

Journal of The Chemical Society

Chemical Communications

ISSUED TWICE MONTHLY

JCCCAT (7) 305–352 (1981)

CONTENTS

Page

- 305 A New Bridging Geometry for Sulphur Dioxide in $[\text{Mo}(\text{CO})_3(\text{PPh}_3)(\text{pyridine})(\mu-\text{SO}_2)]_3 \cdot 2\text{CH}_2\text{Cl}_2$; X-Ray Crystal Structure **Gordon D. Jarvinen, Gregory J. Kubas, and R. R. Ryan**
- 306 Carbocyclizations employing 2-Silyl-1,3-dithians **Douglas B. Grotjahn and Niels H. Andersen**
- 307 Alkaloid-catalysed Asymmetric Addition of Thiocarboxylic S-acids to Cyclohex-2-en-1-ones. Absolute Configuration of the Adducts by *O,S*-Dibenzoate Cotton Effect **Jacek Gawronski, Krystyna Gawronska, and Hans Wynberg**
- 309 Deuterium Isotope Effect on ^1H Chemical Shift in Pentadeuteriobenzene **Tadashi Yonemitsu and Kiyotaka Kubo**
- 309 The Association of Proteins with Polyphenols **John P. McManus, Kenneth G. Davis, Terence H. Lilley, and Edwin Haslam**
- 311 Synthesis of η^3 -Allyl-(η^5 -cyclopentadienyl)dicarbonylmanganese Cations **Alan M. Rosan**
- 313 Regioselective Allylation of a Grignard Reagent Catalysed by Phosphine-Nickel and -Palladium Complexes **Tamio Hayashi, Mitsuo Konishi, Kan-ichi Yokota, and Makoto Kumada**
- 314 Confirmation of the Structures of Gonyautoxins I—IV by Correlation with Saxitoxin **Yuzuru Shimizu and Chien P. Hsu**
- 315 Asymmetric Reduction of Aromatic Ketones with Chiral Alkoxy-amine-borane Complexes **Akira Hirao, Shinichi Itsuno, Seiichi Nakahama, and Noboru Yamazaki**
- 317 Organic Batteries: Reversible *n*- and *p*-Type Electrochemical Doping of Polyacetylene, $(\text{CH})_n$. **David MacInnes, Jr., Mark A. Drury, Paul J. Nigrey, David P. Nairns, Alan G. MacDiarmid, and Alan J. Heeger**
- 319 Facile 8-Hydrogen Abstraction from a Ruthenium Complex; Possible 1—4 η -Bonding of the *o*-Xylylene Ligand **S. David Chappell and David J. Cole-Hamilton**
- 320 Polymeric Proanthocyanidins: Interflavanoid Linkage Isomerism in (Epicatechin-4)-(epicatechin-4)-catechin Procyanidins **Richard W. Hemingway, L. Yeap Foo, and Lawrence J. Porter**
- 322 Synthesis and X-Ray Crystal Structure of a 1,1-Dithiolate Cluster Compound containing a Cube of eight Ag^I Atoms, $[\text{Ag}_8^{\text{I}}(\text{S}_2\text{C}=\text{C}(\text{CN})_3)_6]^{4-}$ **Paul J. M. W. L. Birker and Gerrit C. Verschoor**
- 324 Fast Atom Bombardment Quadrupole Mass Spectrometry **David J. Surman and John C. Vickerman**
- 325 Fast Atom Bombardment of Solids (F.A.B.): A New Ion Source for Mass Spectrometry **Michael Barber, Robert S. Bordoli, R. Donald Sedgwick, and Andrew N. Tyler**
- 327 A Novel Rearrangement of Hetisine, and X-Ray Crystal Structure of the Major Product: Transformation of a Dihydroxy-bicyclo[2.2.2]octane System to an Adamantane-type Skeleton **S. William Pelletier, Naresh V. Mody, Janet Finer-Moore, Abdel-Monem M. Ateya, and Lee C. Schramm**
- 329 Synthesis, Characterization, and Chemical Transformation of Di-iminosuccinonitrile Cobalt Complexes; X-Ray Crystal Structure of Cyanobis(di-iminosuccinonitrile)cobalt **Shie-Ming Peng, Yu Wang, Sue-Lein Wang, Mei-Chen Chuang, Y. Le Page, and E. J. Gabe**

