

JOURNAL OF THE CHEMICAL SOCIETY

Chemical Communications

Number 7
1988

CONTENTS

- 449 Concurrent Reductive Cleavage and Recombination of γ,δ -Alkylidenedioxy- α,β -unsaturated Esters Promoted by Organocuprates **Seiichi Takano, Yoshinori Sekiguchi, Kunio Ogasawara**
- 450 Reduction of Co-ordinated Carbon Dioxide to Carbon Monoxide *via* Protonation by Thiols and other Brønsted Acids promoted by Ni-Systems: a Contribution to the Understanding of the Mode of Action of the Enzyme Carbon Monoxide Dehydrogenase **Michele Aresta, Eugenio Quaranta, Immacolata Tommasi**
- 452 Formation of Whiskers on the Electrode Surface by the Electrolysis of 3,3',5,5'-Tetramethylbenzidine **Akira Watanabe, Kunio Mori, Maki Mikuni, Yoshiro Nakamura, Osamu Ito**
- 454 Facile Ramberg–Bäcklund Reactions for the Synthesis of 2,3-Disubstituted Cyclopentenones; a Short Synthetic Route to Tetrahydrodicranenone B **Guy Casy, Richard J. K. Taylor**
- 455 Free and Associated Trimethylsilyl Cation in Solution **Joseph B. Lambert, JoAnn A. McConnell, Wojciech Schif, William J. Schulz, Jr.**
- 457 Diastereo-differentiating Hydrogen Transfer in 5-Deazaflavins **Seiji Shinkai, Akito Kawase, Toshiro Yamaguchi, Osamu Manabe**
- 458 Selective Formation of Lower Alkenes and Alcohols in CO + H₂ Reaction catalysed on NaY Zeolite-encapsulated Rh₆ and RhFe Bimetallic Cluster-derived Catalysts **Ling-Fen Rao, Atsushi Fukuoka, Masaru Ichikawa**
- 460 Carbohydrate Liquid Crystals even at Ambient Temperature **Henk van Doren, T. J. Buma, Richard M. Kellogg, Hans Wynberg**
- 462 X-Ray Crystal Structure of a Phosphirenium Ion **J. M. Vural, Steven A. Weissman, S. G. Baxter, Alan H. Cowley, Christine M. Nunn**
- 463 New Evidence for the Presence of a Spiroindolenine Intermediate in Pictet–Spengler Reaction of N^b-Hydroxytryptamine **Masako Nakagawa, Jinjun Liu, Koreharu Ogata, Tohru Hino**
- 465 The Synthesis, X-Ray Structural Analysis, and Anomeric Effect in *trans*-3,6-Dimethoxy-1,2,4,5-tetroxane **Chin-Yun Chiang, William Butler, Robert L. Kuczkowski**
- 466 A New Rhodium Trinuclear Complex containing highly protected Hydroxo Groups, [$\{\text{Rh}(\text{binap})\}_3(\mu_3\text{-OH})_2$]ClO₄, responsible for Deactivation of the 1,3-Hydrogen Migration Catalyst of Allylamine [binap = 2,2'-bis(diphenylphosphino)-1,1'-binaphthyl] **Tsuneaki Yamagata, Kazuhide Tani, Yoshitaka Tatsuno, Taro Saito**
- 468 Oxygen Insertion into the Metal–Carbon Bond of Cyclopalladated 2-(Alkylsulphinyl)azobenzenes by Peracids. High Yield Regiospecific Aromatic Hydroxylation **Chitta R. Sinha, Debkumar Bandyopadhyay, Animesh Chakravorty**
- 470 Enzymatic Resolution of Bicyclo[4.2.0]oct-2-en-7-ol and the Preparation of some Polysubstituted Bicyclo[3.3.0]octan-2-ones *via* Highly Strained Tricyclo[4.2.0.0^{1,5}]octan-8-ones **Ian C. Cotterill, Harry Finch, Derek P. Reynolds, Stanley M. Roberts, Henry S. Rzepa, Kevin M. Short, Alexandra M. Z. Slawin, Christopher J. Wallis, David J. Williams**
- 472 Coupling Electrocatalysis (Electron Transfer Chain) with Organometallic Catalysis: Polymerisation of Terminal Alkynes Catalysed by [W(CO)₃(NCMe)₃] and [Fe(cp)₂]⁺PF₆⁻ (cp = η^5 -cyclopentadienyl) **Marie-Hélène Desbois, Didier Astruc**
- 473 1-Substituted (*S*)-3-(*p*-Tolyl)sulphinyl-1,4-dihydropyridines: Novel NADH Model Compounds **Takeshi Imanishi, Yoshimitsu Hamano, Hirofumi Yoshikawa, Chuzo Iwata**
- 475 The Mechanisms of the Rearrangements of Allylic Hydroperoxides **Athelstan L. J. Beckwith, Alwyn G. Davies, Ian G. E. Davison, Allan Maccoll, Margaret H. Mruzek**
- 477 Regioselective Photodimerization of Cinnamic Acid in a Micellar Solution **Yushin Nakamura**
- 478 Synthesis, Structure, and Infrared Spectroelectrochemistry of the Cluster [Os₃H(μ -FcCO)(CO)₁₀] (Fc = ferrocenyl), a Product of Oxidative Addition of Formylferrocene to [Os₃(CO)₁₀(MeCN)₂] **Alejandro J. Arce, Paul A. Bates, Stephen P. Best, Robin J. H. Clark, Antony J. Deeming, Michael B. Hursthouse, Roderick C. S. McQueen, Nicholas I. Powell**
- 480 Hydrogen Atom Transfer to Alkenes from Aminyl–Borane Radicals **J. Nicholas Kirwan, Brian P. Roberts**

