

JOURNAL OF THE CHEMICAL SOCIETY

Chemical Communications

Number 6
1983

CONTENTS

- 253 Mono-oxygenase-like Dioxxygen Activation leading to Alkane Hydroxylation and Olefin Epoxidation by an Mn^{III}-(porphyrin)-Ascorbate Biphasic System **Daniel Mansuy, Marc Fontecave, Jean-François Bartoli**
- 254 Quenching of Fluorescence by Substituted Ethylenes. Substituent and Salt Effects as Criteria of Quenching Mechanism **John J. McCullough, Shahin Yeroushalmi**
- 256 Formation of C(2)-Oxygenated Compounds from the Reaction of CO and H₂ over Alkali-metal Doped Rhodium Catalysts under Mild Conditions **Setsuko Kagami, Shuichi Naito, Yasuo Kikuzono, Kenzi Tamaru**
- 257 A Simple Total Synthesis of Viburtinal **Jean-Louis Brayer, Jean-Pierre Alazard, Claude Thal**
- 259 Homologation of Olefins on an Iron Catalyst in the Absence of Carbon Monoxide **Richard A. Strehlow, Emily C. Douglas**
- 260 Reaction of a 2-Iminothione with Dimethyl Acetylenedicarboxylate to give a Pyridine Derivative **Ismail Khattak, Roger Ketcham**
- 261 Photoisomerization of Protonated 5-Deuterio-5-methylhex-3-en-2-one. Evidence for a Photochemical 1,2 Hydride Shift **Ronald F. Childs, Gary S. Shaw**
- 262 Heterogeneous Metathesis of Unsaturated Nitriles **Godefridus C. N. van den Aardweg, Ruud H. A. Bosma, Johannes C. Mol**
- 263 Silver(I) Salts as One-electron or Two-electron Oxidants in their Reactions with [Fe₂(η-C₅H₅)₂(CO)₄]_n(CNMe)_n Derivatives (*n* = 0–2). The Effect of Varying the Reaction Solvent **Brian Callan, A. R. Manning**
- 264 Liquid Xenon as a Solvent for E.S.R. Studies **Malcolm D. Cook, Brian P. Roberts**
- 267 Formation and X-Ray Crystal Structure of an Isopropylperoxoplatinum(IV) Complex: A New Test for a Free Radical Mechanism of Oxidative Addition **George Ferguson, Masood Parvez, Patrick K. Monaghan, Richard J. Puddephatt**
- 268 A Synthesis of (3S)-Homomevalonolactone **Eun Lee, Jai Wook Park, Sang Chul Park**
- 269 The Wittig Synthesis of Alkenes under Gas-Liquid Phase-transfer Catalysis **Enrico Angeletti, Pietro Tundo, Paolo Venturello**
