JOURNAL OF THE CHEMICAL SOCIETY

Chemical Communications

Number 24 1989

CONTENTS

- 1865 Divalent Diene and Triene Compounds of Zirconium and Hafnium; X-Ray Crystal Structures of $[Hf(\eta^4-CH_2=CMe-CMe=CH_2)(PMe_3)_2Cl_2]$, $[Zr(\eta^5-C_5H_5)_2(PMe_3)(\eta^2-C_7H_8)]$, and $\{[Hf(\eta^7-C_7H_7)(\eta^5-C_9H_7)]_2(\mu-Me_2PCH_2CH_2PMe_2)\}$ Malcolm L. H. Green, Neil M. Walker
- 1868 Macroscopic Expression of Molecular Recognition. Supramolecular Liquid Crystalline Phases induced by Association of Complementary Heterocyclic Components Marie-Josèphe Brienne, Jacqueline Gabard, Jean-Marie Lehn, Ivan Stibor
- 1870 Synthesis, Solution Stability, and Crystal Structure of Aza-thia Macrocyclic Complexes of Silver(1) Andrew S. Craig, Ritu Kataky, David Parker, Harry Adams, Neil Bailey, Herrmann Schneider
- 1872 New Ketene Equivalents for the Diels-Alder Reaction. Vinyl Sulphoxide Cycloadditions Richard Vaughan Williams, Xu Lin
- 1874 Novel Benzo Crown Ether Cavitand and Benzo Crown Ether-Ferrocenyl Host Molecules that bind Bipyridinium and Sodium Guest Cations Paul D. Beer, E. Louise Tite, Arthur Ibbotson
- 1876 Baeyer-Villiger Oxidation of Bicycloheptanone to Cyclopentapyranone: a Novel Synthesis of Iridomyrmecin, Isoiridomyrmecin, and Boschnialactone **Tein-Fu Wang, Chi-Fu Yang**
- 1878 A New Method for Immobilization of Polymer-protective Colloidal Platinum Metals *via* Co-ordination Capture with Anchored Ligands. Synthesis of the First Example of Mercapto-containing Supported Metallic Catalyst for Hydrogenation of Alkenes with High Activity Yuan Wang, Hanfan Liu, Yingyan Jiang
- 1880 Co-operation of Two Amino Residues for the Facile Cleavage of Bis(nitrophenyl) Phosphates Makoto Komiyama, Koichi Yoshinari
- 1881 Selective Bromofluorination of Alkenes with 1,3-Dibromo-5,5-dimethylhydantoin and Silicon Tetrafluoride Makoto Shimizu, Yuko Nakahara, Hirosuke Yoshioka
- 1883 Model Reactions for Nitrogen Fixation. Photon-induced Formation and X-Ray Crystal Structure of [Os₂(NH₃)₈(MeCN)₂(N₂)]⁵⁺ from [Os^{VI}(NH₃)₄N]³⁺ Chi-Ming Che, Hon-Wah Lam, Wai-Fong Tong, Ting-Fong Lai, Tai-Chu Lau
- 1884 Theoretical Studies of the Role of Complexation in the Conjugate Addition of Dialkylcuprates to Electron-deficient C=C
 Bonds. Influence on the Stereochemistry of the Reaction Andrea E. Dorigo, Keiji Morokuma
- 1887 Synthesis and Reactivity of η³-Butadienyl Molybdenum Complexes formed by Deprotonation or Desilylation of 1,3-Diene Cations; Structure of [Mo(CO)₂(η³-CH₂···· CH···· C=CH₂)(η-C₅Me₅)] Stephen A. Benyunes, Michael Green, Mary McPartlin, Caroline B. M. Nation
- 1889 Extended Linear Metal-Metal Interactions in an Anionic Rhodium(1) Complex. X-Ray Structure of NMe₄[Rh(ox)(CO)₂] (ox = oxalato) Julio Real, J. Carles Bayón, Fernando J. Lahoz, José A. López
- 1890 Preparation and Structure of Cs[TcN(O₂)₂Cl]; the First Example of Nitridoperoxo Complex **John Baldas, Silvano F.** Colmanet, Maureen F. Mackay
- 1891 Excimer Phosphorescence of Naphthalene End-labelled Poly(ethylene glycol) observed in a Glass Matrix. Evidence for Aggregate Formation Chen-Ho Tung, Yi-Ming Wang
- 1893 Enantioselective Synthesis of a C/D-Ring Synthon for the Preparation of Vitamin D₃ Metabolites Susumi Hatakeyama, Hirotoshi Numata, Ken Osanai, Seiichi Takano
- 1896 A New Route to 4-epi-L-Daunosamine containing Disaccharides Belgacem Abbaci, Jean-Claude Florent, Claude Monneret
- 1897 The Reaction of Chiral Nucleophiles with Organomanganese Arene Complexes William H. Miles, Patricia M. Smiley, Herbert R. Brinkman
- 1899 Biomimetic Synthesis of Tropinone by the Oxidation of Hygrine with Mercury(II) Acetate Edward Leete, Sung Hoon Kim

