COMMUNICATIONS TO PROCEEDINGS: INDEX OF SUBJECTS, 1959

The following index relates to Scientific Communications published in Proceedings of the Chemical Society, 1959.

[14C] Acetates, reactions of, in acetic acid, 226.

Acylating agents, Friedel-Crafts, vinyl ethers from the reation of decalin with, 395.

Aldobiouronic acids, formation from catalytically oxidised polysaccharides, 270.

Alkaloids, diterpenoid, removal of the nitrogen from, 62.

Allene, optically active, stereospecific synthesis of an, 154.

Allyl alcohol, action of 60Co-y-radiation on, in aqueous solution, 125.

Allyl carbonium ion, phenyl-, reactivity of, 8.

Allyl chloride, 1-phenyl-, solvolysis of, 8.

Alternaric acid, structure of, 398.

Alternatiol, biosynthesis of, 88.

Aluminium bromide, action of, on phenyl s-butyl ether, 58. Androstanes, conversion of a 14α - into a 14β -hydroxy-group in,

Anions, reactivity of, towards acylating agents, 149.

Antibiotic A 246, carbon skeleton of, 154.

Antibiotics, macrolide. Part IX, 316.

Azoferrocenes, 56.

В

Bassic acid, structure of, 393.

Benzoic acids, benzoyl-, anodic reactions of, 366.

Benzonitrile, trimerisation of, by iron carbonyls, 307.

Benzoquinone, bisadduct with butadiene, stereochemistry of,

2,5-dimethyl-, structure of a saturated photo-dimer of, 11. Biflavonyls, as natural products, 91.

prep., 232, 269.

Borazoles, B-amino-, and their polycondensates, 59.

Boron, allyl compounds of, as polymerisation initiators, 397. perfluoroalkyls of, 301.

cyclic organic compounds of. Part III, 59.

Butadiene, bisadduct with benzoquinone, stereochemistry of, 390.

Butanes, 2,3-dibromo-, nuclear magnetic resonance spectra of, 327.

C

Cadmium:

Di-(2-thioimidazolidine)cadmium thiocyanate, crystal structure, 159.

Camphor, structure of the lactone C₁₀H₁₆O₄ obtained in the Baeyer-Villiger oxidation of, 188.

Carbene, dichloro-, prep., 229.

Carbenes, formation of, from silicon compounds, 394.

Carbonium ions, trimethyl-, direct detection of, 92.

Carboxylic acid, abnormal, prep., 62. Catalytic activity, in the first transition series, 315.

Catechin, configuration of, 388.

Chlorine monoxide, microwave spectrum and nuclear quadrupole coupling coefficients for, 10.

Cholest-6-en-3 β -ol, prep., 314.

Cholesterol, 7-dehydro-, reduction of, 314.

Chromatography, gas-liquid, of volatile germanes and silanes, 189.

Chromium:

Tricarbonylchromium, electric dipole moments of some aromatic complexes of, 93.

Tricarbonyltropyliumchromium perchlorate, reactions with anions, 267.

Chrysanthenone, synthesis of, by photoisomerisation of verbenone, 160.

"Citrylidene-malonic acid," 400.

Cobalt octacarbonyl, relation of a synthetic structure to one proposed for, 156 (erroneously paginated, 56).

Acetylene-enneacarbonyldicobalt, structure, (erroneously paginated 56).

Cobalt (III), complexes, and cyanide ion, interaction of, 385. Peroxydicobalt complexes, paramagnetic resonance absorption in, 57; electron spin resonance in crystals of,

Configuration, relative, of catechin and epicatechin, 388.

Conformation, of dimethylpiperazine in its palladous chloride complex, 394.

Conjugation, perpendicular, in some octahedral metallophthalocyanine derivatives, 123.

Copper, ethynyl co-ordination complexes of, 296.

Cupric nitrate, anhydrous, crystal structure of, 311.

gaseous, mass spectrum of, 11.

Cyanamide, microwave spectrum and structure of, 155. Cyanide ion, and cobalt(III) complexes, interaction of, 385.

Cyclodecapentaene, 309.

Cyclododecane, structure (amendment to Proc. Chem. Soc., Soc., 1958, 348), 268.

Cyclohexadiene, triterpenoid, photochemical cleavage of, 55. O^2 , 2'-Cyclonucleosides, new route to, 84.

Cyclo-octatetraene, complexes with iron. 90.

Cytidine, cyclisation during phosphorylation of, by polyphosphoric acid, 84.

n

Dammarenolic acid, constitution of, 306.

Decalin, with Friedel-Crafts acylating agents, vinyl ethers from, 395.

Denaturation, of a synthetic polyampholyte, 222.

Diaboline, structure of, 126.

Dimethylpiperazine, confirmation of, in its palladous chloride complexes, 394.

