena, G. See Capozzi, G., 216, 1136, and Melloni, G., 218, 1355.
- Modena, M. See Piccardi, P., 1146.
- Moir, L. E. J. See Cooper, G. H., 2755.
- Montanari, F. See Cinquini, M., 1886.
- Moody, K., Thomson, R. H., Fattorusso, E., Minale, L., and Sodano, G. Aerothionin and homoaerothionin: two tetrabromo spirocyclohexadienylisoxazoles from *Verongia* sponges, 18.
- Moore, B. P. See Birch, A. J., 2653.
- Moppett, C. E. See Huff, R. K., 2584.
- Morgan, E. D. See Butterworth, J. H., 2445.
- Morgan, H., and Wilson, D. A. Preparation of *O*-(methoxymethyl)benzophenone oxime and *N*-(diphenylmethylene)-methoxymethylamine *N*-oxide and their reactions with trichloroacetic acid, 2803.
- Morgan, K. See Neeman, M., 2302.
- Morgan, M. H. See Davis, A., 286.
- Moritz, P. See Elliott, D. F., 1862.
- Morrison, G. A. See Brooks, J. S., 421, 2990.
- Morton, W. D. See Barlow, M. G., 2170.

- Muffarij, N. A., Haddadin, M. J., Issidorides, C. H., McFarland, J. W., and Johnston, J. D. The reactions of benzofurazan 1-oxides with enamines, 965.
- Mukai, T. See Neeman, M., 2297, 2300.
- Mukherjee, D. See Mukherjee, S., 1325.
- Mukherjee, S., Mukherjee, D., Sharma, M., Basu, N. K., and Dutta, P. C. Synthetic studies on terpenoids. Part XV. Syntheses of α -methylpodocarpanes, 1325.
- Mulholland, T. P. C., Foster, R., and Haydock, D. B. A synthesis of tetronic acid [furan-2(3*H*),4(5*H*)-dione] and three analogues, 1225.
- Synthesis of pyrrolidine-2,4-diones(tetramic acids) and some derivatives, 2121.
- Mullan, M. J. C. See Bowie, R. A., 1106.
- Mullen, K. See Banks, R. E., 1098.
- Müller, W. E. See Bell, A. M., 2759.
- Munro, A. See Brouwer, W. G., 124.
- Murphy, D. See Armenakian, A., 63.
- Murphy, W. S., and Sullivan, D. F. The mechanism of metal-ammonia reduction of camphor, 999.
- Murphy, W. S. See also Barrow, K. D., 2837, and Boyce, R., 1292.
- Musgrave, W. K. R. See Chambers, R. D., 1281, 1286, and Feast, W. J., 1527, 1830.
- Myers, P. L. See Lewis, J. W., 1549, 2521.
- Myerscough, T. See Banks, R. E., 1449, 2336.

N

- Naga, S. See Nakata, H., 1924.
- Nagasaki, T. See Takeda, K., 957.
- Nagpurkar, A. G. See Bourne, E. J., 2202.
- Nagy, H. See Bowman, R. E., 1926.
- Najam, A. A. See Eaborn, C., 2481.
- Nakano, T. See Kametani, T., 1435.
- Nakata, H., Tatematsu, A., Yoshizumi, H., and Naga, S. Mass spectrometry of tautomeric compounds. Part IV. Structure of the molecular ions of 4-hydroxycoumarins, 1924.
- Narayanan, K. V. See Ramani, P. V., 1516.
- Narayanaswami, S. See Kirby, G. W., 203.
- Nasipuri, D., Mitra, K., and Venkataraman, S. Cyclohexenone derivatives. Part VI. C-3 and C-1 alkylation of Hagemann's ester (ethyl 2-methyl-4-oxocyclohex-2-enecarboxylate) with alkyl halides and Michael acceptors, 1836.
- Naso, F. See Bartoli, G., 2671, and Caló, V., 2567.
- Neeman, M., Mukai, T., O'Grodnick, J. S., and Rendall, A. L. Regiospecific syntheses of modified steroid hormones. Part III. 2-Fluoro-oestrone and 17 β -oestradiol, 2300.
- Neeman, M., O'Grodnick, J. S., and Morgan, K. Regiospecific syntheses of modified steroid hormones. Part IV. 4-Bromo-oestrone and -17 β -oestradiol, 2302.
- Neeman, M., Osawa, Y., and Mukai, T. Regiospecific syntheses of modified steroid hormones. Part II. 4-Fluoro-17 β -oestradiol and -oestrone, 2297.
- Neidle, S. See Ellis, F., 1560.
- Neilson, D. G. See Bowie, R. A., 2395.
- Neiman, Z. See Lichtenberg, D., 2950.
- Nemoto, H. See Kametani, T., 1435.
- Nesi, R. See Adembri, G., 953.
- Newlands, M. J. See Coy, D. H., 1880.
- Nhamo, L. R. M. See Letcher, R. M., 206, 2941.
- Nicholson, D. C. See Gray, C. H., 288.
- Nicholson, W. J. See Banks, R. E., 1098.
- Nisato, D. See Toniolo, C., 1179, 1182.
- Nishitani, Y. See Irie, H., 588.
- Nishiwaki, T., and Fujiyama, F. Studies on heterocyclic chemistry. Part XIII. Cleavage of 5-benzylaminoxazoles, photoproducts of *N*-benzyl-2*H*-arizine-2-carboxamides, by dialkyl phosphite, 1456.
- Nishiwaki, T., and Kondo, K. Studies on heterocyclic chemistry. Part XII. Tautomerism of α -(5-oxo- Δ^3 -isoxazolin-4-yl)benzylphosphonates, 90.
- Nonhebel, D. C. See Carnduff, J., 692.
- Norman, R. O. C., Purchase, R., and Thomas, C. B. Reactions of lead(IV). Part XXVI. Oxidation of some derivatives of hydroxylamine, 1701.
- Norman, R. O. C., Purchase, R., Thomas, C. B., and Aylward, J. B. Reactions of lead(IV). Part XXV. Oxidation of some benzyl-substituted hydrazine derivatives, 1692.
- Norman, R. O. C. See also McClelland, R. A., 562, 570, 578, and Smith, J. R. L., 228.
- Nosseir, M. H. See Baddar, F. G., 1091.

O

- Oakland, J. S. See Barraclough, D., 1500.
- Obasi, M. E., Okogun, J. I., and Ekong, D. E. U. The meliacins (limonoids). Some transformations and interconversions of the meliacins, 1943.
- O'Boyle, P. See Bennett, P., 1554, 2982.
- O'Callaghan, C. N. Synthesis of ethyl 3-oxopyrazolidine-4-carboxylates, 1416.
- Odani, M. See Ishibe, N., 1203.
- Odom, H. C., jun., and Pinder, A. R. Synthetic experiments in the eremophilane sesquiterpene group. Synthesis of (\pm)-7-*epi*-nootkatone and partial synthesis of valerianol. The structure of nardostachone, 2193.
- O'Donnell, R. See Donnelly, J. A., 1875.
- O'Driscoll, J. See Scott, F. L., 2224.
- Ogata, Y., Urasaki, I., and Ishibashi, T. Reactions of biphenyl, diphenylmethane, and bibenzyl with acetyl hypiodite, 180.
- Ogilvie, A. G., and Hanson, J. R. The aromatization of some 3-substituted 5 α ,6 α -epoxysteroids, 1981.
- Ogilvie, A. G. See also Hanson, J. R., 590.
- O'Grodnick, J. S. See Neeman, M., 2300, 2302.
- Ogunkoya, L. See Barton, D. H. R., 2889.
- O'Halloran, J. K., Cronin, D. A., Cronin, J., and Scott, F. L. Chemistry of polyhalogenodiazabutadienes. Part IV. The synthesis of dihalogeno- and trihalogenodiazabutadienes, 2214.
- O'Halloran, J. K., and Scott, F. L. Chemistry of polyhalogenodiazabutadienes. Part V. Routes to new triazolyl systems: substituted 3-amino-4,5-diaryltriazoles, 2219.
- O'Halloran, J. K. See also Scott, F. L., 2224.
- Ohtsuka, Y. See Tahara, A., 320.
- Okano, M. See Uemura, S., 2268.
- Okazaki, R. See Yoshifuji, M., 559.
- Okogun, T. I. See Barton, D. H. R., 1103, Ekong, D. E. U., 953, and Obasi, M. E., 1943.
- Okorie, D. A., and Taylor, D. A. H. Limonoids from *Trichilia heudelottii*. Part II, 1488.
- Okorie, D. A. See also Connolly, J. D., 1145.