- 1900 Chiral Reaction Field for Highly Stereoselective Hydrolysis of Enantiomeric Esters Yasuji Ihara, Kayo Igata, Yuko Okubo, Mamoru Nango
- 1902 Exceptionally Stable Alkali Metal Complexes of a Torand Thomas W. Bell, Albert Firestone, Richard Ludwig
- 1904 Vanadium(II) Carboxylate Chemistry. Synthesis, Structure, and Properties of [(thf)₃V(μ-Cl)(μ-CF₃CO₂)₂V(thf)₃][ZnCl₃(thf)] (thf = tetrahydrofuran) **Lucio Gelmini, William H. Armstrong**
- 1906 π Participation in Addition Reactions of *endo-*3,3-Diphenyltricyclo[3.2.1.0^{2.4}]oct-6-ene **Mehboob Peeran**, (the late) **James W. Wilt, Subramanian Ramakrishnan, David S. Crumrine**
- 1907 Synthesis and Luminescent Properties of an Eu^{III} Complex with a Macrocyclic Ligand incorporating 2,2'-Bipyridyl-1,1'-dioxide Units Marek Pietraszkiewicz, Sebastiano Pappalardo, Paolo Finocchiaro, Antonino Mamo, Jerzy Karpiuk
- 1908 Dealumination of Zeolite Beta using (NH₄)₂SiF₆ and SiCl₄ Jens Weitkamp, Michael Sakuth, Cong-yan Chen, Stefan Ernst
- 1910 Liquid Clathrates Dianne R. Bond, Graham E. Jackson, Heidi C. João, Michelle N. Hofmeyr, Tomasz A. Modro, Luigi R. Nassimbeni
- 1911 The Absolute Stereochemistry of Pamamycin-607, an Aerial Mycelium-inducing Substance of Streptomyces alboniger Masahiro Natsume, Satoru Kondo, Shingo Marumo
- 1913 An Ab initio Study of Dimethoxymethane Protonation and its Relevance to Glycoside Hydrolysis C. Webster Andrews, J. Phillip Bowen, Bert Fraser-Reid
- 1916 The Regio- and Stereo-controlled Synthesis of cis-p-Menth-3-ene-1,2-diol by means of a 1,2,4-Trioxane Intermediate Charles W. Jefford, Amer Jaber, John Boukouvalas
- 1918 Synthesis of α-Linked Derivatives of N-Acetyl Glucosamine and Gal-β(1-3)GalNAc (T Antigen) directly with the Natural N-Acetyl Protecting Group André Lubineau, Hugues Bienaymé, Joëlle Le Gallic
- 1919 Enantio- and Diastereo-selective Synthesis of Carbocyclic Oxetanocin Analogues Yun-ichiro Ichikawa, Aya Narita, Akira Shiozawa, Yujiro Hayashi, Koichi Narasaka
- 1921 A Short Asymmetric Synthesis of Anthracycline Antibiotics Kiyoshi Tomioka, Makoto Nakajima, Kenji Koga
- 1923 Unusual, CO Assisted Cyclo-oligomerization Reactions of Ethylene: Formation of Cyclopentane and Cyclohexane Derivatives by Ytterbium Ziegler-Natta Catalysts Wilhelm Keim, Zhongxin Chen, Zhiquan Shen

