

JOURNAL OF THE CHEMICAL SOCIETY

Chemical Communications

Number 2
1994

CONTENTS

- Dirk J. Hinz, Gerd Meyer 125 Synthesis and Crystal Structure of the First Titanium Halide with Isolated Octahedral Clusters, $[\text{Ti}_6\text{C}]\text{Cl}_{14}$
- Ewa Skrzypczak-Jankun, Bruce V. Cheesman, Bin Zheng, Richard M. Lemert, Siddharta Asthana, Morris Srebnik 127 First Example of a Stable 1,1-Bidentate Lewis Acid Based on Boron and Zirconium: Synthesis, Reactivity, X-Ray Analysis and NMR Studies
- Kazuhiro Nomura, Sakae Uemura 129 Selective Rhodium-catalysed Oxidation of Alkanes to Alkyl Esters with Peracids
- M. Abazid, H. O. Bertrand, M. O. Christen, J. L. Burgot 131 Synthesis of New Dithiolethione Derivatives: 5-(1-hydroxyiminoalkyl)-1,2-dithiole-3-thiones and 5-acyl-1,2-dithiole-3-thiones
- Richard Johnson, Bhalchandra V. Joshi, Colin B. Reese 133 Synthesis of 2',3'-Dithiouridine
- Michael Ruf, Karl Weis, Heinrich Vahrenkamp 135 A New Pyrazolylborate Zinc Hydroxide Complex Capable of Cleaving Esters, Amides and Phosphates
- Tadashi Eguchi, Takumi Terachi, Katsumi Kakinuma 137 The First Synthesis of an Archaeobacterial 36-Membered Macrocyclic Diether Lipid
- Xiang Hu, Qi-Wang Liu, Shu-Tang Liu, Li-Ping Zhang, Bao-Shan Wu 139 Boat-shaped Co_6 Carbonyl Cluster Derivatives Containing a Semi-interstitial P Atom and Bridging Thiolate or Heterocyclic Phosphido Ligands
- K. Kasthuri Rangan, B. Raghavendra Prasad, C. K. Subramanian, J. Gopalakrishnan 141 Soft-chemical Synthesis of New Non-linear Optical Materials, $\text{K}_{0.5}\text{M}_{0.5}\text{Ti}_{0.5}\text{OPO}_4$ ($\text{M} = \text{Nb}, \text{Ta}$), Related to KTiOPO_4
- Hideo Sawada, Eisaku Sumino, Masatoshi Oue, Motohiro Mitani, Hiromitsu Nakajima, Masami Nishida, Yasuo Moriya 143 Synthesis of a Novel Polymeric Perfluoro-oxa-alkane Diacyl Peroxide. A Convenient Tool for the Introduction of the Perfluoro-oxa-alkylene Unit
- Antal Rockenbauer, László Korecz 145 Comment on Conversion of Nitric Oxide into a Nitroxide Radical using 2,3-Dimethylbutadiene and 2,5-Dimethylhexadiene
- A. Corma, M. T. Navarro, J. Pérez Pariente 147 Synthesis of an Ultralarge Pore Titanium Silicate Isomorphous to MCM-41 and its Application as a Catalyst for Selective Oxidation of Hydrocarbons
- Stojan Stavber, Marko Zupan 149 A New, Selective Method for Conversion of Alcohols to Vicinal Fluorohydrins