- 271 Synthesis of (±)-Septicine and (±)-Tylophorine by Regioselective [3 + 2] Cycloaddition **Hideo Iida, Masao Tanaka, Chihiro Kibayashi**
- 272 Biosynthesis of Cantharidin: Evidence for the Specific Incorporation of C-4 and C-11' of Farnesol **Wolf-Dietrich Woggon, Suzanne A. Hauffe, (the late) Hans Schmid**
- 275 The Synthesis of a New 22 π-Electron Macrocyclic Pentaphyrin **Hans Rexhausen, Albert Gossauer**
- 276 Facile C–H Activation by Lutetium–Methyl and Lutetium–Hydride Complexes **Patricia L. Watson**
- 277 Synthesis and Molecular Structures of *nido*-[9-(η-C₅H₅)-7,8,9-C₂NiB₈H₁₁], *nido*-[9-(η-C₅H₅)-μ_{10,11}-(Ph₃PAu)-7,8,9-C₂NiB₈H₁₀], and *closo*-[1,3-(η-C₅H₅)₂-1,2,3,4-CrCCrCB₈H₁₀]; Evidence for a Multiple Metal–Metal Bond in a Dimetallacarborane **Geoffrey K. Barker, Norman R. Godfrey, Michael Green, Hans E. Parge, F. Gordon A. Stone, Alan J. Welch**
- 279 A Short Synthesis of a Useful C₁₉ Heptaquinane **Jack E. Baldwin, Paul L. M. Beckwith**
- 281 Hetero-Diels–Alder Reactions of 2-Methylene-1,3-dicarbonyl Compounds with Alkyl Vinyl Ethers **Masashige Yamauchi, Sadamu Katayama, Osamu Baba, Toshio Watanabe**
- 282 Stereoselectivity of Prochiral Thioalkyl Groups in the Enzymatic Oxidation of Thioacetals by Fungi **Barbara J. Auret, Derek R. Boyd, E. Sally Cassidy, Fiona Turley, Alex F. Drake, Stephen F. Mason**
- 283 The Decomposition of Trihalogenoacetic Acids in Dimethyl Sulphoxide: a Mild Route from Carbonyl Compounds to Trihalogenomethylethanol and Trihalogenomethyl Ketones **Paul J. Atkins, Victor Gold, Wasfy N. Wassef**
- 284 Radical-Anion Chemistry of Carbon Monoxide **Peter W. Lednor, Peterina C. Versloot**
- 285 Influence of the Trimethylsilyl Group on the Diastereoselectivity of an Adjacent Claisen Amide-acetal Rearrangement **Edward H. Smith, Nicholas D. Tyrrell**
- 287 The Vacuum Ultraviolet–Circular Dichroism Spectrum of an Isolated Pyridine Chromophore **Carlo Rosini, Carlo Bertucci, Dario Pini, Piero Salvadori, Franco Soccolini, Giovanna Delogu**
- 289 Fluxional Pentacarbonyltungsten(0) Complexes of the Thioaldehyde and Thioketone Valence Isomers of 1,6,6aλ⁴-Trihiapentalenes **Peter J. Pgorzelec, David H. Reid**