- Okumura, K., Adachi, T., Tomie, M., Kondo, K., and Inoue, I.** The use of polyphosphoric ester and polyphosphoric acid in the synthesis of 1,4-dihydro-4-oxoquinolines, 173.
- Oppenheim, C.** See **Banks, R. E.**, 1098.
- Oram, R. K.** See **Corfield, J. R.**, 713.
- Orgias, E. F.** See **Briggs, L. H.**, 1464.
- Ormerod, J. A.** See **Lewis, J. W.**, 1549, 2521.
- Osawa, Y.** See **Neeman, M.**, 2297.
- O'Sullivan, P.** See **Butler, R. N.**, 1519.
- Ottenbrite, R. M.** Preparation of aryl isothiocyanates by pyrolysis of *N*-aryldithiocarbamates, 88.
- Overend, W. G.** See **Collins, P. M.**, 2596, 2611.
- Overend, W. R.** See **Johnson, A. W.**, 2681.
- Overton, K. H.** See **Boyd, J.**, 2533, and **Johnston, J. P.**, 1490.
- Owen, G.** See **Goodings, E. P.**, 1310.
- Owen, L. N.** See **Khan, M. S.**, 2060, 2067.

P

- Padmanabhan, S.** See **Singh, Harkishan**, 993.
- Pagani, G.** See **Bradamante, S.**, 282.
- Palmer, A. K.** See **Hough, L.**, 2513.
- Panzica, R. P.** See **Earl, R. A.**, 2672.
- Paradisi, M. P., and Romeo, A.** Hydrogenolyses of 3-hydroxycholest-4-enes by mixed hydrides, 2010.
- Parker, J.** See **Franich, R. A.**, 2034.
- Parker, V. D.** See **Hammerich, O.**, 1718.
- Parker, W.** See **Colvin, E. W.**, 860, and **Martin, J.**, 1760.
- Parnell, E. W.** See **Davis, M.**, 1420.
- Parry, D. R.** See **Curtis, R. F.**, 240.
- Partch, R.** See **Schlademan, J.**, 213.
- Partridge, I.** See **Bird, C. W.**, 1020.
- Patel, J. K.** See **Finnegan, R. A.**, 1896.
- Paterson, T., and Wood, H. C. S.** Specific enzyme inhibitors in vitamin biosynthesis. Part I. The synthesis of 8-substituted pyrido[2,3-*d*]pyrimidines, 1041.
The biosynthesis of pteridines. Part VI. Studies of the mechanism of riboflavin biosynthesis, 1051.
- Payne, I. M.** See **Bramwell, A. F.**, 2004.
- Pearce, P. J., Richards, D. H., and Scilly, N. F.** A one-step alternative to the Grignard reaction, 1655.
- Pearson, M.** See **Worman, J. J.**, 1209.
- Pechet, M. M.** See **Barton, D. H. R.**, 2889.
- Peek, M. E.** See **Keating, M.**, 1315.
- Pelc, B., and Kodicek, E.** The location of tritium in [1-³H]ergosterol, 244.
[G-³H]Ergosterol; location of tritium in rings A and B, 1915.
Synthesis of [4-¹⁴C]ergosterol and [4-¹⁴C]ergocalciferol, 2980.
- Pelc, B., and Sanders, J. K. M.** The configuration of 1 α -methyl-5 α -androstane-3-ones, 1219.
- Pellegrini, F.** See **Greco, C. V.**, 720, 1623.
- Pendlebury, A.** See **Clark, I. M.**, 499, 2765.
- Perche, J.-C., Saint-Ruf, G., and Buu-Hoi, N. P.** Carcinogenic nitrogen compounds. Part LXXIV. Skraup and Combes-Beyer reactions with 3-aminocarbazoles; a new route to pyrido[3,2'-*b*]carbazoles, 260.
- Percy, G. R.** See **Butterworth, J. H.**, 2445.
- Pérez, G.** See **Crabbé, P.**, 46.
- Périn-Roussel, O., Buu-Hoi, N. P., and Jacquignon, P.** Carcinogenic nitrogen compounds. Part LXXVII. A novel synthesis of β -carbolines, 531.
- Périn-Roussel, O.** See also **Buu-Hoi, N. P.**, 234, 1263.
- Perkins, M. J.** See **Hey, D. H.**, 105, 113, 118, 1150, 1155, 1162, 1170.
- Perold, G. W., Hodgkinson, A. J., and Howard, A. S.** Metabolites of Proteaceae. Part V. Reflexin and conocarpic acid from *Leucospermum reflexum* Buek *ex* Meisner, and the phenol-dienone rearrangement of reflexin and conocarpin, 2450.
- Perold, G. W., Hodgkinson, A. J., Howard, A. S., and Kruger, P. E. J.** Metabolites of Proteaceae. Part VI. The stereochemistry of reflexin and conocarpin, 2457.
- Pesce, M. A.** See **Greco, C. V.**, 1623.
- Philbin, E. M.** See **Buggle, K.**, 2630.
- Phillips, L.** See **Ayres, D. C.**, 1343.
- Phipps, J. R.** See **Good, R. H.**, 2441.
- Piccardi, P., Modena, M., and Santoro, E.** The peroxide-initiated addition of 1,1-dibromotetrafluoroethane to ethylene, propene, and 2-methylpropene, 1146.
- Pickett, J. A.** See **Elvidge, J. A.**, 1483, 2346.
- Pijewska, L.** See **Battersby, A. R.**, 1736.
- Pinder, A. R.** See **Odum, H. C., jun.**, 2193.
- Pinder, R. M.** See **Brewster, K.**, 941.
- Pinhas, H.** See **Buu-Hoi, N. P.**, 278.
- Pinhey, J. T., and Rizzardo, E.** The structure of 'cholestane-3,4,6-trione', 1358.
- Pinhey, J. T.** See also **Batey, I. L.**, 2260, **Clark, I. M.**, 2765, and **Kazlauskas, R.**, 1243.
- Piozzi, F., Venturella, P., Bellino, A., Marino, M. L., and Salvadori, P.** Further reactions of sideridiol [($-$)-kaur-15-ene-7 β ,19-diol], 759.
- Pitkethly, W. N.** See **Hooper, M.**, 1607.
- Placucci, G.** See **Lunazzi, L.**, 2418.
- Pocar, D., Stradi, R., and Rossi, L. M.** *v*-Triazolines. Part I. Synthesis and properties of 5-amino-4-(α -aminoethyl)-1-aryl-4,5-dihydro-*v*-triazoles. Part II. Synthesis and reactions of 5-amino-4-aminomethyl-1-aryl-*v*-triazolines, 619, 769.
- Pocar, D.** See also **Bianchetti, G.**, 997.
- Porter, A. E. A.** See **Blake, K. W.**, 2494.
- Porter, Q. N.** See **Baldas, J.**, 592, 597, 599.
- Poyser, J. P.** See **Barton, D. H. R.**, 53.
- Pragnall, J.** See **Denny, W. A.**, 486.
- Prakash, A.** See **Banks, R. E.**, 1098.
- Pregosin, P. S., Randall, E. W., and McMurry, T. B. H.** ¹³C Fourier studies. The configurational dependence of the carbon-13 chemical shifts in santonin derivatives, 299.
- Pregdergast, W.** See **Albert, A.**, 457.
- Preston, W. E.** See **Feast, W. J.**, 1527, 1830.
- Price, A. P.** See **Bentley, K. W.**, 302, and **Heaney, H.**, 2911.
- Pritchard, A. E.** See **Weinstein, B.**, 1015.
- Pritt, J. R.** See **Bone, J. A.**, 2644, and **Cloke, C.**, 2648.
- Proctor, G. R., and Ross, W. I.** Azocine derivatives. Part I. Synthesis of 1-benzazocin-6-one derivatives by direct cyclisation, 885.
- Proctor, G. R., Ross, W. I., and Tapia, A.** Azabenzocycloheptenones. Part XIV. Cyclisation of amino-acid derivatives to tetrahydro-1-benzazepin-5-ones and tetrahydroquinolin-4-ones, 1803.
- Proctor, G. R.** See also **Cromarty, A.**, 2012, **Haque, K. E.**, 539, **Humphreys, D. J.**, 722, and **Ross, W. I.**, 889.
- Prota, G., D'Agostino, M., and Misuraca, G.** The structure of hallochrome: 7-hydroxy-8-methoxy-6-methyl-1,4-anthraquinone, 1614.
- Punja, N.** See **Cowie, J. S.**, 2197.
- Purchase, R.** See **Norman, R. O. C.**, 1692, 1701.