- Toshikatsu Yoshida, Tomohiro Adachi, Nobuhiro Yabunouchi, Tatsuo Ueda, Susumu Okamoto 151 Reversible Addition of Carbonyl Compounds to Parent Imido Complex: Preparation and Crystal Structures of *trans*- $\{\text{Mo}(\text{NH})(\text{OTf})(\text{syn-Me}_8[16]\text{aneS}_4)\}$ - OTf and *trans*- $\{\text{Mo}[\text{NC}(\text{OH})\text{RR}'](\text{OTf})(\text{syn-Me}_8[16]\text{aneS}_4)\}$ - OTf ($\text{R}=\text{R}'=\text{Me}$; $\text{R}=\text{H}$, $\text{R}'=\text{Ph}$)
- Stephen A. Barr, Derek R. Boyd 153 A General Synthetic Route to Enantiopure Quinoline Alkaloids
- Miguel A. G. Aranda, J. Paul Attfield, Sebastian Bruque, R. B. Von Dreele 155 Chemical Switching of Magnetic Properties through Topotactic Lithium Exchange in Manganese(III) Arsenate Hydrate
- Shoukang Hao, Jae-Inh Song, Hossein Aghabozorg, Sandro Gambarotta 157 Diphenylphosphinomethanide Complexes of Chromium(II) and Samarium(III): Preparation and Characterization of the Dinuclear $[\text{Cr}(\text{Ph}_2\text{PC}(\text{H})\text{PPh}_2)_2](\mu\text{-Cl})[\mu\text{-C}(\text{H})(\text{PPh}_2)_2][\text{Cr}(\text{Ph}_2\text{PC}(\text{H})\text{PPh}_2)]$ and Mononuclear Pseudo-allylic $\text{Sm}[\eta^3\text{-Ph}_2\text{PC}(\text{H})\text{PPh}_2]_3$
- Feng-Bin Li, S. D. Lubetkin, D. J. Roberts, A. R. Hillman 159 Electrogravimetric and Chronoamperometric Monitoring of Individual Events of Growth and Detachment of Electrolytic Chlorine Gas Bubbles
- Karl Kirchner, Kurt Mereiter, Roland Schmid 161 Novel η^3 -Cyclopentenonyl Complexes of Ruthenium(IV): X-Ray Structures of $\text{Ru}(\eta^5\text{-C}_5\text{H}_5)(\eta^3\text{-C}_5\text{H}_4\text{OBr})\text{Br}_2$ and $\text{Ru}(\eta^5\text{-C}_5\text{H}_5)(\eta^3\text{-C}_5\text{H}_5\text{O})\text{Br}_2$
- Andrew K. Hughes, Vincent J. Murphy, Dermot O'Hare 163 Synthesis, X-Ray Structure and Spin Crossover in the Triple-decker Complex $\{(\eta^5\text{-C}_5\text{Me}_5)\text{Cr}(\mu^2\text{-}\eta\text{-P}_5)\text{Cr}(\eta^5\text{-C}_5\text{Me}_5)\}^+[\text{A}]^-$ ($\text{A} = \text{PF}_6, \text{SbF}_6$)
- Takashi Hirano, Iwao Mizoguchi, Mihoko Yamaguchi, Feng-Qi Chen, Mamoru Ohashi, Yoshihiro Ohmiya, Frederick I. Tsuji 165 Revision of the Structure of the Light-emitter in Aequorin Bioluminescence
- Alexander J. Blake, Craig M. Grant, Paul E. Y. Milne, Jeremy M. Rawson, Richard E. P. Winpenny 169 Reactions of a Dimeric Copper Compound: Synthesis and Structures of New Dinuclear, Tetranuclear, Octanuclear and Polymeric Copper Complexes