- 290 On the Stereochemistry of Ethylene Biosynthesis **Robert M. Adlington, Jack E. Baldwin, Bernard J. Rawlings**
- 292 Solid-state ^{31}P N.M.R. Spectroscopy of 5'-AMP Adsorbed on Zinc-exchanged Clay **Nigel J. Clayden, John S. Waugh**
- 294 Synthesis, Crystal Structure, and Charge-transfer Salts of Dibenzotetraselenafulvalene (DBTSF) **Knud Lerstrup, Marsha Lee, Frank M. Wiygul, Thomas J. Kistenmacher, Dwaine O. Cowan**
- 295 Dibenzotetraselenafulvalene (DBTSF). Synthesis and Conducting Salts **Ib Johannsen, Klaus Bechgaard, Kell Mortensen, Claus Jacobsen**
- 296 A Dinuclear Rhodium-Carbonyl Cryptate of a Ditopic Macrocyclic Ligand **Jean-Pierre Lecomte, Jean-Marie Lehn, David Parker, Jean Guilhem, Claudine Pascard**
- 298 Unexpected Trends in Standard Enthalpies of Formation of Alkylammonium Salts and Calculation of Amine Proton Affinities **Arthur Finch, Peter N. Gates**
- 299 2,2,2-Trichloroethylsulphonyl, 2,2,2-Trichloroethoxysulphonyl, and Trifluoroacetyl Isocyanates in β -Lactam Synthesis **Anthony G. M. Barrett, Ashley Fenwick, Michael J. Betts**
- 301 Fremy's Salt (Potassium Nitrosodisulphonate): A Nitrosating Reagent for Amines **Luis Castedo, Ricardo Riguera, M. Pilar Vázquez**
- 302 The Formation and Structure of the Novel Aluminoxane Anion $[\text{Me}_2\text{AlO}\cdot\text{AlMe}_3]_2^-$ **Jerry L. Atwood, Michael J. Zaworotko**
- 303 Electrochemical One-electron Oxidation of $[\text{Ru}(\text{NO})\text{Cl}_5]^{2-}$: Spectroscopic and Magnetic Evidence for the (t_{2g}^5) Ruthenium(III) Pentachloronitrosyl Complex Monoanion $[\text{Ru}(\text{NO})\text{Cl}_5]^-$ **Vyvyan T. Coombe, Graham A. Heath, T. Anthony Stephenson, Derek A. Tocher**
- 305 Synthesis of a Trisaccharide related to the Antitumour Antibiotic, Aclacinomycin A **Alain Martin, Mary Pais, Claude Monneret**
- 306 On Conformational Preferences in Aromatic Methyl Ethers **John D. Mersh, Jeremy K. M. Sanders, Stephen A. Matlin**
- 307 Formation of Carbon-Carbon Bonds by Ring Closure of β -Phenylselenocrotonates **Derrick L. J. Clive, Pierre L. Beaulieu**
- 309 Novel Synthesis of Platinum(II) Alkenyl Compounds *via* Organoboration of Platinum(II) Acetylides **Angelika Sebald, Bernd Wrackmeyer**
- 310 Reversible Addition of Hydrogen and Carbon Monoxide to a *closo*-Triosmiumplatinum Cluster: X-Ray Crystal Structures of $[\text{Os}_3\text{Pt}(\mu\text{-H})_4(\text{CO})_{10}\{\text{P}(\text{C}_6\text{H}_{11})_3\}]$ and $[\text{Os}_3\text{Pt}(\mu\text{-H})_2(\text{CO})_{11}\{\text{P}(\text{C}_6\text{H}_{11})_3\}]$ **Louis J. Farrugia, Michael Green, David R. Hankey, A. Guy Orpen, F. Gordon A. Stone**
- 312 Enantioselective Syntheses using Chiral Epoxy-alcohols **Ernest W. Colvin, Alan D. Robertson, Shaila Wakharkar**
- 314 Phosphorescence from the Second Triplet State of Benzil and a Related Compound **Hiroyasu Inoue, Tadamitsu Sakurai**
- 315 Generation of Borane Radical Anions by Photo-induced Electron Transfer from Hydroborate Anions **Jehan A. Baban, John C. Brand, Brian P. Roberts**
- 317 5-Hydroxy-7b-methyl-7bH-cyclopent[cd]indene, a Stable Annulenol **Zev Lidert, Charles W. Rees**
- 318 4a-Methyl-4aH-fluorenes **David Neuhaus, Charles W. Rees**
- 320 E.S.R. Evidence for the Static Distortion of $^2\text{E}_{1g}$ Benzene Cations giving $^2\text{B}_{2g}$ with D_{2h} Symmetry in Low Temperature Matrices **Machio Iwasaki, Kazumi Toriyama, Keichi Nunome**
- 322 Clavularins, a New Class of Cytotoxic Compounds isolated from the Soft Coral, *Clavularia koellikeri* **Mamoru Endo, Masashi Nakagawa, Yoshihiro Hamamoto, Toshihiro Nakanishi**
- 323 A New Cyclic Peptide, Ascidiacyclamide, isolated from Ascidian **Yoshihiro Hamamoto, Mamoru Endo, Masashi Nakagawa, Toshihiro Nakanishi, Kosei Mizukawa**
- 324 A Method to assign ^{13}C N.M.R. Signals of Compounds with Exchangeable Hydrogen Atoms using Two and Three Bond Isotope Effects: Cellobiose **John C. Christofides, David B. Davies**
- 326 The $\cdot\text{BH}_4$ Radical: an Electron Spin Resonance Study of the Radiolysis of NaBH_4 **Martyn C. R. Symons, Tsing Chen, Christopher Glidewell**

