

# Journal of The Chemical Society

## Chemical Communications

22 MAY 1974

JCCCAT (10) 361–416 (1974)

### CONTENTS

- Page
- 361 Reaction of Trifluoroacetonitrile with  $\pi$ -Allylic-iridium Complexes; the Crystal Structure of an Iridium(I) Six-membered Ring Chelate Complex  
**Michael Green, Susan H. Taylor, John J. Daly and Francisco Sanz**
- 362 Polyketide Syntheses: Condensations of Keto-esters with Anionic Electrophiles  
**T. M. Harris, T. P. Murray, C. M. Harris, and M. Gumulka**
- 363 Solvent and Micellar Effects on the Hydrogen Exchange of Sulphonium Salts  
**Tsueno Okonogi, Taeko Umezawa, and Waichiro Tagaki**
- 364 Chelated Dicarbene Complexes of Rhodium(III)  
**Peter R. Branson, Robert A. Cable, Michael Green, and Malcolm K. Lloyd**
- 365 Negative-ion Mass Spectra of Metal Complexes; Fluorinated  $\beta$ -Diketonates of Various Metals  
**Ian W. Fraser, John L. Garnett, and Ian K. Gregor**
- 366 Metal Binding in Chelation Therapy: the Crystal Structure of D-Penicillaminatolead(II)  
**Hans C. Freeman, Graham N. Stevens, and Ivan F. Taylor, jun.**
- 367 Reversible Anion Radical–Dianion Redox Equilibria Involving Ions of Simple Aromatic Compounds  
**Bo Svensmark Jensen and Vernon D. Parker**
- 369 Chemistry of Organoditins. Trapping of Radicals Generated from Organic Halides  
**Henry G. Kuivila and Charles C.-H. Pian**
- 370 The Effect of Lysozyme on some Glycosides which contain *N*-Acetylxylosamine Residues  
**Brian Capon and William M. Dearie**
- 372 Formation of a Benzosilacyclopentene. Formation of a Silacyclopropane by Intramolecular Insertion of a Silylcarbene  
**Wataru Ando, Akira Sekiguchi, Tsuneo Hagiwara, and Toshihiko Migita**
- 372 Excimer Phosphorescence in Poly-3,6-dibromo-*N*-vinylcarbazole  
**Masaaki Yokoyama, Masaaki Funaki, and Hiroshi Mikawa**
- 373 Photo-valence Isomerization between 2-Phenyl-1,3-oxazepine and 3-Phenyl-2-oxa-4-azabicyclo[3,2,0]-hepta-3,6-diene  
**T. Tezuka, O. Seshimoto, and T. Mukai**
- 374 Synthesis and Mesomorphic Behaviour of 5 $\alpha$ -Cholest-8(14)-en-3 $\beta$ -yl Alkanoates  
**Joseph Y. C. Chu**
- 375 Asymmetric Hydrogenation of a Carbon–Nitrogen Double Bond in Folic Acid  
**Peter H. Boyle and Marie T. Keating**
- 376 Photochemical Rearrangement of 3-Methyl-2-methylthio-5-phenyl-(1,3-thiazol-4-yl)oxide to 3-Methyl-4-methylthio-5-phenyl-1,3-thiazol-2-one  
**Ole Buchardt, Jerzy Domanus, Niels Harrit, Arne Holm, Gunilla Isaksson, and Jan Sandström**
- 377 Alkylation of the Sodium Enolate of Ethyl Acetoacetate in Dimethoxyethane. Leaving Groups Effect on Rate and Orientation  
**Pierre Sarthou, François Guibé, and Georges Bram**
- 378 Structure of the Tetra-azacyclotetradecadienes obtained from  $\alpha,\beta$ -Enones and Ethylenediamine  
**Olga H. Hankovszky, Kálmán Hideg, Douglas Lloyd, and Hamish McNab**
- 379 Synthesis of Conjugated Dienes using Cobalt Acetylene Complexes  
**Ihsan U. Khand and Peter L. Pauson**
- 379 Photoextrusion of Isocyanides from Monoimines of Tetramethylcyclobutane-1,3-dione  
**K. G. Srinivasan and Joseph H. Boyer**
- 380 Carbon Dioxide Insertion into Organocopper and Organosilver Compounds  
**Tetsuo Tsuda, Kazuo Ueda, and Takeo Saegusa**
- 381 Redistribution Reactions of Organometallic Complexes: Carbonyl, Halogen, and Phosphine Ligand Exchange Between Co-ordinately Unsaturated Rhodium(I) and Iridium(I) Complexes  
**Philip E. Garrou and George E. Hartwell**
- 382 Positional Selectivity in Aromatic Nitration occurring at the Diffusion Rate  
**Roy B. Moodie, Kenneth Schofield, and John B. Weston**