- Andrew Beeby, Julian Eastoe, Richard K. Heenan 173 Solubilisation of C₆₀ in Aqueous Micellar Solution
- Peter R. Ashton, Roberto Ballardini, Vincenzo Balzani, Maria Teresa Gandolfi, Damien J.-F. Marquis, Lluís Pérez-García, Luca Prodi, J. Fraser Stoddart, Margherita Venturi 177 The Self Assembly of Controllable [2]Catenanes
- Peter R. Ashton, Douglas Philp, Neil Spencer, J. Fraser Stoddart, David J. Williams 181 A Self-organised Layered Superstructure of Arrayed [2]Pseudorotaxanes
- Ronald Grigg, Jeremy M. Holmes, Shaun K. Jones, W. D. J. Amilaprasadh Norbert 185 Luminescent pH Sensors based on *p*-*tert*-Butylcalix[4]arene-linked Ruthenium(II) Trisbipyridyl Complexes
- Marie-Noëlle Collomb-Dunand-Sauthier, Alain Deronzier, Raymond Ziessel 189 Electrocatalytic Reduction of CO₂ in Water on a Polymeric [{Ru⁰(bpy)(CO)₂}]_n (bpy = 2,2'-bipyridine) Complex Immobilized on Carbon Electrodes
- Alex I. D. Alanine, Koji Ichinose, Denis Thibaut, Laurent Debussche, N. Patrick J. Stamford, Finian J. Leeper, Francis Blanche, Alan R. Battersby 193 Biosynthesis of Vitamin B₁₂: Use of Specific ¹³C-Labeling for Structural Studies on Factor IV
- Mitsuharu Kotera, Jean-Marie Lehn, Jean-Pierre Vigneron 197 Self-assembled Supramolecular Rigid Rods
- Louis A. Carpino, Ayman El-Faham, Charles A. Minor, Fernando Albericio 201 Advantageous Applications of Azabenzotriazole (Triazolopyridine) based Coupling Reagents to Solid-phase Peptide Synthesis
- François Diederich, Douglas Philp, Paul Seiler 205 π -Complexes incorporating Tetraphenyltetraethynylethene
- Frank G. Riddell, Peter G. Bruce, Philip Lightfoot, Martin Rogerson 209 Probing Molecular Motion by Solid-state NMR Spectroscopy and High Resolution Powder X-Ray Diffraction
- Demetrios Anglos, Vandana Bindra, Atsuo Kuki 213 Photoinduced Electron Transfer and Long-lived Charge Separation in Rigid Peptide Architectures
- Urs Bolle, Wolfgang Tremel 217 Insertion of a Transition Metal Fragment into a Heptaantimonide(3-) Anion: Synthesis and Structure of [Sb₇Mo(CO)₃]³⁻
- Marcello Tiecco, Lorenzo Testaferri, Marco Tingoli, Francesca Marini 221 *N*-Hydroxy γ -Lactams or Cyclic *N*-Hydroxy Imidates from the Organoselenium-induced Cyclization of β,γ -Unsaturated Hydroxamic Acids
- Hiroyuki Matsuzaka, Tetsuhiro Ogino, Masayuki Nishio, Masanobu Hidai, Yoshi-aki Nishibayashi, Sakae Uemura 223 Dinuclear (η^5 -C₅Me₅)Ru Complexes Triply Bridged by Tellurium or Selenium Ligands—Syntheses and Characterisation of (η^5 -C₅Me₅)Ru(μ_2 -RTeTeR)(μ_2 -TeR)₂Ru(η^5 -C₅Me₅) and [(η^5 -C₅Me₅)Ru(μ_2 -SeR)₃Ru(η^5 -C₅Me₅)]Cl (R = Tol, Ph)
- Stephen C. Bennett, Mark A. Phipps, Michael J. Went 225 Synthesis and Reactivity of Dicobalt Stabilised But-2-yne-1,4-dicarbene Ions
- Yoshiki Chujo, Nobuyuki Takizawa, Tomonori Sakurai 227 Synthesis of Poly(organoboron halides)s by Hydroboration Polymerization between Diene and Monobromoborane
- Kohei Tamao, Shigehiro Yamaguchi, Yoshihiko Ito 229 Synthesis and Properties of Thiophene-Cyclopentadienone Cooligomers
- Taeko I. Urano, Shigeru Machida, Kenji Sano 231 A New Variable Orienting Force for Liquid Crystals which has its Origin in the Electric Property of Poly- γ -benzyl-L-glutamate CRA Film
- Atsushi Ebina, Shin-ichi Nishikiori, Toschitake Iwamoto 233 A Hydrogen-Bond Bridged Layer Host: Crystal Structure of 2-Phenylethylammonium Tetracyanonickelate(II)-(*N,N*-Dimethylaniline) (1/1)
- Derrick L. J. Clive, Maarten H. D. Postema 235 Ozonolysis of Olefinic Phenyl Selenides with Preservation of the Selenium Unit: A Route to Phenylseleno Aldehydes and Ketones
- Xiaoyong Sun, Edward H. Wong, Mark M. Turnbull, Beth E. Waltermire, Robert L. Ostrander, Arnold L. Rheingold 237 Dichromium Cage Complexes of Cyclo-tetra-, Cyclo-penta-, and Cyclo-hexa-phosphoxane
- Markus Scholz, Georg Gescheidt 239 A Quantitative Study of Enrichment of K⁺ in Radical-Ion Pairs generated by Sodium Reduction

