

JOURNAL OF THE CHEMICAL SOCIETY

Chemical Communications

Number 4
1985

CONTENTS

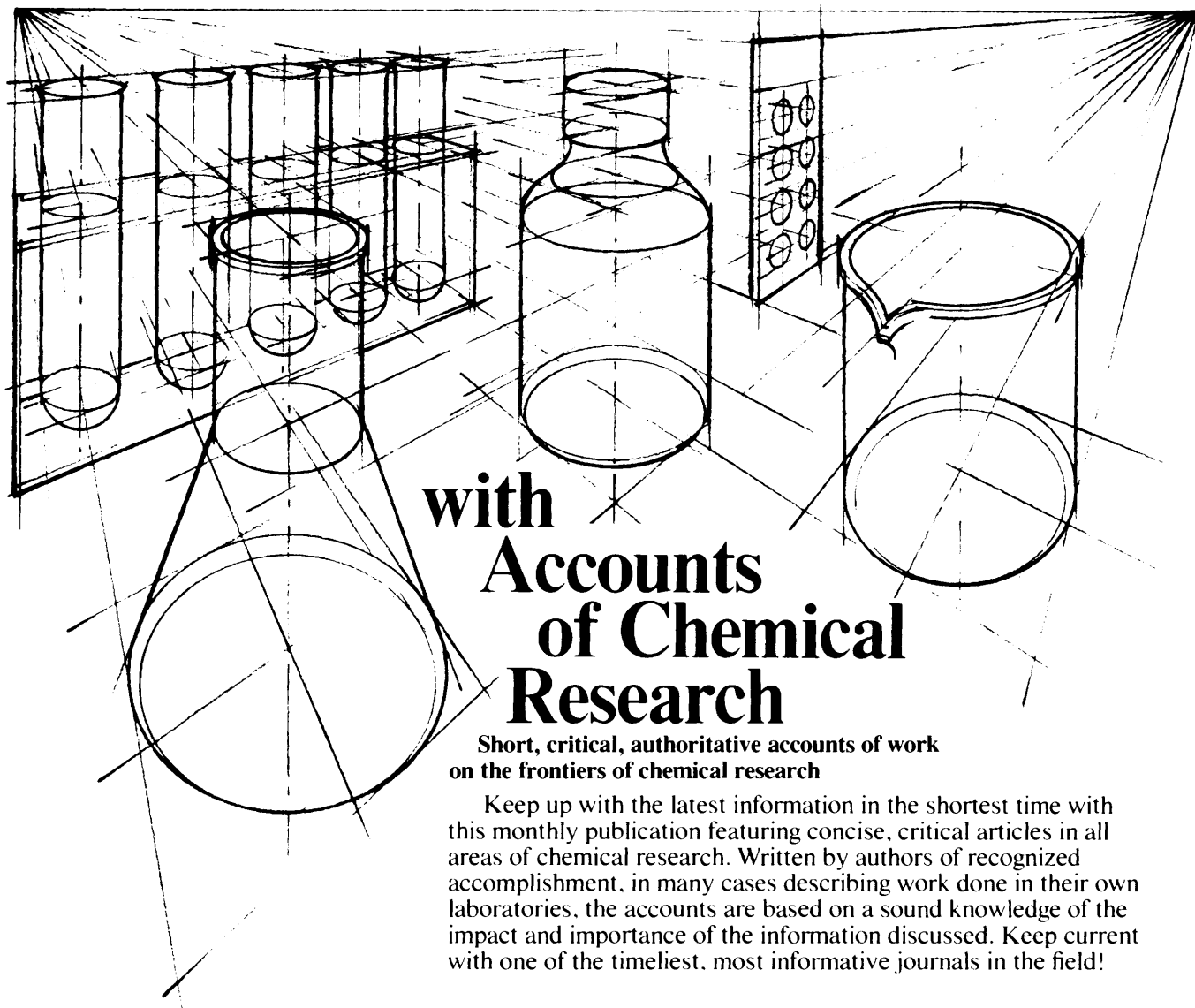
- 181 A New Direct Synthesis for Dicarbide Clusters: Synthesis and Crystal Structure of $[\text{AsPh}_2]_2[\text{Ni}_{10}(\text{CO})_{16}\text{C}_2]$ **Alessandro Ceriotti, Giuliano Longoni, Mario Manassero, Norberto Masciocchi, Luigi Resconi, Mirella Saponi**
- 183 Synthesis of Linear and Cyclic Trihydroxamic Acids as Models for Ferrioxamines E and G **Kazuyuki Shimizu, Masayasu Akiyama**
- 184 Total Synthesis of (–)-Kopsinilam, (–)-Kopsinine, and the Bis-indole Alkaloids (–)-Norpleiomutine and (–)-Pleiomutine **Philip Magnus, Peter Brown**
- 186 A Short Synthesis of 2-Deoxy-2-fluoro-*ribo*-D-pentopyranose **John T. Welch, Seetha Eswarakrishnan**
- 188 Hydrodenitrogenation Catalysed by Zeolite-supported Ruthenium **Timothy G. Harvey, Trevor W. Matheson**
- 189 2-Azabicyclo[2.2.0]hexane-3,5-dione, a New Building Block for Carbapenem Nuclei **Nobuya Katagiri, Masayuki Sato, Satoshi Saikawa, Toshiyuki Sakamoto, Makoto Muto, Chikara Kaneko**
- 190 Formation and Reactions of Mesoionic Anhydro-4-hydroxy-1,3-dioxolium Hydroxides **Masashi Hamaguchi, Toshikazu Nagai**
- 192 A Novel Quinquedentate N_5 Macrocycle containing a Pendant Amino Group **Bohdan Korybut-Daszkiewicz**
- 193 Unexpectedly Low Yields of Water from Hydrogen–Oxygen Titrations on Platinum at 293 K **Nigel D. Hoyle, Paul A. Sermon**
- 194 γ -Lactam Analogues of Carbapenicillanic Acids **Jack E. Baldwin, Robert M. Adlington, Richard H. Jones, Christopher J. Schofield, Constantine Zarocostas, Colin W. Greengrass**
- 197 Synthesis of an Unusual, High Nuclearity Osmium–Platinum Cluster: X-Ray Analysis of $[\text{Os}_6\text{Pt}_2(\text{CO})_{16}(\text{C}_8\text{H}_{12})_2]$ (C_8H_{12} = cyclo-octa-1,5-diene) **Christiane Couture, David H. Farrar**
- 198 Identification of Polar Porphyrins in Oil Shale **Ruben Ocampo, Henry J. Callot, Pierre Albrecht**
- 200 Occurrence of Bacterioporphyrins in Oil Shale **Ruben Ocampo, Henry J. Callot, Pierre Albrecht**
- 202 An Improved Synthesis of Polyacetylene **W. James Feast, Jeremy N. Winter**
- 203 Alka-2,3-dienes from Crotonaldehyde **José Barluenga, José R. Fernández, Miguel Yus**
- 204 An Unusual Substitution Reaction in a Benzotetrazine Derivative **A. M. Almerico, A. J. Boulton**
