

Journal of The Chemical Society

Chemical Communications

21 DECEMBER 1977

JCCCAT (24) 901–956 (1977)

CONTENTS

- | Page | |
|------|---|
| 901 | Co-ordinated Thioformaldehyde Monomer. Synthesis and Reactions of $[\text{Os}(\eta^2\text{-CH}_2\text{S})(\text{CO})_2(\text{PPh}_3)_2]$
Terrence J. Collins and Warren R. Roper |
| 902 | Stereochemical Control of the Interfacial Darzens Condensation
Andrzej Jonczyk, Andrzej Kwast, and Mieczyslaw Makosza |
| 903 | Stereospecific, Transition Metal-mediated Synthesis of Unsymmetrical <i>cis</i> Olefinic Diphosphines
David K. Johnson and Arthur J. Carty |
| 905 | Evidence for the Replacement of Silicon by a Divalent Cation: Synthesis of a Novel Zinc Mica, $\text{K}_2\text{H}_2\text{Zn}_5\text{[ZnSi}_2\text{O}_{20}\text{]}(\text{OH})_4$
Richard M. Barrer and Werner Sieber |
| 905 | Total Synthesis of Clavulanic Acid Analogues <i>via</i> Isomerisation of 7-Oxo-4-oxa-1-azabicyclo[3.2.0]hept-2-enes
Peter H. Bentley, Gerald Brooks, Martin L. Gilpin, and Eric Hunt |
| 906 | Total Synthesis of β -Lactamase Inhibitors related to Clavulanic acid
Eric Hunt, Peter H. Bentley, Gerald Brooks, and Martin L. Gilpin |
| 908 | Direct Formation of Peptide Analogues of Rubredoxins and Four-iron Ferredoxins from their Components
George Christou, Brian Ridge, and H. N. Rydon |
| 909 | Synthesis of the Nonacosapeptide Corresponding to the Entire Amino Acid Sequence of Duck Glucagon
Haruaki Yajima, Hiroshi Ogawa, and Hideo Sakurai |
| 910 | Discovery of New Types of Chain Silicates by High Resolution Electron Microscopy
Leslie G. Mallinson, John L. Hutchison, David A. Jefferson, and John M. Thomas |
| 911 | Large Preference for Equatorial Iodine in 2-Isopropyl-5-iodo-1,3-dioxans
Nicholas J. Kotite, Maria Harris, and Moses K. Kaloustian |
| 912 | Metal Atom Preparation and Ligand Displacement Reactions of Bisnaphthalenechromium and Related Compounds
Ernst Peter Kündig and Peter L. Timms |
| 913 | Michael Reactions of Lithium Trialkylalkynylborates
Andrew Pelter and Lyn Hughes |
| 914 | Hydrogen Exchange Between Amines and Chloroform Catalysed by Palladium(II) Amine Complexes Containing a β -Diketonate Anion in the Outer Sphere
Seichi Okeya, Yukio Nakamura, and Shinichi Kawaguchi |
| 915 | Easy Perchlorination of Nitrogen-, Oxygen-, Fluorine-, Silicon-, Sulphur-, and Tin-substituted Aryl Compounds
Christopher Glidewell and John C. Walton |
| 916 | Synthesis of a Variety of Polycyclic Heteroaromatic Compounds <i>via</i> Quinone Methide Intermediates
Janet L. Asherson and Douglas W. Young |
| 918 | Synthesis of In, Out-3,6,9,12,16,19,22,25,27,30,33,36-dodecaoxabicyclo[12.12.10]hexatriacontane and the Chiral Cryptand In, Out-($-$)-3,6,9,12,15,18,21,24,26,29,32-undecaoxabicyclo[12.10.9]tritriacontane. Out, In-In, Out Isomerism
Barrie J. Gregory, Alan H. Haines, and Pipat Karntiang |
| 919 | Removal of C-20 in Gibberellin Biosynthesis
Brian Dockerill, Roger Evans, and James R. Hanson |
| 921 | Deuterium as a Tracer in Polyketide Biosynthesis: a New Method for the Detection of Chain Starter Units
Mary J. Garson, Robert A. Hill, and James Staunton |
| 922 | Oxygen-17 Nuclear Magnetic Resonance Spectroscopy: the Sign of the O-H Nuclear Spin-Spin Coupling Constant
W. Brian Jenkins and William McFarlane |
| 923 | Chemical Mutations of Papain. The preparation of Ser 25- and Gly 25-Papain
Peter I. Clark and Gordon Lowe |
| 924 | Novel Conformational $\beta \rightarrow \alpha$ Transformation of Oligopeptides in the Solid State by Shear Stress
Ryoichi Kataki and Yohko Nakayama |
| 926 | Nucleophilic Attack on π -Etheneplatinum(II) Complexes: <i>cis</i> -Isomers
Ibrahim M. Al-Najjar and Michael Green |
| 927 | Photochemical Preparations of Deoxy-sugars from Carbohydrate Esters: a Simple Synthesis of Methyl Amicetoside
Peter M. Collins and V. Ranjit Z. Munasinghe |