AUTHOR INDEX

- Abazid, M., 131
 Adachi, Tomohiro, 151
 Aghabozorg, Hossein, 157
 Alanine, Alex I. D., 193
 Albericio, Fernando, 201
 Anglos, Demetrios, 213
 Aranda, Miguel A. G., 155
 Ashton, Peter R., 177, 181
 Asthana, Siddharta, 127
 Attfield, J. Paul, 155
 Ballardini, Roberto, 177
 Balzani, Vincenzo, 177
 Barr, Stephen A., 153
 Battersby, Alan R., 193
 Beeby, Andrew, 173
 Bennett, Stephen C., 225
 Berstrand, H. O., 131
 Bindra, Vandana, 213
 Blake, Alexander J., 169
 Blanche, Francis, 193
 Bolle, Urs, 217
 Boyd, Derek R., 153
 Bruce, Peter G., 209
 Bruque, Sebastian, 155
 Burgot, J. L., 131
 Carpino, Louis A., 201
 Cheesman, Bruce V., 127
 Chen, Feng-Qi, 165
 Christen, M. O., 131
 Chujo, Yoshiki, 227
 Clive, Derrick L. J., 235
 Collomb-Dunand-Sauthier, Marie-Noëlle, 189
 Corma, A., 147
 Debussche, Laurent, 193
 Deronzier, Alain, 189
 Diederich, François, 205
 Eastoe, Julian, 173
 Ebina, Atsushi, 233
 Eguchi, Tadashi, 137
 El-Faham, Ayman, 201
 Gambarotta, Sandro, 157
 Gandolfi, Maria Teresa, 177
 Gescheidt, Georg, 239
 Gopalakrishnan, J., 141
 Grant, Craig M., 169
 Grigg, Ronald, 185
 Hao, Shoukang, 157
 Heenan, Richard K., 173
 Hidai, Masanobu, 223
 Hillman, A. R., 159
 Hinz, Dirk J., 125
 Hirano, Takashi, 165
 Holmes, Jeremy M., 185
 Hu, Xiang, 139
 Hughes, Andrew K., 163
 Ichinose, Koji, 193
 Ito, Yoshihiko, 229
 Iwamoto, Toschitake, 233
 Johnson, Richard, 133
 Jones, Shaun K., 185
 Joshi, Bhalchandra V., 133
 Kakinuma, Katsumi, 137
 Kirchner, Karl, 161
 Korecz, László, 145
 Kotera, Mitsuharu, 197
 Kuki, Atsuo, 213
 Leeper, Finian J., 193
 Lehn, Jean-Marie, 197
 Lemert, Richard M., 127
 Li, Feng-Bin, 159
 Lightfoot, Philip, 209
 Liu, Qi-Wang, 139
 Liu, Shu-Tang, 139
 Lubetkin, S. D., 159
 Machida, Shigeru, 231
 Marini, Francesca, 221
 Marquis, Damien J.-F., 177
 Matsuzaka, Hiroyuki, 223
 Mereiter, Kurt, 161
 Meyer, Gerd, 125
 Milne, Paul E. Y., 169
 Minor, Charles A., 201
 Mitani, Motohiro, 143
 Mizoguchi, Iwao, 165
 Moriya, Yasuo, 143
 Murphy, Vincent J., 163
 Nakajima, Hiromitsu, 143
 Navarro, M. T., 147
 Nishibayashi, Yoshi-aki, 223
 Nishida, Masami, 143
 Nishikiori, Shin-ichi, 233
 Nishio, Masayuki, 223
 Nomura, Kazuhiro, 129
 Norbert, W. D. J. Amilaprasadh, 185
 Oginio, Tetsuhiro, 223
 O'Hare, Dermot, 163
 Ouchi, Masatoshi, 165
 Ohmiya, Yoshihiro, 165
 Okamoto, Susumu, 151
 Ostrander, Robert L., 237
 Ouc, Masatoshi, 143
 Pérez-García, Lluïsa, 177
 Pérez Pariente, J., 147
 Philp, Douglas, 181, 205
 Phipps, Mark A., 225