- 205 An Unexpected Reaction of Diphenyldiazomethane with Perfluoro-2-nitrosopropane **Ronald Eric Banks, Adrian Richards**
- 206 The Stereochemistry of Oxidation of 1-Amino-cyclopropanecarboxylic Acid **Jack E. Baldwin, David A. Jackson, and in part Robert M. Adlington, Bernard J. Rawlings**
- 207 Selective Synthesis of Ethane from CO and H_2 catalysed by Zeolite-entrapped Ruthenium Carbonyl Clusters **Takashi Tatsumi, Heigo Odajima, Hiro-o Tominaga**
- 209 Stereocontrolled Tandem Alkylations: Michael Additions and Subsequent Alkylations of α,β -Unsaturated Acyl Ligands bound to $[(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})(\text{PPh}_3)]$ **Stephen G. Davies, Jonathan C. Walker**
- 210 He_2^{2+} , the Experimental Detection of a Remarkable Molecule **Michael Guilhaus, A. Gareth Brenton, John H. Beynon, Mila Rabrenović, Paul von Ragué Schleyer**
- 211 Highly Diastereoselective Reduction of Chiral β -Ketosulphoxides under Chelation Control: Application to the Synthesis of (*R*)-(+)-*n*-Hexadecano-1,5-lactone **Hiroshi Kosugi, Hiroshi Konta, Hisashi Uda**
- 213 3-Hydroxypyrrroles [Pyrrol-3(*2H*)-ones] **Hamish McNab, Lilian C. Monahan**
- 214 ^{29}Si N.M.R. Longitudinal Relaxation Times in ZSM-5 Zeolites **Leo J. M. van de Ven, Jos G. Post, Jan H. C. van Hooff, Jan W. de Haan**
- 216 Co-ordination of a 16-Membered Dioxopenta-amine Macrocycle to High-spin Nickel(II). X-Ray Study of Structural Requirements for a Mono-oxygenase Model **Yoshihiko Kushi, Ryosuke Machida, Eiichi Kimura**
- 218 Novel Base-induced Ring Transformation of 1,2-Benzisoxazole-3-acetic Acid Esters into 2*H*-Azirines or Benzofurans **Shōzō Ueda, Shunsuke Naruto, Toyokichi Yoshida, Tadahiro Sawayama, Hitoshi Uno**
- 219 An Accurate Estimate of the Relative Energetics of the π - and σ -Succinimidyl Radicals **Martin J. Field, Ian H. Hillier, Susan A. Pope, Martyn F. Guest**
- 220 Long Range ^{13}C – ^1H Coupling in Carbohydrates by Selective 2D Heteronuclear *J*-resolved N.M.R. Spectroscopy **Michael J. Gidley, Stephen M. Bociek**
- 222 Glycinoeclepin A, a Natural Hatching Stimulus for the Soybean Cyst Nematode **Akio Fukuzawa, Akio Furusaki, Mitsuhiro Ikura, Tadashi Masamune**
- 224 Formation of Zirconium(III) Complexes by Thermolysis of $(\eta^5\text{-C}_5\text{H}_5)_2\text{ZrH}(\text{CH}_2\text{PPh}_2)$ **Robert Choukroun, Danièle Gervais**