Diphenyl-4,4'-dicarboxylic acid, 2,2'-dibromo-, racemisation of, in ethanol, 367.

Dispersion, optical rotatory, studies of. Part XXIX, 264.

Dissociation, of nickel complexes, application of the stoppedflow method to, 399.

of triphenylmethyl chloride in liquid sulphur dioxide, 386.

Di-t-butyl peroxide, photolysis of, 385.

Dithizone, complexes of, with metal halides, 324.

E

Echitamine, 134.

partial structure of, 224.

Elastomers, containing fluorine, 230.

α-Elaterin, structure of, and its degradation products, 191.

Electron spin resonance, in crystals of the amminoperoxydicobalt complexes, 130.

Emetine, absolute stereochemistry of, 86.

Epicalciferol, 269.

Epicatechin, configuration of, 388.

Ethane, role of hydroperoxides in the oxidation of, 384.

Ethylene, trifluoronitroso-, and its polymers, 369.

Ethylenediamines, substituted, prep. from tertiary amines and t-butoxy-radicals, 225.

Ethynyl co-ordination complexes of copper and silver, 396.

F

Filipin, 316.

Flav-2-ene, 4-1'-indenylidene-, 93.

Fluorine cyanide, 265.

G

β-D-Galactose, 1.6-anhydro-3.4-isopropylidene-2-O-methanesulphonyl-, an exchange reaction with, 187.

Gamma-radiation, from cobalt-60, action on propene and allyl alcohol in aqueous solution, 125.

Geraniol, stereochemistry and synthesis of, 263.

Germanes, volatile, gas-liquid chromatographic separation

Gibberellic acid, revised structure for, 302.

Gibberellin A, isolation and analysis, 325.

Ginkgetin, structure of, 91.

H

Halides, metal, stability relations among, 324.

Heptane, peroxides formed during the slow combustion of, 190, 328.

Hydrazine, prep. by glow-discharge electrolysis of ammonia, 272, (reprinted with accompanying diagram) 368.

Hydrocortisone, 6x-fluoro-16x-methyl-, and related steroids,

Hydrogen-bonding, of monocarboxylates in aqueous solution,

Hydroperoxides, role of, in the oxidation of ethane and propane, 384.

1

Ionisation of triphenylmethyl chloride in liquid sulphur dioxide, 386.

Iron carbonyls, trimerisation of benzonitrile by, 307.

Iron-acetylene-carbonyl complexes, new, 150.

Isoginkgetin, structure of, 91.

Isolycoctonine, and the structure of hydroxylycoctonine salts, 192.

Isostrychnic acid, oxidation of, 322.

K

Kavafiavone, structure of, 269.

Ketyls, of metals, as initiators of polymerisation of vinvl monomers, 364.

L

Lagosin, carbon skeleton of, 154.

Lead:

Mono(thiourea)lead(π) acetate, crystal structure, 194.

Trimethyl-lead hydride, 124.

Lumisantonin, stereochemistry of, 391.

M

Maleic acid, addition of, to benzene, 326.

Manganese carbonyls, 130.

phthalocyanine, as an oxygen carrier, 195.

Metallophthalocyanines, octahedral, perpendicular conjugation in, 123.

Metals, transition, six-membered heterocyclic sandwich compounds of, 61.

Methoxyl radicals, reactions of, 61.

Methyl methacrylate, polymerisation of, 397.

Methylene, abstractions of, 318.

Monocarboxylates, hydrogen-bonding of, in aqueous solution,

Mundulone, characteristics of, 150.

N

Naphthalene, vapour absorption spectra of, at 3200 Å, 361. Nerol, stereochemistry and synthesis of, 263.

Nickel, complexes, application of the stopped-flow method to,

Nitrous oxide, ionised, N_2O^+ , emission spectrum of, 313.

Nitroso-compounds, fluoroalkyl-, prep., 367.

Nuclear resonance spectroscopy, high-resolution, use of spherical samples in, 128.

Nyctanthic acid, constitution of, 306; structure of, 271.

Oosporein-tomichaedin degradation, 95.

Osmium, a halogenohydride of, 153; highest fluoride of, 85.

Palladous chloride, conformation of complex with dimethylpiperazine, 394.

Papaverine, biogenesis of, 152.

Penta-1,2-diene, 1-chloro-3,4,4-trimethyl-, stereospecific prep.,

Peroxides, formed during the slow combustion of heptane, 190, 328.

Phaseolus multiflorus, isolation of gibberellin A5 from seeds of,

Phenoxy-radicals, free, electron magnetic resonance of, 308. Phenyl s-butyl ether, action of aluminium bromide on, 58.

Phosphorus, heterocyclic compounds of, prep., 231. optically active compounds of, displacement reactions of, 227.

Methylphosphonitriles, prep., 7.

