

# Journal of The Chemical Society

## Chemical Communications

20 APRIL 1977

JCCCAT (8) 241–287 (1977)

### CONTENTS

- | Page |  |
|------|--|
| 241  | Stereochemistry and Mechanism of Cleavage of the Platinum-Carbon $\sigma$ -Bond by Peroxy Acid<br><b>Ian J. Harvie and Francis J. McQuillin</b>  |
| 242  | Solvent Effects in 1,3-Photocycloaddition of Vinyl Ethers to Monosubstituted Benzenes<br><b>Andrew Gilbert and Graham Taylor</b>   |
| 243  | Correlation Between Resonance Energies Per $\pi$ Electron and Sondheimer's Rates of Formation of Macrocyclic Annulenes<br><b>B. Andes Hess, Jr. and Lawrence J. Schaad</b>   |
| 244  | Calorimetric Determination of Macroyclic Enthalpy. Copper(II) and Zinc(II) Complexes with 1,4,8,11-Tetra-azacyclotetradecane<br><b>Andrea Anichini, Luigi Fabbrizzi, Piero Paoletti, and Robert Clay</b>   |
| 245  | Reaction of Hexafluorobut-2-yne with Halogenodicarbonyl( $\eta^2$ -cycloheptatrienyl)molybdenum Complexes; Crystal and Molecular Structure of $[\text{Mo}_2(\mu\text{-Cl})_3(\eta^2\text{-C}_7\text{H}_7)_2]^+[\text{MoCl}(\text{CF}_3\text{C}_2\text{CF}_3)_3]^-$<br><b>Richard Bowerbank, Michael Green, Howard P. Kirsch, André Mortreux, Lesley E. Smart, and F. Gordon A. Stone</b>                               |
| 247  | Isolation of Trioxodinitrato(II) Complexes of Some First Row Transition Metal Ions<br><b>Charles A. Lutz, Ann Lomax, and Lily Toh</b>  |
| 247  | Participation of Hydrocarbons in the Photodimerization of 3,4-Dichlorocinnamic Acid<br><b>Fusae Nakanishi, Seiji Yamada, and Hachiro Nakanishi</b>   |
| 248  | Synthesis of New Nucleosides Containing a Fused Cyclopropane Ring: 1-((1R,3R,5R)-2-Oxabicyclo[3.1.0]-hexan-3-yl)-thymine and -uracil<br><b>Takeshi Adachi, Tameo Iwasaki, Muneji Miyoshi, and Ichizo Inoue</b>   |
| 249  | Synthesis of Hemin C from Hemin<br><b>Shosuke Kojo and Seiyo Sano</b>  |
| 250  | Effect of Cathodic Potential on the Electrochemical Synthesis of Optically Active Amino-acids<br><b>Michel Jubault, Eugene Raoult, Joseph Armand, and Line Boulares</b>  |
| 251  | Novel Reaction of Cysteine with Phenolic Amino-acids in Hydrobromic Acid: Reversible Formation of 3-Cystein-S-tyrosine and Cystein-S-yldopas<br><b>Shosuke Ito and Giuseppe Prota</b>  |
| 252  | Synthesis of Pyridines by Thermolysis of 4a,7a-Dihydrocyclopenta[ $\epsilon$ ][1,2]oxazines<br><b>Roy Faragher and Thomas L. Gilchrist</b>   |
| 253  | A New Cationic S-N Ring System, $\text{S}_4\text{N}_4^{2+}$ . The Crystal Structure of Cyclotetrathiazyl Bis(hexachloro-antimonate(v), $[\text{S}_4\text{N}_4][\text{SbCl}_6]_2$ , and Cyclotetrathiazyl Hexafluoroantimonate(v) Tetradecafluorotriantimonate, $[\text{S}_4\text{N}_4][\text{SbF}_6][\text{Sb}_3\text{F}_{14}]$<br><b>Ronald J. Gillespie, David R. Slim, and J. David Tyrer</b>                       |
| 255  | Elaeodendroside A: a Novel Cytotoxic Cardiac Glycoside from <i>Elaeodendron glaucum</i><br><b>S. Morris Kupchan, Itsuo Uchida, Kazutake Shimada, Bonny Yu Fei, David M. Stevens, Albert T. Sneden, Richard W. Miller, and Robert F. Bryan</b>  |
| 256  | Synthesis and Reactions of Octakis(t-butyl isocyanide)dicobalt and Pentakis(t-butyl isocyanide)ruthenium; X-Ray Crystal and Molecular Structures of $[\text{Co}_2(\text{Bu}'\text{NC})_8]$ and $[\text{Ru}(\text{Ph}_3\text{P})(\text{Bu}'\text{NC})_4]$<br><b>Geoffrey K. Barker, Anita M. R. Galas, Michael Green, Judith A. K. Howard, F. Gordon A. Stone, Terence W. Turney, Alan J. Welch, and Peter Woodward</b> |
| 258  | Novel Catalytic Resolution and Asymmetric Transformation of $\alpha$ -Dichloro(triethylenetetra-amine)cobalt(III) Dichloride<br><b>Robert C. Job</b>   |