Q

- Quillinan, A. J., and Scheinmann, F.** Extractives from Guttiferae. Part XXV. Synthesis of the natural 1,5-dioxygenated xanthenes, dehydrocycloguanandin, guanandin, isoguanandin, and 5-hydroxy-1-methoxyxanthone 1382.
- Qureshi, A. R.** See **Hudson, H. R.**, 1595.
- Qutob, M.** See **Fitton, A. O.**, 2658, 2660.

R

- Radics, L.** See **Findlay, J. A.**, 2071.
- Ragoonanan, D.** See **Hudson, H. R.**, 1595.
- Rahat, M.** See **Lichtenberg, D.**, 2950.
- Rahman, A.** See **Sammes, M. P.**, 344.
- Rahman, R.** See **Francis, E.**, 470.
- Rainey, D. K.** See **Locksley, H. D.**, 3001.
- Raja, R. A.** See **Cremllyn, R. J. W.**, 1171.
- Ralph, B. J.** See **Batey, I. L.**, 2260.
- Ramage, R.** See **Battersby, A. R.**, 1741, 2743.
- Ramani, P. V., John, J. P., Narayanan, K. V., and Swaminathan, S.** Base-catalysed rearrangements of bicyclic δ -hydroxy- $\alpha\beta$ -enones. Part V, 1516.
- Ramli, M.** See **Greenhill, J. V.**, 1667.
- Randall, E. W.** See **Pregosin, P. S.**, 299.
- Randall, M. H., and Angyal, S. J.** Formation of 3,6-anhydro-4,5-*O*-isopropylidene-D-allose dimethyl acetal in the methanolysis of 1,2:5,6-di-*O*-isopropylidene-3-*O*-*p*-tolylsulphonyl- α -D-glucofuranose. Synthesis of 3,6-anhydro-D-allose, 346.
- Ranzi, B. M.** See **Canonica, L.**, 2639.
- Rao, V. V.** See **Manhas, M. S.**, 2119.
- Raphael, R. A.** See **Baker, A. J.**, 1256, and **Colvin, E. W.**, 860.
- Rapi, G., Ginanneschi, M., Martinelli, M., and Chelli, M.** Amino- and dienamino-derivatives formed from adrenocortical steroids and heterocyclic bases, 502.
- Raulins, N. R.** See **Abbott, P. J.**, 2182.
- Rawlings, T. J.** See **Easton, D. B. J.**, 41.
- Rea, E. J. F.** See **Cuddy, B. D.**, 2701.
- Readhead, M. J.** See **Lewis, J. W.**, 878, 881.
- Redman, A. P.** See **Elvidge, J. A.**, 2820.
- Reed, G. F.** See **Crombie, L.**, 2241, 2248, 2255.
- Rees, C. W., and Yelland, M.** Reactive intermediates. Part XVIII. An *N*-aminopyridone-to-pyridazine rearrangement; a new decarbonylation reaction, 77.
- Rees, C. W.** See also **Anderson, D. J.**, 1317, **Bradbury, S.**, 68, 72, **Gilchrist, T. L.**, 2165, and **Keating, M.**, 1315.
- Reese, C. B., and Saffhill, R.** A ^1H nuclear magnetic resonance spectroscopic study of some *N*-methyl and *N*-acyl derivatives of guanosine. The structure of *N,O*(2'),*O*(3'),*O*(5')-tetra-acetylguanosine, 2937.
- Reid, D. H., and Webster, R. G.** Studies of heterocyclic compounds. Part XII. A three-step synthesis of 6a-thiathiophthen from γ -pyrone, 1447.
- Reid, D. H.** See also **Dingwall, J. G.**, 1360.
- Reid, S. T.** See **Hunt, R.**, 2527.
- Rendall, A. L.** See **Neeman, M.**, 2300.
- Reynolds, A. A.** See **Bowman, R. E.**, 1121.
- Ricci, A.** See **Buu-Hoi, N. P.**, 1266.
- Richards, D. H.** See **Davis, A.**, 286, and **Pearce, P. J.**, 1655.
- Richardson, A. C., and Tarelli, E.** Chemical modification of trehalose. Part X. Some further 3,3'-dideoxy-analogues, 949.