- 226 A Flavin Mimic possessing Strong Oxidizing Power due to Electron Delocalization: a Benzo-dipteridine **Yumihiko Yano, Michiaki Nakazato, Rafael E. Vasquez**
- 227 The Preparation and Crystal Structure of *cis*-Bis(trimethylsilylsulphurdiimido)bis(triphenylphosphine)platinum(II) **Nigel P. C. Walker, Michael B. Hursthouse, Christopher P. Warrens, J. Derek Woollins**
- 228 Gas-phase Hydration of Ethylene over a Proton-exchanged Ferrierite-type Zeolite Catalyst **Masakazu Iwamoto, Masahiro Tajima, Shuichi Kagawa**
- 230 Heterogeneous Catalytic Insertion Mechanism of the C₂ Oxygenate Formation **T. Loek F. Favre, Gerrit van der Lee, Vladimir Ponec**
- 231 Oxidative Activation of Co^{II} in Schiff Base Complexes in the Presence of *n*-Butyltin Trichloride: the Molecular Structure of BuⁿSn(OMe)Cl₂·CoCl(salen) [salen = *N,N'*-ethylenebis(salicylideneaminato)] **Desmond Cunningham, Tim Higgins, Brendan Kneafsey, Patrick McArdle, John Simmie**
- 233 The Synthesis of a Cocaine Intermediate *via* a Sodium-Liquid Ammonia Carbon-Carbon σ -Bond Cleavage of an Azabicyclic Succinate-type Ester **A. Paul Krapcho, James A. Vivel**
- 234 Perfluoropropylation of Aromatic Compounds with Bis(heptafluorobutyl) Peroxide **Masato Yoshida, Hiroyasu Amemiya, Michio Kobayashi, Hideo Sawada, Hidehiko Hagii, Kazuyoshi Aoshima**
- 236 Convenient Syntheses of Hydroindans and Hydronaphthalenes **Ta-shue Chou, Hsi-Hwa Tso, Lee-Jean Chang**
- 237 Formation of 3,6-Dihydro-1,2,4-oxathiazines from Thioketone *S*-Oxides and a 2*H*-Azirine *via* a New Type of [3,3] Cycloaddition Reaction **Bianca F. Bonini, Gaetano Maccagnani, Germana Mazzanti, Binne Zwanenburg**
- 238 The Synthesis of Diarylamines by Nitro-group Displacement. Activation of Anilines containing Electron-withdrawing Groups by Potassium Carbonate **John H. Gorvin**
- 240 A New Synthesis of 1-*t*-Butyldimethylsilyl-3-acetyl-4-carboxyazetid-2-one **Gianfranco Cainelli, Michele Contento, Annamaria Drusiani, Mauro Panunzio, Laura Plessi**