Contents—continued overleaf

Contents—continued

Page	
928	Enantiomeric 1-Phenylpropyl and 1-Phenylbutyl 9-Anthroates as Novel Chiral Inclusion Complexing Agents. Preparation and X-Ray Analysis of the 6 : 1 Inclusion Complexes with n-Hexane <i>Meir Lahav, Les Leiserowitz, Lipa Roitman, and Chia Pin Tang</i>
930	Bridging Acetylene Complexes of Nickel and Platinum; X-Ray Crystal Structure of $[\text{Pt}_2(\text{Et}_2\text{P})_4(\text{PhC}_2\text{Ph})_2]$ <i>Neil M. Boag, Michael Green, Judith A. K. Howard, John L. Spencer, Robert F. D. Stansfield, F. Gordon A. Stone, Martyn D. O. Thomas, Jose Vicente, and Peter Woodward</i>
931	Reactivity of 2,3-Dimethylthiiren 1,1-Dioxide as an Ambident Electrophile. Reaction with α -Metallated Nitriles <i>Toshio Agawa, Yasuo Yoshida, Mitsuo Komatsu, and Yoshiki Ohshiro</i>
932	Method for the Synthesis of 4-Substituted Acetoacetates <i>Coes B. Troostwijk and Richard M. Kellogg</i>
933	Addition of $\text{Li}^{80\text{m}}\text{Br}$ to Polyhalogenoarynes <i>David J. Malcolm-Lawes, Alan G. Massey, and Denys Wickens</i>
934	2,5-Dihydro-1,3,2-oxazaphosph(v)oles. Preparation and Properties <i>Evan P. Kyba and David C. Alexander</i>
936	Preparation of New Triple-bridged Dimers of Ruthenium(II) by Protonation of Basic Ruthenium Hydrides with the Weak Acids HX (X = OH, SH, SMe, or F); X-Ray Crystal and Molecular Structure of $[\text{Ru}_2(\text{OH})_3(\text{PMc}_2\text{Ph})_6][\text{BPh}_4]$ <i>Terence V. Ashworth, Magriet J. Nolte, and Eric Singleton</i>
937	Conversion of Bonded Cyclo-octadiene into a Cyclo-octadienyl Ligand and Cleavage of Boron-Phenyl Bonds of Arene-bonded Tetraphenylborate Anions in Ruthenium(II) Systems: X-Ray Crystal and Molecular Structures of $[\text{Ru}(\eta^6\text{-C}_6\text{H}_5\text{BL}_3)(1-\text{3,5,6-}\eta\text{-C}_6\text{H}_{11})]$ (L = Ph or F) <i>Terence V. Ashworth, Magriet J. Nolte, Rolf H. Reimann, and Eric Singleton</i>
939	Model Compounds for Simple Saturated 7-9 Membered Rings: the X-Ray Crystal Structures of Hexa-, Hepta-, and Octa-methylenammonium Salts <i>T. Stanley Cameron and Hans W. Scheeren</i>
941	Analysis of the Thermodynamic and Kinetic Factors which Control Entry into, and Wagner-Meerwein Rearrangement within, the $\text{C}_{12}\text{H}_{15}^+$ Systems <i>Merle A. Battiste, John F. Timberlake, Leo A. Paquette, Charles R. Degenhardt, J. T. Martin, E. Hedaya, T. M. Su, and S. Theodoropoulos</i>
942	Ligand Substitution at Five-co-ordinate Centres: Associate Mechanism for the High-spin Complex 2,9-Dimethyl-1,10-phenanthrolinebis-($O\text{O}'$ -dimethyl dithiophosphato)nickel(II) <i>Michael J. Hynes and Patricia F. Brannick</i>
944	Singlet Excited States from Dioxetan Decomposition <i>Frank McCapra, I. Beheshti, A. Burford, R. A. Hann, and K. A. Zaklika</i>
946	Alternative Mechanism for Dioxetan Decomposition <i>Frank McCapra</i>
948	Novel Stereochemical Feature of Epoxidation with Hydrogen Peroxide-Tris(acetylacetonato)iron(III) System <i>Toshio Yamamoto and Michiya Kimura</i>
949	Biosynthesis of Mycophenolic Acid. The Synthesis of 6-Farnesyl-5,7-dihydroxy-4-methylphthalide in a Cell-free Preparation from <i>Penicillium brevicompactum</i> <i>Lynn Bowen, Kenneth H. Clifford, and Gareth T. Phillips</i>
950	Biosynthesis of Mycophenolic Acid. Substrate Stereochemistry of Farnesyl Pyrophosphate: 5,7-Dihydroxy-4-methylphthalide Farnesyl Transferase from <i>Penicillium brevicompactum</i> <i>Lynn Bowen, Kenneth H. Clifford, and Gareth T. Phillips</i>
952	Proacacipetalin and Acacipetalin <i>Martin G. Ettlinger, Jerzy W. Jaroszewski, Søren Rosendal Jensen, Bent Juhl Nielsen, and Frederick Nartey</i>
953	Structure Elucidation of MM 17880, a New Fused β -Lactam Antibiotic isolated from <i>Streptomyces olivaceus</i> ; a Mild β -Lactam Degradation Reaction <i>David F. Corbett, A. John Eglington, and T. Trefor Howarth</i>
955	Biosynthesis of Phenanthroindolizidine Alkaloids from 6,7-Diphenylhexahydroindolizines <i>Richard B. Herbert and Frederick B. Jackson</i>
956	Corrigenda