Contents—continued overleaf

Contents—continued

- Page
- 383 Syntheses and Equilibria of Fused Bicyclic Methylenecyclopropanes  
**Andrew S. Kende and Edgar E. Riecke**
- 384 Stereospecific Deoxygenation of Epoxides with Octacarbonyldicobalt  
**Paul Dowd and Kilmo Kang**
- 385 Stereochemistry of C-1 Hydrogen Exchange in the Interconversion of *trans,trans*- and *cis,trans*-Farnesols by Soluble Enzymes from Tissue Cultures of *Andrographis paniculata*  
**Karl H. Overton and Frank M. Roberts**
- 386 Addition of *N*-Nitrenes to  $\alpha\beta$ -Unsaturated Esters: Investigation of Kinetically formed Invertomer Ratios  
**Robert S. Atkinson and Robert Martin**
- 388 Guayacanicin—A Novel Phenolic Xanthen Derivative from *Tabebuia guayacan*  
**G. Manners, L. Jurd, and K. Stevens**
- 389 X-Ray Structure Determination of 1-(*p*-Bromophenyl)ethyl *t*-Butyl Sulphoxide. Configuration and Conformation  
**Yoichi Itaka, Yoshio Kodama, Ken Nishihata, and Motohiro Nishio**
- 390 Stereospecific Synthesis of the *trans-anti-trans*- and *trans-syn-trans*-Isomers of Dicyclohexyl-18-crown-6  
**J. Fraser Stoddart and Colin M. Wheatley**
- 391 Base R, the X-Ray Crystal Structure of a Novel Lycopodium Alkaloid  
**R. H. Burnell, A. Chapelle, J. Fischer, and L. Ricard**
- 392 Assignments of the Paramagnetically Shifted Methyl Resonances in the Nuclear Magnetic Resonance spectrum of Iron(III) Protoporphyrin-IX Cyanide by Selective Deuteriation  
**José A. S. Cavaleiro, António M. d'A. Rocha Gonsalves, George W. Kenner, Kevin M. Smith, Robert G. Shulman, Adalbert Mayer, and T. Yamane**
- 393 Luminescence of  $d^8$  Complexes of Iridium and Rhodium, and Its Quenching by Molecular Oxygen and Other Gases  
**Rosemary Brady, Warren V. Miller, and L. Vaska**
- 395 Structure of Halomicin B  
**Ashit K. Ganguly, Sol Szmulewicz, Olga Z. Sarre, Dianne Greeves, James Morton, and James McGlotten**
- 397 Conversion of Methanol into Hydrocarbons  
**Donald E. Pearson**
- 397 Electron Diffraction Study of 3-Methyldiaziridine  
**Vladimir S. Mastryukov, Olga V. Dorofeeva, and Lev V. Vilkov**
- 398 Dynamic-coupling Approach to the Optical Activity of the 260 nm Transition of Chiral Thiirans  
**Giovanni Gottarelli, Bruno Samori, and Giovanni Torre**
- 400 Two-co-ordinate Phosphine-Palladium(0) Complexes: X-Ray Structure of the Tricyclohexyl- and the Di(*t*-butyl)phenyl-phosphine Derivatives  
**Attilio Immirzi and Alfredo Musco**
- 401 Carbon-13 Nuclear Magnetic Resonance Determination of the Sequence Structure of Styrene-Butadiene Copolymers  
**Alan R. Katritzky and Douglas E. Weiss**
- 403 *Ab Initio* Molecular Orbital Calculations on Anions. Determination of Gas Phase Acidities  
**Leo Radom**
- 405 Carboxylic Anhydrides and Diphenylketen, a New Reaction Mode of Ketens  
**Leander A. Feiler, Rolf Huisgen, and Peter Koppitz**
- 406 X-Ray Structural Characterization of Bis[dimethylbis(1-pyrazolyl)gallato]nickel(II)  
**David F. Rendle, Alan Storr, and James Trotter**
- 407 Marine Natural Products: Nephthenol and Epoxynephthenol Acetate, Cembrene Derivatives from a Soft Coral  
**Francis J. Schmitz, David J. Vanderah, and L. S. Ciereszko**
- 408 The Structure of Fumitremorgin B (FTB), a Tremorgenic Toxin from *Aspergillus fumigatus* Fres  
**Mikio Yamazaki, Kumiko Sasago, and Komei Miyaki**
- 409 Flash Thermolysis: a Synthesis of Very Reactive Thiocarbonyls. Thioacrolein and Thiobenzaldehyde  
**H. Gwynne Giles, Robert A. Marty, and Paul de Mayo**
- 410 Pyrolysis of 2-Bis(methylthio)methylpyridine *S*-Oxides. Synthesis of Substituted Pyridinecarbaldehydes  
**George R. Newkome, J. M. Robinson, and J. D. Sauer**
- 411 Azido-Tetrazole Tautomerism in the Azole Series  
**Ermitas Alcalde, Javier de Mendoza, and Jose Elguero**
- 412 Cycloaddition Reactions of Cyclic and Acyclic 1,3-Dipoles with Diphenylcyclopropenone and Related Compounds. A New Rearrangement  
**Hiroshi Matsukubo and Hiroshi Kato**
- 413 New Synthesis of Monosaccharide Carbonates  
**Grzegorz Grynkiewicz, Janusz Jurczak, and Aleksander Zamojski**
- 414 Reactions of Grignard Reagents with 2,4,6-Tri-*t*-butylnitrosobenzene: 1,4- and 1,6-Conjugate Addition to the Nitroso-group  
**Renji Okazaki, Yoshio Inagaki, and Naoki Inamoto**
- 415 Interaction of an Aliphatic C-H Bond with a Metal Atom Can Compete Successfully with a Metal-Olefin Interaction  
**F. Albert Cotton and Victor W. Day**