Contents—continued overleaf

**Contents—continued**

Page	
259	Synthesis of Perfluoropoly(ethylene glycol) Ethers: $\text{CF}_3-\left[\text{O}-\text{CF}_2-\text{CF}_2\right]_n-\text{O}-\text{R}_f$ ( $\text{R}_f = \text{CF}_3$ or $\text{C}_2\text{F}_5$ ; $n = 1-5$ ) <b>Glenn E. Gerhardt and Richard J. Lagow</b>
261	A Novel Bis-indole Alkaloid. <i>X</i> -Ray Crystal Structure Determination of Borrerine and its Rearrangement Product on Diacetylation <b>J.-L. Pousset, A. Cavé, A. Chiaroni, and C. Riche</b>
262	Structure and Chemistry of the Conformationally Rigid Dihalogenocyclobutane Unit of 6,7-Di-iodobicyclo[3.1.1]heptane; <i>X</i> -Ray Structure of 6,7-Di-iodobicyclo[3.1.1]heptane <b>Stephen Mazur, Albert H. Schroder, and Marvin C. Weiss</b>
264	Stereochemistry of the Hydroxypalladation Step in the Wacker Process <b>Jan-E. Bäckvall, Björn Åkermark, and Stig O. Ljunggren</b>
265	Kinetics of Reactions of Bromine and Iodine with Some Substituted Dimanganese and Dirhenium Carbonyls <b>Gary Kramer, Lily Ng, and Anthony Poë</b>
266	Mechanism of the Thermal Decomposition of Tetra-arytellurium Species <b>Derek H. R. Barton, Stephen A. Glover, and Steven V. Ley</b>
268	Fluorimetric Determination of Complexation Constants for the Ionophore Antibiotic X-537A with Biogenic Amines <b>Siegfried Lindenbaum, Larry Sternson, and Stanley Rippel</b>
269	The Putative Structure of Albene; <i>X</i> -Ray Structure of an Analogue <b>Wolfgang Kreiser, Lothar Janitschke, and William S. Sheldrick</b>
270	Protection of Alcoholic Hydroxy Groups as Crotonate and Related Esters <b>René Arentzen and Colin B. Reese</b>
272	<i>X</i> -Ray Crystal Structure of a Stable Metal-5'-Uridine Monophosphate (UMP) Complex, $[\text{Cu}(5'\text{-UMP})-(2,2'\text{-dipyridylamine})(\text{H}_2\text{O})]_2$ <b>Beda E. Fischer and Robert Bau</b>
273	Rate of the Electron-transfer Reaction between Tetracyanoquinodimethane and <i>NNN'N'</i> -Tetramethyl- <i>p</i> -phenylenediamine in Acetonitrile <b>Akihiko Yamagishi, Fumiaki Watanabe, and Takeshi Masui</b>
274	The $\text{Pb}^{2+}$ Ion as a Template in the Synthesis of Macroyclic Ligands; <i>X</i> -Ray Structure of 3,15,21-Triaza-6,9,12-trioxabicyclo[15.3.1]heneicosa-1(21),2,15,17,19-pentaene(thiocyanato)(isothiocyanato)lead(II) <b>David E. Fenton, Diana H. Cook, and Ian W. Nowell</b>
275	Cyclisation of 1-Methyl-9-methoxy-( <i>E,Z</i> )-cyclonona-1,5-diene <b>Edward G. Scovell and James K. Sutherland</b>
276	Relative Energies of the Ground and Core Hole States of the 1-Propyl and 2-Norbornyl Carbocations <b>David T. Clark, Benjamin J. Cromarty, and Lynne Colling</b>
278	Cytochrome C Oxidase: Isolation, Crystallisation, and Synthesis of Porphyrin A Dimethyl Ester <b>Mervyn Thompson, Jack Barrett, Edward McDonald, Alan R. Battersby, Christopher J. R. Fookes, Irshad A. Chaudhry, Peter S. Clezy, and Howard R. Morris</b>
280	Conversion of Aldehydes and Ketones into Nitriles Containing an Additional Carbon Atom <b>Daniel M. Orere and Colin B. Reese</b>
281	An Oxazol-5( <i>H</i> )-one Derived from a Benzyloxycarbonylamino-acid <b>John H. Jones and Michael J. Witty</b>
282	Reaction of 5-Chloropyridin-2-yl-thioureas with Phenacyl Bromides: a New Thiazole Synthesis. <i>X</i> -Ray Crystal Structure of 5-(5-Chloropyridin-2-yl)-2-diethylamino-4-phenylthiazole <b>David J. Le Count and John A. J. Jarvis</b>
283	Interaction of Magnesium Dialkyls with Binuclear Transition Metal Acetates: Crystal Structure of Bis-(trimethylsilylmethyl)bis(trimethylphosphine)bis-( $\mu$ -trimethylsilylmethyl)-dichromium(II) <b>Richard A. Andersen, Richard A. Jones, Geoffrey Wilkinson, Michael B. Hursthouse, and K. M. Abdul Malik</b>
285	Synthesis of the Unsymmetrical Tricarbonylalkoxymanganese Trimers and <i>X</i> -Ray Crystal Structure of Dimethylphenylphosphineoacarbonyltriethoxytrimanganese <b>Edward W. Abel, Ian D. H. Towle, T. Stanley Cameron, and Ruth E. Cordes</b>
286	Fate of the 16 $\beta$ -Hydrogen Atom of Cholesterol in the Biosynthesis of Tomatidine and Solanidine <b>Luigi Canonica, Fiamma Ronchetti, Giovanni Russo, and Giancarlo Sportoletti</b>
287	Unstable Intermediates in the Gas-phase. Formation of Thioformaldehyde from Trithiolan <b>H. Bock, B. Solouki, S. Mohmand, E. Block, and L. K. Revelle</b>