AUTHOR INDEX

- Adlington, Robert M., 194, 206
 Akiyama, Masayasu, 183
 Albrecht, Pierre, 198, 200
 Almerico, A. M., 204
 Amemiya, Hiroyasu, 234
 Aoshima, Kazuyoshi, 234
 Baldwin, Jack E., 194, 206
 Banks, Ronald Eric, 205
 Barluenga, José, 203
 Beynon, John H., 210
 Bociek, Stephen M., 220
 Bonini, Bianca F., 237
 Boulton, A. J., 204
 Brenton, A. Gareth, 210
 Brown, Peter, 184
 Cainelli, Gianfranco, 240
 Callot, Henry J., 198, 200
 Ceriotti, Alessandro, 181
 Chang, Lee-Jean, 236
 Choukroun, Robert, 224
 Chou, Ta-shue, 236
 Contento, Michele, 240
 Couture, Christiane, 197
 Cunningham, Desmond, 231
 Davies, Stephen G., 209
 de Haan, Jan W., 214
 Drusiani, Annamaria, 240
 Eswarakrishnan, Seetha, 186
 Farrar, David H., 197
 Favre, T. Loek F., 230
 Feast, W. James, 202
 Fernández, José R., 203
 Field, Martin J., 219
 Fukuzawa, Akio, 222
 Furusaki, Akio, 222
 Gervais, Danièle, 224
 Gidley, Michael J., 220
 Gorvin, John H., 238
 Greengrass, Colin W., 194
 Guest, Martyn F., 219
 Guilhaus, Michael, 210
 Hagii, Hidehiko, 234
 Hamaguchi, Masashi, 190
 Harvey, Timothy G., 188
 Higgins, Tim, 231
 Hillier, Ian H., 219
 Hoyle, Nigel D., 193
 Hursthouse, Michael B., 227
 Ikura, Mitsuhiro, 222
 Iwamoto, Masakazu, 228
 Jackson, David A., 206
 Jones, Richard H., 194
 Kagawa, Shuichi, 228
 Kaneko, Chikara, 189
 Katagiri, Nobuya, 189
 Kimura, Eiichi, 216
 Kneafsey, Brendan, 231
 Kobayashi, Michio, 234
 Konta, Hiroshi, 211
 Korybut-Daszkiewicz, Bohdan, 192
 Kosugi, Hiroshi, 211
 Krapcho, A. Paul, 233
 Kushi, Yoshihiko, 216
 Longoni, Giuliano, 181
 McArdle, Patrick, 231
 Maccagnani, Gaetano, 237
 Machida, Ryosuke, 216
 McNab, Hamish, 213
 Magnus, Philip, 184
 Manassero, Mario, 181
 Masamune, Tadashi, 222
 Masciocchi, Norberto, 181
 Matheson, Trevor W., 188
 Mazzanti, Germana, 237
 Monahan, Lilian C., 213
 Muto, Makoto, 189
 Nagai, Toshikazu, 190
 Nakazato, Michiaki, 226
 Naruto, Shunsuke, 218
 Ocampo, Ruben, 198, 200
 Odajima, Heigo, 207
 Panunzio, Mauro, 240
 Plessi, Laura, 240
 Ponec, Vladimir, 230
 Pope, Susan A., 219
 Post, Jos G., 214
 Rabrenović, Mila, 210
 Rawlings, Bernard J., 206
 Resconi, Luigi, 181
 Richards, Adrian, 205
 Saikawa, Satoshi, 189
 Sakamoto, Toshiyuki, 189
 Sansoni, Mirella, 181
 Sato, Masayuki, 189
 Sawada, Hideo, 234
 Sawayama, Tadahiro, 218
 Schleyer, Paul von Ragué, 210
 Schofield, Christopher J., 194
 Sermon, Paul A., 193
 Shimizu, Kazuyuki, 183
 Simmie, John, 231
 Tajima, Masahiro, 228
 Tatsumi, Takashi, 207
 Tominaga, Hiro-o, 207
 Tso, Hsi-Hwa, 236
 Mazzanti, Germana, 237
 Ueda, Hisashi, 211
 Ueda, Shōzō, 218
 Uno, Hitoshi, 218
 van der Lee, Gerrit, 230
 van de Ven, Leo J. M., 214
 van Hooff, Jan H. C., 214
 Vasquez, Rafael E., 226
 Viveló, James A., 233
 Walker, Jonathan C., 209
 Walker, Nigel P. C., 227
 Warrens, Christopher P., 227
 Welch, John T., 186
 Winter, Jeremy N., 202
 Woollins, J. Derek, 227
 Yano, Yumihiko, 226
 Yoshida, Masato, 234
 Yoshida, Toyokichi, 218
 Yus, Miguel, 203
 Zarocostas, Constantine, 194
 Zwanenburg, Binne, 237