- 482 The Reversible Protonation of Rhenium(vii) Heptahydrides of Type $[\text{ReH}_7(\text{PR}_3)_2]$ to give η^2 -Dihydrogen Complexes
Xavier L. R. Fontaine, Edmund H. Fowles, Bernard L. Shaw
- 483 δ -Lactams: Synthesis from D-Glucose, and Preliminary Evaluation as a Fucosidase Inhibitor, of L-Fuconic- δ -lactam
George W. J. Fleet, Nigel G. Ramsden, Raymond A. Dwek, Tom W. Rademacher, Linda E. Fellows, Robert J. Nash, Donovan St. C. Green, Bryan Winchester
- 485 A Model for Methane Mono-oxygenase: Dioxygen Oxidation of Alkanes by Use of a μ -Oxo Binuclear Iron Complex
Nobumasa Kitajima, Hideno Fukui, Yoshihiko Moro-oka
- 487 Infrared Chemiluminescence from an Organic Compound **Frank McCapra, M. Taheri-Kadkhoda**
- 488 A Promising Material for Non-linear Optics: Observation of Second Harmonic Generation from 4-[N-(4-Carboxypentyl)-N-methylamino]-4'-nitrostilbene-coated Substrates **John W. Barton, Michael Buhaenko, Brian Moyle, Norman M. Ratcliffe**
- 490 E.S.R. Observation of the Radical Trianion and Radical Anion of Bis(1,2,5-thiadiazolo)tetracyanoquinodimethane
Masatoshi Hirayama, Akihiko Seki, Yoshiro Yamashita, Takanori Suzuki, Tsutomu Miyashi
- 491 A Convenient Synthesis of $\text{C}_5(\text{CD}_3)_5\text{H}$. Synthesis and Characterisation of $\text{Fe}\{\eta^5\text{-C}_5(\text{CD}_3)_5\}_2$ **Dermot O'Hare, Juan Manriquez, Joel S. Miller**
- 493 Formation and Partial Characterisation of a Stable Phosphinine 1-Sulphide **David G. Holah, Alan N. Hughes, Karen L. Knudsen**
- 495 Positional Selectivity in the Rearrangement of 7-Formyl and 7-Vinyl Norcaradienes; Evidence for 3,5-Sigmatropy
Peter J. Batty, David W. Jones, Harvey P. Tucker
- 496 Photocleavage of Water with Silver Phosphate **K. Tennakone, A. H. Jayatissa, W. Wijeratne**
- 498 μ_3 -Arsenic Trimolybdenum Clusters with Oxygen and Sulphur bridging the Transition Metals **Hans-Peter Neumann, Manfred L. Ziegler**
- 500 Diastereoselection in an Aqueous Diels-Alder Reaction: a Formal Total Synthesis of the Inhoffen-Lythgoe Diol **Ellen Brandes, Paul A. Grieco, Philip Garner**
- 503 An Easy Access to β -Acyl- and β -Aryl-propionaldehydes through a New Silylated Organotin Homoenolate Equivalent
Jean-Baptiste Verlhac, Jean-Paul Quintard, Michel Pereyre
- 504 α -Hydroxyiminophosphonic Acids. New Types of Phosphorylating Agents through Monomeric Metaphosphate
Eli Breuer, Rafik Karaman, Dan Gibson, Haim Leader, Amiram Goldblum
- 506 Synthesis and Dimerisation of [1,2,4]Triazolo[4,3-*a*]pyrimidinium-3-aminides **Hugh Marley, Kevin J. McCullough, Peter N. Preston, Stanley H. B. Wright**
-

Corrigendum

- 508 The *in situ* Generation of Thiazyl Trichloride: A Synthone for C-N-S Heterocycles **Allen Applett, Tristram Chivers**
-