- Richardson, A. C.** See also **Hough, L.**, 2513.
- Ridd, V.** See **Bowie, R. A.**, 2395.
- Riddell, W. D.** See **Bastable, J. W.**, 2205.
- Ridge, B., Rydon, H. N., and Snell, C. R.** Polypeptides. Part XXI. Synthesis of some sequential macromolecular polypeptolides of L-leucine and L-2-hydroxy-4-methyl-pentanoic acid, 2041.
- Riezebos, G.** See **Bramwell, A. F.**, 2004, and **McAndrew, B. A.**, 367.
- Rigby, R. B.** See **Haszeldine, R. N.**, 155, 159, 1506, 2180, 2438.
- Riley, T.** See **Barker, S. A.**, 809.
- Rindone, B.** See **Canonica, L.**, 2639.
- Rittner, I.** See **Manger, A. B.**, 2146.
- Rizzardo, E.** See **Pinhey, J. T.**, 1358.
- Roberts, J. C.** See **Bonner, T. G.**, 1902.
- Robertson, A. K.** See **Baigrie, B.**, 2563.
- Robinson, D. H., and Shaw, G.** Purines, pyrimidines, and imidazoles. Part XXIX. Formation of some 5-amino-imidazole-4-carboxylic acid derivatives from ethyl α -amino- α -cyanoacetate, 1715.
- Robinson, G. E., and Vernon, J. M.** Preparation and photochemistry of some chlorine-substituted derivatives of deoxybenzoin and bibenzyl, 1277.
- Robinson, G. E.** See also **Abbott, P. J.**, 2182.
- Rohan, T. A.** See **Locksley, H. D.**, 3001.
- Rollins, A. J.** See **Brimacombe, J. S.**, 2977.
- Romeo, A.** See **Mazzeo, P.**, 2532, and **Paradisi, M. P.**, 2010.
- Ronzini, L.** See **Capozzi, G.**, 1136.
- Rooney, J. J.** See **Courtney, T.**, 2691.
- Rosenbaum, J.** See **Davis, M.**, 1420.
- Rosevear, A.** See **Kennedy, J. F.**, 2568.
- Rosie, D. A., and Shone, G. G.** Reactions of fatty cyclopropanoids with hydrogen halides and halogens, 1750.
- Ross, W. I., and Proctor, G. R.** Azocine derivatives. Part II. Synthesis of benzazocine derivatives by ring-expansion of dihydrobenzazepines with dibromocarbene, 889.
- Ross, W. I.** See also **Proctor, G. R.**, 885, 1803.
- Rossi, L. M.** See **Pocar, D.**, 619, 769.
- Rothfield, M.** See **Bachi, M. D.**, 2326.
- Rowbottom, K. T.** See **Glover, E. E.**, 2927.
- Rowley, A. G.** See **Smith, J. R. L.**, 228.
- Rudloff, E. von.** See **Suga, T.**, 962.
- Russell, C. A.** See **Crawforth, C. E.**, 1176, 2807.
- Rutledge, P. S.** See **Baker, K. M.**, 190, and **Briggs, L. H.**, 581.
- Ryan, N. D.** See **Buggle, K.**, 2630.
- Rydon, H. N.** See **Ali, A.**, 1070, **Barrett, G. C.**, 2634, **Hardy, P. M.**, 5, 605, 1523, **Marlborough, D. I.**, 1, and **Ridge, B.**, 2041.
- Rzepa, H. S.** See **King, G. S.**, 437.
- Rzeszotarski, W. J.** See **Mauger, A. B.**, 2146.

S

- Saeki, Y.** See **Fujita, E.**, 2141.
- Safe, S., and Hutzinger, O.** The mass spectra of polychlorinated biphenyls, 686.
- Safe, S., and Taylor, A.** Sporidesmins. Part XIII. Ovine III-thrift in Nova Scotia. Part III. The characterisation of chetomin a toxic metabolite of *Chaetomium cochliodes* and *Chaetomium globosum*, 472.
- Safe, S.** See also **Francis, E.**, 470.
- Saffhill, R.** See **Reese, C. B.**, 2937.