 Postema, Maarten H. D., 235
 Prasad, B. Raghavendra, 141
 Prodi, Luca, 177
 Rangan, K. Kasthuri, 141
 Rawson, Jeremy M., 169
 Reese, Colin B., 133
 Rheingold, Arnold L., 237
 Riddell, Frank G., 209
 Roberts, D. J., 159
 Rockenbauer, Antal, 145
 Rogerson, Martin, 209
 Ruf, Michael, 135
 Sakurai, Tomonori, 227
 Sano, Kenji, 231
 Sawada, Hideo, 143
 Schmid, Roland, 161
 Scholz, Markus, 239
 Seiler, Paul, 205
 Skrzypczak-Jankun, Ewa, 127
 Song, Jae-Inh, 157
 Spencer, Neil, 181
 Srebnik, Morris, 127
 Stamford, N. Patrick J., 193
 Stavber, Stojan, 149
 Stoddart, J. Fraser, 177, 181
 Subramanian, C. K., 141
 Sumino, Eisaku, 143
 Sun, Xiaoyong, 237
 Takizawa, Nobuyuki, 227
 Tamao, Kohei, 229
 Terachi, Takumi, 137
 Testaferri, Lorenzo, 221
 Thibaut, Denis, 193
 Tiecco, Marcello, 221
 Tingoli, Marco, 221
 Tremel, Wolfgang, 217
 Tsuji, Frederick I., 165
 Turnbull, Mark M., 237
 Ueda, Tatsuo, 151
 Uemura, Sakae, 129, 223
 Urano, Taeko I., 231
 Vahrenkamp, Heinrich, 135
 Venturi, Margherita, 177
 Vigneron, Jean-Pierre, 197
 Von Dreele, R. B., 155
 Waltermire, Beth E., 237
 Weis, Karl, 135
 Went, Michael J., 225
 Williams, David J., 181
 Winpenny, Richard E. P., 169
 Wong, Edward H., 237
 Wu, Bao-Shan, 139
 Yabunouchi, Nobuhiro, 151
 Yamaguchi, Mihoko, 165
 Yamaguchi, Shigehiro, 229
 Yoshida, Toshikatsu, 151
 Zhang, Li-Ping, 139
 Zheng, Bin, 127
 Ziessel, Raymond, 189
 Zupan, Marko, 149

Chemical Communications – 1994

From the beginning of 1994, each communication in *Chemical Communications* will start on a fresh right-hand page, and will be limited to two pages in length. The vast majority of communications already fall within this two-page limit. Authors will be asked to shorten communications that are longer than two pages, and should bear in mind our requirements for brevity in drafting their manuscript.

In particular:

- Extensive historical introduction and associated references should not be included; all that is needed is brief information to put the work in context.
- Duplication of results in the text and Tables and/or Figures must be avoided.
- Tables and Figures should be included only if their content is essential; more extensive tabulation of data and illustration of results should be reserved for the full paper.
- Supplementary information on compound characterisation is useful for the referees.

Only in very exceptional circumstances, requiring special justification from the author, will communications be allowed to extend to four printed pages.