AUTHOR INDEX

- Apblett, Allen, 508
 Arce, Alejandro J., 478
 Aresta, Michele, 450
 Astruc, Didier, 472
 Bandyopadhyay, Debkumar, 468
 Barton, John W., 488
 Bates, Paul A., 478
 Batty, Peter J., 495
 Baxter, S. G., 462
 Beckwith, Athelstan L. J., 475
 Best, Stephen P., 478
 Brandes, Ellen, 500
 Breuer, Eli, 504
 Buhaenko, Michael, 488
 Buma, T. J., 460
 Butler, William, 465
 Casy, Guy, 454
 Chakravorty, Animesh, 468
 Chiang, Chin-Yun, 465
 Chivers, Tristram, 508
 Clark, Robin J. H., 478
 Cotterill, Ian C., 470
 Cowley, Alan H., 462
 Davies, Alwyn G., 475
 Davison, Ian G. E., 475
 Deeming, Antony J., 478
 Desbois, Marie-Hélène, 472
 Dwek, Raymond A., 483
 Fellows, Linda E., 483
 Finch, Harry, 470
 Fleet, George W. J., 483
 Fontaine, Xavier L. R., 482
 Fowles, Edmund H., 482
 Fukui, Hiden, 485
 Fukuoka, Atsushi, 458
 Garner, Philip, 500
 Gibson, Dan, 504
 Goldblum, Amiram, 504
 Green, Donovan St. C., 483
 Grieco, Paul A., 500
 Hamano, Yoshimitsu, 473
 Hino, Tohru, 463
 Hirayama, Masatoshi, 490
 Holah, David G., 493
 Hughes, Alan N., 493
 Hursthouse, Michael B., 478
 Ichikawa, Masaru, 458
 Imanishi, Takeshi, 473
 Ito, Osamu, 452
 Iwata, Chuzo, 473
 Jayatissa, A. H., 496
 Jones, David W., 495
 Karaman, Rafik, 504
 Kawase, Akito, 457
 Kellogg, Richard M., 460
 Kirwan, J. Nicholas, 480
 Kitajima, Nobumasa, 485
 Knudsen, Karen L., 493
 Kuczkowski, Robert L., 465
 Lambert, Joseph B., 455
 Leader, Haim, 504
 Liu, Jinjun, 463
 McCapra, Frank, 487
 Maccoll, Allan, 475
 McConnell, JoAnn A., 455
 McCullough, Kevin J., 506
 McQueen, Roderick C. S., 478
 Manabe, Osamu, 457
 Manriquez, Juan, 491
 Marley, Hugh, 506
 Mikuni, Maki, 452
 Miller, Joel S., 491
 Miyashi, Tsutomu, 490
 Mori, Kunio, 452
 Moro-oka, Yoshihiko, 485
 Moyle, Brian, 488
 Mruzek, Margaret H., 475
 Nakagawa, Masako, 463
 Nakamura, Yoshiro, 452
 Nakamura, Yushin, 477
 Nash, Robert J., 483
 Neumann, Hans-Peter, 498
 Nunn, Christine M., 462
 Ogasawara, Kunio, 449
 Ogata, Koreharu, 463
 O'Hare, Dermot, 491
 Pereyre, Michel, 503
 Powell, Nicholas I., 478
 Preston, Peter N., 506
 Quaranta, Eugenio, 450
 Quintard, Jean-Paul, 503
 Rademacher, Tom W., 483
 Ramsden, Nigel G., 483
 Rao, Ling-Fen, 458
 Ratcliffe, Norman M., 488
 Reynolds, Derek P., 470
 Roberts, Brian P., 480
 Roberts, Stanley M., 470
 Rzepa, Henry S., 470
 Saito, Taro, 466
 Schilf, Wojciech, 455
 Schulz, Jr., William J., 455
 Seki, Akihiko, 490
 Sekiguchi, Yoshinori, 449
 Shaw, Bernard L., 482
 Shinkai, Seiji, 457
 Short, Kevin M., 470
 Sinha, Chitta R., 468
 Slawin, Alexandra M. Z., 470
 Suzuki, Takanori, 490
 Taheri-Kadkhoda, M., 487
 Takano, Seiichi, 449
 Tani, Kazuhide, 466
 Tatsuno, Yoshitaka, 466
 Taylor, Richard J. K., 454
 Tennakone, K., 496
 Tommasi, Immacolata, 450
 Tucker, Harvey P., 495
 van Doren, Henk, 460
 Verlhac, Jean-Baptiste, 503
 Vural, J. M., 462
 Wallis, Christopher J., 470
 Watanabe, Akira, 452
 Weissman, Steven A., 462
 Wijeratne, W., 496
 Williams, David J., 470
 Winchester, Bryan, 483
 Wright, Stanley H. B., 506
 Wynberg, Hans, 460
 Yamagata, Tsuneaki, 466
 Yamaguchi, Toshiro, 457
 Yamashita, Yoshiro, 490
 Yoshikawa, Hirofumi, 473
 Ziegler, Manfred L., 498