- Said, E. Z., and Tipping, A. E.** Organohalogen compounds. Part I. The preparation of 1,4-dibromo-2,3-dimethylbuta-1,3-diene and 1-bromo-4-chloro-2,3-dimethylbuta-1,3-diene. Part II. The reactions of 2,3-dimethylbuta-1,3-diene with chlorine and with iodine monochloride, 1399, 1986.
- Sainsbury, M.** See **Kilminster, K. N.**, 2264, 2415.
- Saint-Ruf, G.** See **Bigot, P.**, 2573, and **Perche, J.-C.**, 260.
- Sakla, A. B.** See **Tadros, W.**, 2839.
- Salgado, D.** See **Crabbé, P.**, 46.
- Sallomi, I. G.** See **Al-Jallo, H. N.**, 1022.
- Salvadori, P.** See **Piozzi, F.**, 759.
- Sammes, M. P., and Rahman, A.** The photochemical synthesis of alkyl 2,2-dimethyl-3-(2-methylpropenyl)-aziridine-1-carboxylates and 3,3-dimethylaziridine-1,2-dicarboxylates from alkyl azidoformates, 344.
- Sammes, P. G.** See **Barton, D. H. R.**, 53, 929, **Blake, K. W.**, 2494, **Ellis, F.**, 1560, 2866, and **Matlin, S. A.**, 2623.
- Samuelsson, B., and Lamm, B.** Formation of a δ -diketone in the cathodic cleavage of a β -keto-sulphoxide, 652.
- Sanders, J. K. M.** See **Baxter, I.**, 2046, and **Pelc, B.**, 1219.
- Santaniello, E.** See **Canonica, L.**, 2639.
- Šantavý, F.** See **Battersby, A. R.**, 1736.
- Santorio, E.** See **Piccardi, P.**, 1146.
- Santos, E.** See **Crabbé, P.**, 46.
- Sargent, M. V.** See **Cannon, J. R.**, 1200, and **Lam, J. K. K.**, 1466.
- Sasaki, O.** See **Uemura, S.**, 2268.
- Sasaki, T., Kanematsu, K., and Hayakawa, K.** Studies of heteroaromaticity. Part LIX. Further investigations of the cycloaddition reactions of tropone with azo-dienophiles and the photochemical behaviour of the adducts, 783.
- Studies of bridged benzo-heterocycles. Part II. Cycloaddition reactions of epoxy-bridged cyclic olefins with tropone and tropolone, and photochemical behaviour of the adducts, 1951.
- Sasaki, T., Kanematsu, K., Hayakawa, K., and Uchide, M.** Studies of bridged benzoheterocycles. Part III. Cycloadditions of 1,4-epoxy-1,4-dihydronaphthalene to some dipolar compounds and dienes, 2750.
- Satoh, Y.** See **Kametani, T.**, 2160.
- Saunders, A., and Sprake, J. M.** Some derivatives of 5,6,11,12-tetrahydrodibenzo[*b,f*][1,4]diazocine, 1964.
- Saxton, J. E.** See **Gibson, K. H.**, 2776.
- Scalzo, M.** See **De Martino, G.**, 2504.
- Schafer, D. J.** Synthesis of some tri-, tetra-, and pentapeptide sequences of fibrinogen by the picolyl ester method, 1452.
- Scheffer, A.** See **Goosen, A.**, 369.
- Scheinmann, F.** See **Barracough, D.**, 1500, and **Quillinan, A. J.**, 1382.
- Schlademan, J., and Partch, R.** Synthesis of 1-oxo- and 1-hydroxy-azabenzocycloalkanes, 213.
- Scilly, N. F.** See **Davis, A.**, 286, and **Pearce, P. J.**, 1655.
- Scopes, D. I. C., and Joule, J. A.** Mechanism of substitution of quinolines with organometallic reagents, 2810.
- Scott, A. I.** See **Fox, J. E.**, 799.
- Scott, F. L., Barry, J. A., and Spillane, W. J.** Transfer of sulphonic acid groups from *N*-alkylsulphamic acids: a new and simple sulphonation procedure, 2663.
- Competition between carbon, nitrogen, and oxygen nucleophilic centres for sulphur(vi) attack in *NN'*-disubstituted sulphamides, 2666.
- Scott, F. L., Lambe, T. M., and Butler, R. N.** Ambident oxidative ring closure of semicarbazones, 1918.
- Scott, F. L., O'Halloran, J. K., O'Driscoll, J., and Hegarty, A. F.** Synthesis and solvolysis of a new group of reactive halides, the imidazolin-2-ylidenehydrazonyl chlorides: a route to 6,7-dihydro-3-aryl-5*H*-imidazolo[2,1-*c*]-s-triazoles, 2224.
- Scott, F. L.** See also **Butler, R. N.**, 269, 1519, and **O'Halloran, J. K.**, 2214, 2219.
- Scott, M. D.** Reaction of phenylacetonitrile anion with sulphites: a novel isothiazole synthesis, 1432.
- Scotton, M.** See **Adembri, G.**, 953.
- Scrowston, R. M.** See **Carrington, D. E. L.**, 3006, **Chapman, N. B.**, 3011, and **Cooper, J.**, 265, 414.
- Seager, J. F.** See **Bailey, A. S.**, 1003.
- Sedmera, P.** See **Battersby, A. R.**, 1736.
- Selby, I. A.** See **Lewis, J. W.**, 1549.
- Selema, M. D.** See **Ekong, D. E. U.**, 1084.
- Sethi, P. D.** See **Kirson, I.**, 2109.
- Shabbir, M.** See **Cromarty, A.**, 2012.
- Shannon, P. V. R.** See **Donnelly, W. J. G.**, 25.
- Shapter, H. J.** See **Hanson, J. R.**, 1445.
- Sharma, M.** See **Mukherjee, S.**, 1325.
- Sharma, P. P.** See **Singh, Harkishan**, 990.
- Sharma, R. P.** See **Hankinson, B.**, 2372.
- Sharma, S. C.** See **Armarego, W. L. F.**, 2485.
- Sharma, S. D.** See **Manhas, M. S.**, 2119.
- Sharp, D. W. A.** See **Haran, G.**, 34.
- Sharp, J. T.** See **Baigrie, B.**, 2563, and **Cadogan, J. I. G.**, 1304.
- Shaw, D.** See **Ellis, G. P.**, 779.
- Shaw, G.** See **Robinson, D. H.**, 1715.
- Sheffield, D. J., and Wooldridge, K. R. H.** Synthesis of some 4-pyridylpyruvic acids as potential lactate dehydrogenase inhibitors, 2506.
- Shelton, G.** See **Broadhurst, M. J.**, 143, and **Grigg, R.**, 1789.
- Sheppard, G.** See **Hickmott, P. W.**, 1038, 1639.
- Shibuya, S.** See **Kametani, T.**, 1435, 1513.
- Shimaoka, A.** See **Takeda, K.**, 957.
- Shingu, T.** See **Inubushi, Y.**, 1682.
- Shishibori, T.** See **Suga, T.**, 171.
- Shok, M.** See **Ekong, D. E. U.**, 953.
- Shone, G. G.** See **Rosie, D. A.**, 1750.
- Shoppee, C. W., and Cooke, B. J. A.** Intramolecular electrocyclic reactions. Part II. Reactions of 1,5-diphenylpenta-1,4-dien-3-one, 2271.
- Shoppee, C. W., and Stevenson, D.** 2,2,6,6-Tetramethylheptane-3,4,5-trione, 3015.
- Shroot, B.** See **Colvin, E. W.**, 860.
- Siddiquei, A. S.** See **Gore, P. H.**, 1442, 1781, 2344.
- Siddiqui, M. N. U.** See **Cadogan, J. I. G.**, 2555.
- Signor, A.** See **Toniolo, C.**, 1179, 1182.
- Simes, J. J. H.** See **Batey, I. L.**, 2260, and **Kazlauskas, R.**, 1243.
- Simpson, T. J.** See **MacMillan, J.**, 2892.
- Singh, Harjit, and Lal, K.** Preparation of 2,3-dihydrothiazolo[2,3-*a*]isoquinolinium salts and their reactions with complex metal hydrides, 1799.
- Singh, Harkishan, Mathur, R. B., and Sharma, P. P.** Steroids and related studies. Part XVIII. 3-Aza-homo-4a-eno[3,4-*d*]tetrazole steroid analogues, 990.
- Singh, Harkishan, Padmanabhan, S., Bose, A. K., and Kugajevsky, I.** Steroids and related studies. Part XIX. Products of the Schmidt reaction with cholest-4-ene-3,6-dione, 993.
- Singh, J. M., and Turner, A. B.** Applications of high-potential quinones. Part VIII. Mechanism of oxidation of 2-benzylphenol to benzybenzoquinones, 2294.