AUTHOR INDEX

Abbaci, Belgacem, 1896 Adams, Harry, 1870 Andrews, C. Webster, 1913 Armstrong, William H., 1904 Bailey, Neil, 1870 Baldas, John, 1890 Bayón, J. Carles, 1889 Beer, Paul D., 1874 Bell, Thomas W., 1902 Benyunes, Stephen A., 1887 Bienaymé, Hugues, 1918 Bond, Dianne R., 1910 Boukouvalas, John, 1916 Bowen, J. Phillip, 1913 Brienne, Marie-Josèphe, 1868 Brinkman, Herbert R., 1897 Che, Chi-Ming, 1883 Chen, Cong-yan, 1908 Chen, Zhongxin, 1923 Colmanet, Silvano F., 1890 Craig, Andrew S., 1870 Crumrine, David S., 1906 Dorigo, Andrea E., 1884 Ernst, Stefan, 1908 Finocchiaro, Paolo, 1907 Firestone, Albert, 1902 Florent, Jean-Claude, 1896 Fraser-Reid, Bert, 1913

Gabard, Jacqueline, 1868 Gelmini, Lucio, 1904 Green, Malcolm L. H., 1865 Green, Michael, 1887 Hatakeyama, Susumi, 1893 Hayashi, Yujiro, 1919 Hofmeyr, Michelle N., 1910 Ibbotson, Arthur, 1874 Ichikawa, Yun-ichiro, 1919 Igata, Kayo, 1900 Ihara, Yasuji, 1900 Jaber, Amer, 1916 Jackson, Graham E., 1910 Jefford, Charles W., 1916 Jiang, Yingyan, 1878 João, Heidi C., 1910 Karpiuk, Jerzy, 1907 Kataky, Ritu, 1870 Keim, Wilhelm, 1923 Kim, Sung Hoon, 1899 Koga, Kenji, 1921 Komiyama, Makoto, 1880 Kondo, Satoru, 1911 Lahoz, Fernando J., 1889 Lai, Ting-Fong, 1883 Lam. Hon-Wah, 1883 Lau, Tai-Chu, 1883 Le Gallic, Joëlle, 1918

Leete, Edward, 1899 Lehn, Jean-Marie, 1868 Lin, Xu, 1872 Liu, Hanfan, 1878 López, José A., 1889 Lubineau, André, 1918 Ludwig, Richard, 1902 Mackay, Maureen F., 1890 McPartlin, Mary, 1887 Mamo, Antonino, 1907 Marumo, Shingo, 1911 Miles, William H., 1897 Modro, Tomasz A., 1910 Monneret, Claude, 1896 Morokuma, Keiji, 1884 Nakahara, Yuko, 1881 Nakajima, Makoto, 1921 Nango, Mamoru, 1900 Narasaka, Koichi, 1919 Narita, Aya, 1919 Nassimbeni, Luigi R., 1910 Nation, Caroline B. M., 1887 Natsume, Masahiro, 1911 Numata, Hirotoshi, 1893 Okubo, Yuko, 1900 Osanai, Ken, 1893 Pappalardo, Sebastiano, 1907 Parker, David, 1870

Peeran, Mehboob, 1906 Pietraszkiewicz, Marek, 1907 Ramakrishnan, Subramanian, Real, Julio, 1889 Sakuth, Michael, 1908 Schneider, Herrmann, 1870 Shen, Zhiquan, 1923 Shimizu, Makoto, 1881 Shiozawa, Akira, 1919 Smiley, Patricia M., 1897 Stibor, Ivan, 1868 Takano, Seiichi, 1893 Tite, E. Louise, 1874 Tomioka, Kiyoshi, 1921 Tong, Wai-Fong, 1883 Tung, Chen-Ho, 1891 Walker, Neil M., 1865 Wang, Tein-Fu, 1876 Wang, Yi-Ming, 1891 Wang, Yuan, 1878 Weitkamp, Jens, 1908 Williams, Richard Vaughan, 1872 Wilt, (the late) James W., 1906 Yang, Chi-Fu, 1876 Yoshinari, Koichi, 1880

Yoshioka, Hirosuke, 1881

ROYAL SOCIETY OF CHEMISTRY

BIOTRANSFORMATIONS:

A survey of the Biotransformations of Drugs and Chemicals in Animals Volume 1

Edited by David R. Hawkins, Huntingdon Research Centre



The series has been devised to provide an up-to-date survey of the literature on the biotransformation of pharmaceuticals, pesticides, food additives, and environmental and industrial chemicals in animals. The objective is to provide a comprehensive database which will allow an increased awareness of patterns in species differences and the influence of chemical structure on biotransformation pathways. The ability to predict biotransformation is the ultimate goal which could contribute to the discovery and development of new products. The material has been collated into chemical classes but an additional feature is the definition and allocation of key functional groups for each compound. The functional groups selected are those commonly associated with biotransformation. Indexing these functional groups provides ready access to reports on compounds containing common structural features. An additional index of biotransformation processes and

compound names further increases the accessibility of relevant information.

Contents:

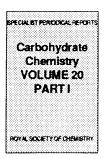
Key Functional Groups; An Overview; Hydrocarbons: Aliphatic, Aromatic (Monocyclic/Bicyclic); Polycyclic Aromatic Hydrocarbons: Unsubstituted, Hydroxylated Derivatives, Substituted; Alkenes, Halogenoalkanes, and Halogenoalkenes: Alkenes (Epoxides), Halogenoalkanes, Halogenoalkenes; Acyclic Functional Compounds; Substituted Monocyclic Aromatic Compounds: Halogenoaryl, Phenols, Nitroaryl/Nitrophenols, Carboxylic Acids/Esters, Ketones, Aryl Amines, Benzhydryls, Arylalkylamines; Miscellaneous Aromatics; Heterocycles: Monocyclic Five-membered, Monocyclic Six-membered, Monocyclic Seven-membered, Bicyclic/Tricyclic; Functional Nitrogen Compounds; Nitrosamines; Amino Acids and Peptides; Steroids; Miscellaneous: Inorganic and Organometallic, Pyrethroids, Organophosphorus Compounds, Sulphur Compounds; Compound Index; Key Functional Group Index; Reaction Type Index

ISBN 0 85186 157 1 Hardcover 511 pages February 1989 Price £75.00 (\$150.00)

CARBOHYDRATE CHEMISTRY

Vol. 20 Part I

Senior Reporter: Neil R. Williams, Birkbeck College, University of London



Since Volume 14 Carbohydrate Chemistry has been divided into two parts: Part I – Mono-, Di-, and Tri-saccharides and their derivatives. Part 2 – Macromolecules.

From Volume 19, Part I was renamed: Monosaccharides, Disaccharides, and Specific Oligosaccharides.

Carbohydrate Chemistry Volume 20 (Part I) provides a review of the literature published during 1986.

Brief Contents:

Introduction and General Aspects; Free Sugars; Glycosides and Disaccharides; Oligosaccharides; Ethers and Anhydro-sugars; Acetals; Esters; Halogeno-Sugars; Amino-sugars; Miscellaneous Nitrogen Derivatives; Thio-sugars; Deoxy-sugars; Unsaturated Derivatives; Branched-chain Sugars; Aldosuloses, Dialdoses, and Diuloses; Sugar Acids and Lactones; Inorganic Derivatives; Alditols and Cyclitols;

Antibiotics; Nucleosides; NMR Spectroscopy and Conformational Features; Other Physical Methods; Separatory and Analytical Methods; Synthesis of Enantiomerically Pure Non-carbohydrate Compounds; Author Index.

ISBN 0 85186 242 X Hardcover 315pp Published 1988 Price £70.00 (\$147.00)



Information

For further information, please write to: Royal Society of Chemistry, Sales and Promotion department, Thomas Graham House, Science Park, Milton Road, Cambridge CB4 4WF, U.K. To Order, please write to:
Royal Society of Chemistry, Distribution
Centre, Blackhorse Road, Letchworth,
Herts SG6 1HN. U.K.
or telephone (0462) 672555 quoting
your credit card details.
We can now accept Access/Visa/
MasterCard/Eurocard.

RSC Members are entitled to a discount on most RSC publications and should write to:
The Membership Manager,
Royal Society of Chemistry,
Thomas Graham House,
Science Park, Milton Road,
Cambridge CB4 4WF. U.K.