AUTHOR INDEX

- Adlington, Robert M., 290
 Alazard, Jean-Pierre, 257
 Angeletti, Enrico, 269
 Atkins, Paul J., 283
 Atwood, Jerry L., 302
 Auret, Barbara J., 282
 Baban, Jehan A., 315
 Baba, Osamu, 281
 Baldwin, Jack E., 279, 290
 Barker, Geoffrey K., 277
 Barrett, Anthony G. M., 299
 Bartoli, Jean-François, 253
 Beaulieu, Pierre L., 307
 Bechgaard, Klaus, 295
 Beckwith, Paul L. M., 279
 Bertucci, Carlo, 287
 Betts, Michael J., 299
 Bosma, Ruud H. A., 262
 Boyd, Derek R., 282
 Brand, John C., 315
 Brayer, Jean-Louis, 257
 Callan, Brian, 263
 Cassidy, E. Sally, 282
 Castedo, Luis, 301
 Chen, Tsing, 326
 Childs, Ronald F., 261
 Christofides, John C., 324
 Clayden, Nigel J., 292
 Clive, Derrick L. J., 307
 Colvin, Ernest W., 312
 Cook, Malcolm D., 264
 Coombe, Vyvyan T., 303
 Cowan, Dwaine O., 294
 Davies, David B., 324
 Delogu, Giovanna, 287
 Douglas, Emily C., 259
 Drake, Alex F., 282
 Endo, Mamoru, 322, 323
 Farrugia, Louis J., 310
 Fenwick, Ashley, 299
 Ferguson, George, 267
 Finch, Arthur, 298
 Fontecave, Marc, 253
 Gates, Peter N., 298
 Glidewell, Christopher, 326
 Godfrey, Norman R., 277
 Gold, Victor, 283
 Gossauer, Albert, 275
 Green, Michael (Bristol), 277, 310
 Guilhem, Jean, 296
 Hamamoto, Yoshihiro, 322, 323
 Hankey, David R., 310
 Hauffe, Suzanne A., 272
 Heath, Graham A., 303
 Iida, Hideo, 271
 Inoue, Hiroyasu, 314
 Iwasaki, Machio, 320
 Jacobsen, Claus, 295
 Johannsen, Ib, 295
 Kagami, Setsuko, 256
 Katayama, Sadamu, 281
 Ketcham, Roger, 260
 Khattak, Ismail, 260
 Kibyashi, Chihiro, 271
 Kikuzono, Yasuo, 256
 Kistenmacher, Thomas J., 294
 Lecomte, Jean-Pierre, 296
 Lednor, Peter W., 284
 Lee, Eun, 268
 Lee, Marsha, 294
 Lehn, Jean-Marie, 296
 Lerstrup, Knud, 294
 Lidert, Zev, 317
 McCullough, John J., 254
 Manning, A. R., 263
 Mansuy, Daniel, 253
 Martin, Alain, 305
 Mason, Stephen F., 282
 Matlin, Stephen A., 306
 Merish, John D., 306
 Mizukawa, Kosei, 323
 Mol, Johannes C., 262
 Monaghan, Patrick K., 267
 Monneret, Claude, 305
 Mortensen, Kell, 295
 Naito, Shuichi, 256
 Nakagawa, Masashi, 322, 323
 Nakanishi, Toshihiro, 322, 323
 Neuhaus, David, 318
 Nunome, Keichi, 320
 Orpen, A. Guy, 310
 Pais, Mary, 305
 Parge, Hans E., 277
 Parker, David, 296
 Park, Jai Wook, 268
 Park, Sang Chul, 268
 Parvez, Masood, 267
 Pascard, Claudine, 296
 Pini, Dario, 287
 Pogorzelec, Peter J., 289
 Puddephatt, Richard J., 267
 Rawlings, Bernard J., 290
 Rees, Charles W., 317, 318
 Reid, David H., 289
 Rexhausen, Hans, 275
 Riguera, Ricardo, 301
 Roberts, Brian P., 264, 315
 Robertson, Alan D., 312
 Rosini, Carlo, 287
 Sakurai, Tadimitsu, 314
 Salvadori, Piero, 287
 Sanders, Jeremy K. M., 306
 Schmid, Hans (the late), 272
 Sebald, Angelika, 309
 Shaw, Gary S., 261
 Smith, Edward H., 285
 Soccolini, Franco, 287
 Stephenson, T. Anthony, 303
 Stone, F. Gordon A., 277, 310
 Strehlow, Richard A., 259
 Symons, Martyn C. R., 326
 Tamaru, Kenzi, 256
 Tanaka, Masao, 271
 Thal, Claude, 257
 Tocher, Derek A., 303
 Toriyama, Kazumi, 320
 Tundo, Pietro, 269
 Turley, Fiona, 282
 Tyrrell, Nicholas D., 285
 van den Aardweg, Godefridus C. N., 262
 Vázquez, M. Pilar, 301
 Venturello, Paolo, 269
 Versloot, Peterina C., 284
 Wakharkar, Shaila, 312
 Wassef, Wasfy N., 283
 Watanabe, Toshio, 281
 Watson, Patricia L., 276
 Waugh, John S., 292
 Welch, Alan J., 277
 Wiygul, Frank M., 294
 Woggon, Wolf-Dietrich, 272
 Wrackmeyer, Bernd, 309
 Yamauchi, Masashige, 281
 Yeroushalmi, Shahin, 254
 Zaworotko, Michael J., 302