- Singh, S. See Bentley, K. W., 302.
- Sinnreich, J., and Asscher, M. Redox-transfer. Part VII. Addition of ethylene and butadiene to functionally substituted aromatic sulphonyl chlorides, 1543.
- Skeels, M. See Brewster, K., 941.
- Smale, T. C. See Brown, A. G., 65.
- Small, C. W. See Briggs, L. H., 1464.
- Small, S. See Dean, F. M., 2007.
- Smith, A. C. B. See Bentley, K. W., 870, and Lewis, J. W., 878.
- Smith, C. See Clark, J., 247.
- Smith, D. C. C. See Berry, D., 699.
- Smith, D. J. H. See Corfield, J. R., 713, and Ellis, K., 1184.
- Smith, D. M. See Cadogan, J. I. G., 1296, 2555.
- Smith, D. O'N. See Lam, J. K. K., 1466.
- Smith, E. H. See Crout, D. H. G., 671.
- Smith, G. See Barton, D. H. R., 542.
- Smith, G. A., and Williams, D. H. Experiments towards a synthesis of antheridiol: a synthesis of biologically active material, 2811.
- Smith, G. F. See Britten, A. Z., 418.
- Smith, J. R. L., Norman, R. O. C., and Rowley, A. G. Amine oxidation. Part VI. Metal-ion induced dehydrative cyclisation, reduction, and reductive fragmentation of arylethyl dimethylamine *N*-oxides, 228.
- Smith, K. M. Porphyrins and bile pigments from brominated pyrromethenes, 1471.
- Smith, P. I. See Horspool, W. M., 1024.
- Smith, R. G. See Bender, C. O., 771.
- Smith, R. M. See Johnson, A. W., 2153.
- Snell, C. R. See Ridge, B., 2041.
- Snowden, R. L. See Chadwick, D. J., 2079.
- Sodano, G. See De Luca, P., 2132, Fattorusso, E., 16, and Moody, K., 18.
- Somanathan, R., and Sultanbawa, M. U. S. Chemical investigation of Ceylonese plants. Part I. Extractives of *Calophyllum calaba* L. and *Calophyllum bracteatum* Thw. (Guttiferae), 1935.
- Sondheimer, F. See Stöckel, K., 355.
- Spagnolo, P., Testaferri, L., Tiecco, M., and Martelli, G. The reactivity of thieno[3,2-*b*]thiophen and theno[2,3-*b*]thiophen with phenyl radicals, 93.
- Spagnolo, P., Tiecco, M., Tundo, A., and Martelli, G. Homolytic aromatic substitution of heterocyclic compounds. Part V. The phenylation of benzo[*b*]thiophen and benzo[*b*]furan, 556.
- Spanswick, J. See Kemp, W., 151.
- Sparkes, G. R. See Banks, R. E., 2964.
- Spence, T. W. M., and Tennant, G. The chemistry of nitro-compounds. Part II. The scope and mechanism of the base-catalysed transformations of some *NN*-disubstituted *o*-nitrobenzamides. Part III. The intramolecular nucleophilic displacement of aromatic nitro-groups by carbanions, 97, 835.
- Spencer, H. See Aldridge, D. C., 2136.
- Spillane, W. J. See Scott, F. L., 2663, 2666.
- Sprake, J. M. See Saunders, A., 1964.
- Spring, D. J. See Chambers, R. D., 2464.
- Srinivasan, K. See Cocker, W., 1971.
- Srivastava, K. S. L. See Davis, Michael, 935.
- Stace, B. C. See Cort, L. A., 177.
- Stagno d'Alcontres, I. See Aversa, M. C., 222.
- Stanton, E. See Anderson, D. J., 1317.
- Stanton, J. See Strange, P. G., 2364, and Wightman, R. H., 2355.
- Steinreich, P. See Kirby, G. W., 1642.
- Step, G. See Blaney, F., 2697.
- Stephens, R. See Brown, P. J. N., 937.
- Stevens, M. F. G. Triazines and related products. Part X. A re-examination of the reaction between benzil and diaminoguanidine nitrate, 1221.
- Stevens, M. F. G. See also Mackenzie, S. M., 295, and Mair, A. C., 161.
- Stevenson, D. See Shoppee, C. W., 3015.
- Stevenson, J. R. See Martin, J., 1760.
- Stewart, T. See Martin, J., 1760.
- Stillwell, M. A. See Strunz, G. M., 2280.
- Stockdale, B. R. See Carnduff, J., 692.
- Stöckel, K., and Sondheimer, F. Unsaturated macrocyclic compounds. Part LXXXVIII. Monodehydro[24]annulene, 355.
- Stoodley, R. J. See Dunn, A. R., 2509, and Jackson, J. R., 895, 1063.
- Storey, H. T. See Hardy, P. M., 1523.
- Storr, R. C. See Bradbury, S., 68, 72, and Keating, M., 1315.
- Stradi, R. See Bianchetti, G., 997, and Pocar, D., 619, 769.
- Strange, P. G., Staunton, J., Wiltshire, H. R., Battersby, A. R., Hanson, K. R., and Havir, E. A. Studies of enzyme-mediated reactions. Part II. Stereochemistry of the elimination of ammonia from *L*-tyrosine catalysed by the enzyme from maize, 2364.
- Streckert, G. See Barton, D. H. R., 542.
- Strunz, G. M., Kakushima, M., and Stillwell, M. A. Scytalidin: a new fungitoxic metabolite produced by a *Scytalidium* species, 2280.
- Stubbs, J. K. See Acheson, R. M., 899.
- Stubbs, M. E. See Hamer, N. K., 2971.
- Subba Rao, G. See Birch, A. J., 1186.
- Subramanian, S. S. See Kirson, I., 2109.
- Suda, K. See Masui, M., 1955, 1960.
- Suder, R. See Harmon, R. E., 1746.
- Suga, T., Hirata, T., and Matsuura, T. Stereochemical studies of monoterpene compounds. Part XI. Rearrangement of 2 α -hydroxypinan-3-one in the presence of anhydrous oxalic acid, 258.
- Suga, T., Imamura, K., and Rudloff, E. von. The oxidation of (+)-occidentalol with *t*-butyl chromate, 962.
- Suga, T., Shishibori, T., and Matsuura, T. Intramolecular hydrogen bonding in hydroxy-keto-steroids, 171.
- Sugahara, T. See Kametani, T., 1435.
- Sugimoto, T. See Brown, D. J., 237.
- Sugita, M. See Irie, H., 588.
- Sullivan, D. F. See Murphy, W. S., 999.
- Sultanbawa, M. U. S. See Somanathan, R., 1935.
- Suschitzky, H. See Ager, E., 133, and Chippendale, K. E., 2023, 2030.
- Sutherland, J. K. See Durrant, G., 2582, and Huff, R. K., 2584.
- Sutton, T. M. See Chapman, N. B., 3011.
- Swaminathan, S. See Ramani, P. V., 1516.
- Swan, G. A., and Wilcock, J. D. 10,11-Didehydrostrychnidine, 1068.
- Studies on the reaction of benzoyl peroxide with *NN*-disubstituted aromatic amines and related compounds. Part VI. Some attempts to effect *o*-hydroxylation in the strychnine series, 1429.
- Sweeney, A. See Grigg, R., 1789.
- Sykes, P., and Ullah, H. The reaction of nucleophiles with some isothiazolium and 1,2-dithiolium salts, 2305.