Contents—continued overleaf

For Notices to Authors, see issue 1, pp. 1 to 4

Contents—continued

Page	
331	Carbon-13 N.M.R. Study of Rhodium Carbonyl Clusters under High Pressures of CO/H ₂ B. T. Heaton, J. Jonas, T. Eguchi, and G. A. Hoffman
332	Electron Exchange Rates of Cobalt Tetra-arylporphines Robert D. Chapman and Everly B. Fleischer
333	Carbonylation of Organic Halides in the Presence of Terminal Acetylenes; Novel Acetylenic Ketone Synthesis Toshiaki Kobayashi and Masato Tanaka
334	2-Methoxycarbonyl-3-prenyl-1,4-naphthoquinone, a Metabolite related to the Biosynthesis of Mollugin and Anthraquinones in <i>Galium mollugo</i> L. Lutz Heide and Eckhard Leistner
336	Racemisation of Activated, Urethane-protected Amino-acids by <i>p</i> -Dimethylaminopyridine. Significance in Solid-phase Peptide Synthesis Eric Atherton, N. Leo Benoiton, Evelyn Brown, Robert C. Sheppard, and Brian J. Williams
338	X-Ray Crystal Structure of the Copper(II) Complex of Mugineic Acid, a Naturally Occurring Metal Chelator of Graminaceous Plants Kyosuke Nomoto, Yoshiki Mino, Toshimasa Ishida, Himeko Yoshioka, Nagayo Ota, Masatoshi Inoue, Sei'ichi Takagi, and Tsunematsu Takemoto
339	A New Route to 1 <i>H</i> -1,5-Benzodiazepinones John Ackroyd and Feodor Scheinmann
340	Promotion of Charge-transfer Complex Formation by γ -Cyclodextrin Nagao Kobayashi, Akihiko Ueno, and Tetsuo Osa
341	Hydride Reduction of the Cations $\{(\eta^5\text{-C}_5\text{H}_5)\text{Fe}[(\text{Ph}_2\text{PCH}_2)_3\text{CMe}]\}\text{PF}_6$, $\{(\eta^5\text{-C}_5\text{H}_5)\text{Ru}[(\text{Ph}_2\text{PCH}_2\text{CH}_2)_2\text{PPh}]\}\text{PF}_6$, and $\{(\eta^5\text{-C}_5\text{H}_5)\text{Ru}[(\text{Ph}_2\text{PCH}_2)_3\text{CMe}]\}\text{PF}_6$: Regioselectivity and Mechanism Stephen G. Davies, Hugh Felkin, Tauqir Fillebeen-Khan, Fatemeh Tadj, and Oliver Watts
342	Titanium-promoted Allyl Transfer to Carbon Monoxide and Other Unsaturated Molecules Bert Klei, Jan H. Teuben, and Henk J. de Liefde Meijer
344	Effective Method for the Asymmetric Synthesis of Bis- β -lactams by the Cycloaddition of Azidoketen to Benzylideneamines Bearing a Chiral β -Lactam Backbone Naoto Hatanaka and Iwao Ojima
346	Reactions of a Triarylsulphonium Salt with Alkoxide Nucleophiles: Involvement of Radical Intermediates Sung-Kee Chung and Kazumi Sasamoto
347	Intramolecular Cyclisation of 1,1',3,3'-Tetramethyl-1,1'-bi-indenyl Pierre Nicolet, Jean-Yves Sanchez, and Marc J. M. Abadie
348	Reactions of Ketones with Molybdenum Nitrosyl Complexes: X-Ray Crystal Structures of $[\{\text{Mo}\{\text{HB}(3,5\text{-Me}_2\text{C}_3\text{HN}_2)_3\}(\text{NO})\text{I}_2\}\text{O}]$, a Complex having a Bent Mo—O—Mo Bond, and of a Bicyclic Salt, $[\text{C}_4\text{H}_3\text{-Me}_5\text{N}_2(\text{OH})][\text{I}_4(\text{I}_3)_4]$ Harry Adams, Neil A. Bailey, Gianfranco Denti, Jon A. McCleverty, John M. A. Smith, and Andrzej Włodarczyk
350	Four-membered Ring Adducts from $2\pi+2\pi$ Cycloaddition of Ketenimines to Sulphur Dioxide. Isolation of 1,2-Thiazetidin-3-one 1-Oxides Alessandro Dondoni, Patrizia Giorgianni, Arturo Battaglia, and Giovanni Dario Andreotti