Phosphine oxide, tetrahedral complex cations with, 158.

Phosphorus(v) halides, mass spectra of, 133.

(2-Substituted ethyl)phosphines, abnormal hydrolysis of,

Tetraethyl monothio- and monoseleno-pyrophosphate, structure, 321.

Photochlorination, of acid chlorides, effect of benzene on, 132. Photo-dimer, saturated, of 2,5-dimethylbenzoquinone, structure, of, 11.

Photolysis, of di-t-butylperoxide, 385.

Phthalocyanine, manganese derivative, as an oxygen carrier,

Phthalocyanines, perpendicular conjugation in, 123.

Phytol, absolute configuration of, 264; stereochemistry and synthesis of, 263.

Polarisabilities, longitudinal, of bonds, and stretching frequencies, 363.

Polyacetylene, macrocyclic molecular structure of a, 231. Polyampholyte, synthetic, denaturation of, 222.

with a "built-in dye," 223. Polymerisation, anionic, of styrene, 399.

of methyl methacrylate, 397.

of vinyl monomers, metal ketyls as initiators for, 364.

Prednisone acetate, dienone-phenol rearrangement of, 6.

Propane, role of hydroperoxide in the oxidation of, 384.

Propan-2-ol, photo-induced oxidation of, by acid chromate,

Propene, action of 60Co-y-radiation on, in aqueous solution,

Propyl radical, 2-chloro-1-methyl-, stereospecificity, 9.

Proton spin-spin coupling constants, relative signs of, in a conjugated diene system, 89.

Pyranosylmethanes, diethylsulphonyl-, oxonium cation intermediates in the nucleophilic degradation of, 193.

Pyrazole ring, evidence for, in a plant amino-acid, 131.

Pyridine, reaction with methyl acetylenedicarboxylate, 186.

Pyridines, substituted, prep., 312.

Q

Quinoline, adduct with acetylenedicarboxylic ester, 309.

R

Racemisation, activation energy and entropy in, 367. Radical, free stereospecific, 9. Riboflavin, biosynthesis, 387. Ruthenium, complex hydrides and alkyls of, 153.

S

Sandwich compounds, six-membered heterocyclic, of transition metals, 61.

Sciadopitysin, structure of, 91.

Silicon:

Disilyl [180]ether, Raman spectrum and structure of, 321.
Silanes, volatile, gas-liquid chromatographic separation of, 189.

Silicon compounds, α-elimination and carbene formation from, 394.

Silver, ethynyl co-ordination complexes of, 396. halides, gaseous, internuclear distances in, 303.

Argentic picolinate, oxidations by, 305.

Sodium hydrogen diacetate, crystal structure of, and hydrogen bond in, 316.

Sotetsuflavone, structure of, 269.

Spectra, crystal, of vibrationally induced transitions, 389.
Spectrum, ultraviolet, of naphthalene at 3200 Å, in the vapour phase, 361.

Spin-spin coupling constants, between hydrogen nuclei in hydrocarbon groupings, magnitudes and signs, 266.

Spirilloxanthin, and related carotenoids, structures of, 96.

Stereochemistry, of the bis butadiene-benzoquinone adduct, 390. of lumisantonin, 391.

Steric effect, of the trifluoromethyl group, 396.

Stopped-flow method, application to the dissociation of nickel complexes, 399.

Styrene, anionic polymerisation of, 399.

Substitution, nucleophilic, simultaneous unimolecular and bimolecular reactions in, 157.

Sulphur:

Disulphur decafluoride, reaction with chlorine, 317.

Trifluoromethylmercaptide ion, existence of, 319.

Sulphur-chlorine bonds, heterolytic and homolytic fission of, 304.

Sulphur dioxide, ionisation and dissociation of triphenylmethyl chloride in liquid, 386.

Sulphur-sulphur bonds, heterolytic and homolytic fission of, 304.

Т

Tantalum, dialkylamido-derivatives of, 225.

Thiols, detection of, 160.

Thorium, dialkylamido-derivatives of, 225.

Titanium, alkyl-, tribalides, 227.

Transitions, vibrationally induced, crystal spectra of, 389.

Trichothecin, structure and biogenesis of, 127. Trifluoromethyl group, steric effect of, 396.

Triphenylmethyl chloride, ionisation and dissociation of, in liquid sulphur dioxide, 386.

U

Uranium, synergic effects in solvent extraction of, 360.
Uridine, cyclisation during phosphorylation of, by polyphosphoric acid, 84.

Ursolic acid, dehydro-, methyl ester, photochemistry of, 55.

٧

Verbenone, conversion into chrysanthenone, 160.Vinyl ethers, from the reaction of decalin with Friedel-Crafts acylating agents, 395.

z

Zirconium, dialkylamido-derivatives of, 225.