T

- Tadros, W., Sakla, A. B., and Abdou, S. E.** Reactions with asymmetric diarylethylenes. Part XV. Dimerisation of 1,1-bis-*p*-alkoxyphenylethylenes, 2839.
- Tadros, W.** See also **Anteunis, M.**, 616.
- Taguchi, H.** See **Albert, A.**, 449.
- Tahara, A., and Ohtsuka, Y.** Diterpenoids. Part XVIII. Synthesis and stereochemistry of 1,2,3,4,4a,9a-hexahydro-1 β ,4 α -dimethylfluorene-1 α ,9-dicarboxylic acids, 320.
- Takahashi, T.** See **Kametani, T.**, 1435.
- Takano, S.** See **Kametani, T.**, 391, 2834.
- Takeda, K., Minato, H., Shimaoka, A., and Nagasaki, T.** Studies on biochemical transformation of plant steroids. Part IV. Biosynthesis of 3 α -hydroxylated steroidal sapogenins. Part I, 957.
- Takeshita, M.** See **Kametani, T.**, 2834.
- Takeuchi, Y.** See **Dennis, N.**, 2054.
- Tamoto, K.** See **Irie, H.**, 588.
- Tanaka, A., Tanaka, R., Uda, H., and Yoshikoshi, A.** Synthesis of cubebane-type sesquiterpenoids and the stereochemistry of cubebol, 1721.
- Tanaka, R.** See **Tanaka, A.**, 1721.
- Tani, S.** See **Irie, H.**, 2986.
- Tanner, R. J. N.** See **Thompson, R. S.**, 1387.
- Tanuma, R.** See **Ishibe, N.**, 1203.
- Tapia, A.** See **Proctor, G. R.**, 1803.
- Tarelli, E.** See **Richardson, A. C.**, 949.
- Tasker, P. A.** See **Acheson, R. M.**, 2918.
- Tatematsu, A.** See **Nakata, H.**, 1924.
- Taticchi, A.** See **Fringuelli, F.**, 199.
- Tatlow, J. C.** See **Bagnall, R. D.**, 2277, **Brown, P. J. N.**, 937, and **Burdon, J.**, 639, 763.
- Taylor, A.** See **Francis, E.**, 470, and **Safe, S.**, 472.
- Taylor, C. M.** See **Brown, D. M.**, 2385.
- Taylor, D. A. H.** See **Connolly, J. D.**, 1145, and **Okorie, D. A.**, 1488.
- Taylor, D. R., Warburton, M. R., and Wright, D. B.** Allene cycloadditions. Part III. Synthesis of alkylidenecyclobutenes, 1365.
- Taylor, J. R.** See **Brown, P. J. N.**, 937.
- Tebby, J. C.** See **Allen, D. W.**, 2793, and **Wilson, I. F.**, 31, 2713, 2830.
- Tedder, J. M.** See **Horspool, W. M.**, 1024.
- Tennant, G.** See **Spence, T. W. M.**, 97, 835.
- Terui, T.** See **Kametani, T.**, 1513.
- Testaferrri, L.** See **Spagnolo, P.**, 93.
- Thacker, D.** See **Albert, A.**, 468.
- Thackeray, D. P. C.** See **Cort, L. A.**, 177.
- Thaller, V., and Turner, J. L.** Natural acetylenes. Part XXXIV. Synthesis of C₁₁ ene-diyn-ene alcohols, aldehydes, acids, and esters. Part XXXV. Polyacetylenic acid and benzenoid metabolites from cultures of the fungus *Lepista diemii* Singer, 552, 2032.
- Thang, D. C., Can, C. X., Buu-Hoi, N. P., and Jacquignon, P.** Carcinogenic nitrogen compounds. Part LXXXI. Steric control in heterocyclic cyclisations with 6-substituted chrysenes, 1932.
- Thang, D. C.** See also **Buu-Hoi, N. P.**, 263.
- Thijs, L.** See **Bonini, B. F.**, 2490.
- Thomas, C. B.** See **McClelland, R. A.**, 562, 570, 578, and **Norman, R. O. C.**, 1692, 1701.
- Thomas, V. E. M.** See **Clegg, A. S.**, 492.
- Thomason, D. A.** See **Bowie, R. A.**, 1842.
- Thompson, A.** See **Fitton, A. O.**, 2658.
- Thompson, R. C.** See **Hardy, P. M.**, 5.
- Thompson, R. S., Jacques, D., Haslam, E., and Tanner, R. J. N.** Plant proanthocyanidins. Part I. Introduction; the isolation, structure, and distribution in nature of plant procyanidins, 1387.
- Thomson, J. B.** See **Cadogan, J. I. G.**, 1296, and **Finucane, B. W.**, 1856.
- Thomson, R. H.** See **Brown, P. M.**, 2842, **Dewar, P. S.**, 2857, 2862, **Erdman, T. R.**, 1291, **Forrester, A. R.**, 2847, 2853, and **Moody, K.**, 18.
- Thorburn, S.** See **Gore, P. H.**, 1781.
- Thorpe, D. H.** See **Birchall, J. M.**, 2579.
- Thrift, R. I.** See **Bowman, R. E.**, 2878.
- Tiecco, M.** See **Spagnolo, P.**, 93, 556.
- Tieghi, G.** See **Ferruti, P.**, 2001.
- Timmings, P. A.** See **Barton, D. H. R.**, 1584.
- Tipping, A. E.** See **Coy, D. H.**, 1880, **Fleming, G. L.**, 1877, **Forshaw, T. P.**, 1059, **Haszeldine, R. N.**, 155, 159, 1506, 2180, 2438, and **Said, E. Z.**, 1399, 1986.
- Titman, R. B.** See **Baxter, I.**, 2046.
- Todesco, P. E.** See **Bartoli, G.**, 2671, and **Caló, V.**, 1652, 2567.
- Tomie, M.** See **Okumura, K.**, 173.
- Tomoeda, M.** See **Miyake, A.**, 663.
- Toniolo, C., Nisato, D., Biondi, L., and Signor, A.** Nitro-heteroaromatic derivatives of amino-acids and peptides. Part III. Application of ultraviolet-visible absorption and circular dichroism to *N*-(3-nitro-2-pyridyl)amino-acids. Part IV. A circular dichroic method for the selective determination of cysteinyl residues, 1179, 1182.
- Toriyama, M.** See **Kametani, T.**, 1435.
- Toube, T. P.** See **Bognár, R.**, 1848.
- Townend, J.** See **Hill, J.**, 1210.
- Townsend, L. B.** See **Earl, R. A.**, 2672, and **Milne, G. H.**, 2677.
- Trehan, I. R.** See **Manhas, M. S.**, 2119.
- Trippett, S.** See **Corfield, J. R.**, 713, and **Ellis, K.**, 1184.
- Trocha-Grimshaw, J.** See **Grimshaw, J.**, 50, 1622.
- Tso, C. C.** See **Armitage, D. A.**, 680.
- Tucker, L. C. N.** See **Al-Radhi, A. K.**, 315.
- Tundo, A.** See **Spagnolo, P.**, 556.
- Turner, A. B.** See **Singh, J. M.**, 2294.
- Turner, J. L.** See **Thaller, V.**, 552, 2032.
- Turner, W. B.** See **Aldridge, D. C.**, 2136, **Cross, B. E.**, 380, and **Gardner, D.**, 2576.

U

- Uccella, N.** See **Aversa, M. C.**, 222.
- Uchide, M.** See **Sasaki, T.**, 2750.
- Uda, H.** See **Kido, F.**, 1755, and **Tanaka, A.**, 1721.
- Uemura, S., Sasaki, O., and Okano, M.** Concurrent chlorination and carboxylation of aromatic hydrocarbons with thallium(III) chloride tetrahydrate in carbon tetrachloride, 2268.
- Uff, B. C., Kershaw, J. R., and Chhabra, S. R.** Reissert compound chemistry. Part III. Some rearrangement and substitution reactions, 479.
- Ullah, H.** See **Sykes, P.**, 2305.
- Unsworth, J. F.** See **Bowie, R. A.**, 1106.
- Urasaki, I.** See **Ogata, Y.**, 180.
- Uyeo, S.** See **Irie, H.**, 588.

V

- Van den Bossche, R., Anteunis, M., Vandewalle, M., and Verzele, M. Oxidation products of hop bitter acids. Part VI. Five-membered ring products from the oxidation of colupulone, 1599.
- Vanderwalle, M. See Van den Bossche, R., 1599.
- Vanstone, A. E. See MacMillan, J., 2892, 2898.
- Venkataraman, S. See Nasipuri, D., 1836.
- Venturella, P. See Piozzi, F., 759.
- Verlander, M. S. See Acheson, R. M., 1577.
- Vernon, J. M. See Kricka, L. J., 904, and Robinson, G. E., 1277.
- Verzele, M. See Van den Bossche, R., 1599.
- Vincenzi, C. See Lunazzi, L., 2418.
- Vouros, P. See Harvey, D. J., 1074.