Place current developments in perspective



with Accounts of Chemical Research

Short, critical, authoritative accounts of work
on the frontiers of chemical research

Keep up with the latest information in the shortest time with this monthly publication featuring concise, critical articles in all areas of chemical research. Written by authors of recognized accomplishment, in many cases describing work done in their own laboratories, the accounts are based on a sound knowledge of the impact and importance of the information discussed. Keep current with one of the timeliest, most informative journals in the field!

Cable Address: JIECHEM
Telex: 440159 ACSP UI
or 892582 ACSPUBS

Accounts of Chemical Research

1985

American Chemical Society

1155 Sixteenth Street, N.W.
Washington, D.C. 20036

Yes, I would like to subscribe to ACCOUNTS OF CHEMICAL RESEARCH at the rate checked below:

	Europe Air Service Included	Other Countries Air Service Included
ACS Members	<input type="checkbox"/> \$ 28.00	<input type="checkbox"/> \$ 31.00
Nonmembers	<input type="checkbox"/> \$102.00	<input type="checkbox"/> \$105.00

Payment enclosed (Payable to American Chemical Society)

Bill me Bill company

Charge my MasterCard VISA Barclaycard Access

Account No. _____ Interbank No. _____
(MasterCard & Access only)

Expires _____ Signature _____

Name _____

Organization _____ Title _____

Address Home Business _____

City _____ State/Country _____ Zip _____

Subscriptions at ACS member rates are for personal use only.

Journal subscriptions start January 1985. Allow 60 days to receive your first issue.

Foreign payment must be made in U.S. currency by international money order, UNESCO coupons, U.S. bank draft, or order through your subscription agency.