W

- Wade, K. O. See Dingwall, J. G., 1360.
- Wade, R. See Elliott, D. F., 1862.
- Wagenaar, A. See Bonini, B. F., 2490.
- Wakefield, B. J. See Berry, D. J., 2190, and Cook, J. D., 995.
- Wakeford, D. H. See Cremllyn, R. J. W., 1171.
- Walker, B. J. See Devlin, C. J., 1249.
- Walker, E. R. H. See MacMillan, J., 981, 986, 1272, 1274.
- Walker, J. See Jones, J. H., 2923.
- Waller, R. T. See Edge, M. D., 1991.
- Wallis, S. R. 4-Vinyltricyclo[6,2,1,0^{2,7}]undec-9-ene: a minor adduct from the Diels-Alder reaction of 4-vinylcyclohexene and cyclopentadiene, 1647.
- Walsh, R. J. A., and Wooldridge, K. R. H. Isothiazoles. Part XV. 5-Nitroisothiazoles, 1247.
- Wälti, M., and Hope, D. B. Synthesis of [1-(L-2-hydroxy-3-mercaptopropanoic acid)]oxytocin, a highly potent analogue of oxytocin, 1946.
- Walton, D. R. M. See Eaborn, C., 2481.
- Warburton, M. R. See Taylor, D. R., 1365.
- Ward, P. See Bramwell, A. F., 2004.
- Warr, W. A. See Bailey, A. S., 1626, 2411.
- Warren, S. See Cann, P. F., 2377.
- Wass, J. See Jackson, A. H., 1475.
- Watson, K. M. See Bowie, R. A., 2395.
- Watson, M. B., and Youngson, G. W. The absolute configuration of tropic acid, 1597.
- Weale, J. See Bowman, R. E., 1926, 2878.
- Webb, B. C., and Wells, C. H. J. Studies on nitroaromatic compounds. Part III. The synthesis of some new polynitroacenaphthenes, 166.
- Webb, C. F. See Mellor, J. M., 211.
- Webb, T. See Bycroft, B. W., 820, 827.
- Webster, R. G. See Reid, D. H., 1447.
- Wedgwood, J. J. See Bailey, A. S., 2411.
- Weedon, B. C. L. See Bognár, R., 1848.
- Weinstein, B., and Pritchard, A. E. Amino-acids and peptides. Part XXVIII. Determination of racemization in peptide synthesis by nuclear magnetic resonance spectroscopy, 1015.
- Weisgraber, K. H., and Weiss, U. Pigments of *Elsinoe* species. Part VI. A simple synthesis of a related perylenequinone, 83.
- Weiss, U. See Weisgraber, K. H., 83.
- Weitl, F. L. See Kevill, D. N., 2162.
- Wells, C. H. J. See Webb, B. C., 166.
- Wells, R. D. See Bramwell, A. F., 2004.
- Weringa, W. D., Williams, D. H., Feeney, J., Brown, J. P., and King, R. W. The structure of an amino-sugar from the antibiotic vancomycin, 443.
- Westcott, N. D. See Barton, D. H. R., 2889.
- Weyell, D. J. See Bowman, R. E., 1926.
- Whitaker, K. E. See Barton, J. W., 717.
- White, A. C. See Bowman, R. E., 1926, 2878.
- White, A. F. See Hanson, J. R., 1892.
- Whitehead, E. V. See Corbett, R. E., 2827.
- Whitehouse, D. See Crout, D. H. G., 671.
- Whitehouse, R. D. See Jones, D. N., 1329.
- Whiteley, C. G. See Coucourakis, E. D., 2339.
- Whitham, G. H., and Zaidlewicz, M. Preparation of *cis*- and *trans*-cyclodec-2- and -3-enones and studies of interconversions between them, 1509.
- Whiting, D. A. See Crombie, L., 642, and Ham, P. J., 330.
- Whiting, M. C. See Bone, J. A., 2644, and Cloke, C., 2648.
- Wibberley, D. G. See Hickman, J. A., 2954, 2958.
- Wicha, J. See Denny, W. A., 486.
- Widdowson, D. A. See Barton, D. H. R., 513, 1231.
- Wife, R. L. See Jones, D. W., 2722.
- Wightman, R. H., Staunton, J., Battersby, A. R., and Hanson, K. R. Studies of enzyme-mediated reactions. Part I. Syntheses of deuterium- or tritium-labelled (3S)- and (3R)-phenylalanines: stereochemical course of the elimination catalysed by L-phenylalanine ammonia-lyase, 2355.
- Wilcock, J. D. See Swan, G. A., 1068, 1429.
- Williams, A. W., and Young, G. T. Amino-acids and peptides. Part XXXV. The effect of solvent on the rates of racemisation and coupling of some acylamino-acid *p*-nitrophenyl esters; the base strengths of some amines in organic solvents, and related investigations, 1194.
- Williams, D. H. See Smith, G. A., 2811, and Weringa, W. D., 443.
- Williams, G. H. See Johnson, K. M., 1648.
- Williams, G. J. See Guthrie, R. D., 2619.
- Williams, M. R. See Cann, P. F., 2377.
- Willis, B. J. See Barton, D. H. R., 305.
- Wilson, D. A. See Morgan, H., 2803.
- Wilson, D. V. See Beddows, C. G., 1773.
- Wilson, I. F., and Tebby, J. C. Formyl-, aroyl, and acyl-alkylidetriphenylphosphoranes: conformational analysis by proton nuclear magnetic resonance spectroscopy, 31.
- Dibenzophospholium salts and ylides. Preparation, properties, and Wittig olefin synthesis, 2713.
- Reactions of phosphines with acetylenes. Part XVI. Formation of β -alkoxy-phosphonium ylides and vinyl ethers *via* methanolysis of vinylphosphonium salts, 2830.
- Wilson, N. H. See Andrew, H. F., 755, and Campbell, N., 2739.
- Wiltshire, H. R. See Strange, P. G., 2364.
- Wiriyachitra, P. See Bick, I. R. C., 2884.
- Wirz-Justice, A. See Banthorpe, D. V., 1764, 1769.
- Wong, D. Y. See Bird, C. W., 1020.
- Wood, H. C. S. See Carnduff, J., 692, and Paterson, T., 1041, 1051.

Woodgate, P. D. See **Bell**, A. M., 2081.
Woods, D. K. See **Crombie**, L., 642.
Woodward, D. R. See **Barlow**, M. G., 2170.
Wooldridge, K. R. H. See **Knowles**, P., 975, **Sheffield**, D. J., 2506, and **Walsh**, R. J. A., 1247.
Woolley, V. A. See **Evans**, W. C., 2017.
Wootton, M. See **Batey**, I. L., 2260.
Worman, J. J., **Kub**, M. E., and **Pearson**, M. Rearrangement of the dihydrobromide of octahydro-3,7-dimethoxy-1,5-diphenyl-1,5-diazocine, 1209.
Wright, B. See **Bowie**, R. A., 1109.
Wright, D. B. See **Taylor**, D. R., 1365.
Wright, M. See **Huckle**, D., 2425.
Wright, N. D. See **Acheson**, R. M., 2918.
Wright, P. H. See **Boyd**, G. V., 909, 914, 1140.

Y

Yamaki, K. See **Kametani**, T., 1513.
Yamane, H. See **Irie**, H., 2986.
Yamauchi, M. See **Masui**, M., 1955, 1960.
Yeboah, S. K. See **MacMillan**, J., 2892, 2898.
Yelland, M. See **Rees**, C. W., 77.
Yijima, C. See **Masui**, M., 1955.

Yoshifuji, M., **Okazaki**, R., and **Inamoto**, N. Aluminium chloride-catalysed reactions of 1-alkyl-3,5-di-*t*-butylbenzenes with phosphorus trichloride. Migration of a *t*-butyl group to the phosphorus atom, 559.
Yoshikoshi, A. See **Kido**, F., 1755, and **Tanaka**, A., 1721.
Yoshizumi, H. See **Nakata**, H., 1924.
Young, A. C. See **Barlin**, G. B., 1269.
Young, D. W. See **Fox**, J. E., 507, 799.
Young, G. R. See **Haddlesey**, D. I., 872.
Young, G. T. See **Fletcher**, G. A., 1867, and **Williams**, A. W., 1194.
Young, I. M. See **Horspool**, W. M., 1113.
Young, M. R. See **Banthorpe**, D. V., 1532.
Youngson, G. W. See **Watson**, M. B., 1597.

Z

Zaher, A. H. A. See **Anteunis**, M., 616.
Zaidlewicz, M. See **Whitham**, G. H., 1509.
Zanardi, G. See **Benati**, L., 2817.
Zocchi, M. See **Ferruti**, P., 2001.
Zsupán, K. See **Bognár**, R., 1848.
Zurr, D. See **Barton**, D. H. R., 542.
Zwanenburg, B. See **Bonini**, B. F., 2490.