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Organometallic Chemistry Vol. 18

Senior Reporters: E. W. Abel, *University of Exeter* and
F.G.A. Stone, *University of Bristol*

Organometallic Chemistry Volume 18 provides a review of the literature published during 1988

Brief Contents:

Group 1: The Alkali and Coinage Metals; Group II: The Alkaline Earths and Zinc and its Congeners; Boron with the Exception of the Carbaboranes; Carbaboranes, including their Metal Complexes; Group III: Aluminium, Gallium, Indium and Thallium; Group IV: The Silicon Group; Group V: Arsenic, Antimony, and Bismuth; Metal Carbonyls; Organometallic Compounds containing Metal-Metal Bonds; Ligand Substitution Reactions of Metal and Organometal Carbonyls with Group V and VI Donor Ligands; Complexes Containing Metal-Carbon σ -Bonds of the Groups Scandium to Manganese, including Carbenes and Carbynes; Complexes Containing Metal-Carbon σ -Bonds of the Groups Iron, Cobalt and Nickel; Metal-Hydrocarbon π -Complexes, Other than π -Cyclopentadienyl and π -Arene Complexes; π -Cyclopentadienyl, π -Arene, and Related Complexes; Homogeneous Catalysis by Transition-metal Complexes; Structures of Organometallic Compounds determined by Diffraction Methods.

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Senior Reporters: B.J. Walker,
The Queen's University of Belfast
and J.B. Hobbs,
University of British Columbia, Canada

Organophosphorus Chemistry Volume 20 reviews the literature published between July 1987 and June 1988.

Brief Contents

Phosphines and Phosphonium Salts; Pentaco-ordinated and Hexaco-ordinated Compounds; Phosphine Oxides and Related Compounds; Tervalent Phosphorus Acids; Quinquevalent Phosphorus Acids; Nucleotides and Nucleic Acids; Ylides and Related Compounds; Phosphazenes.

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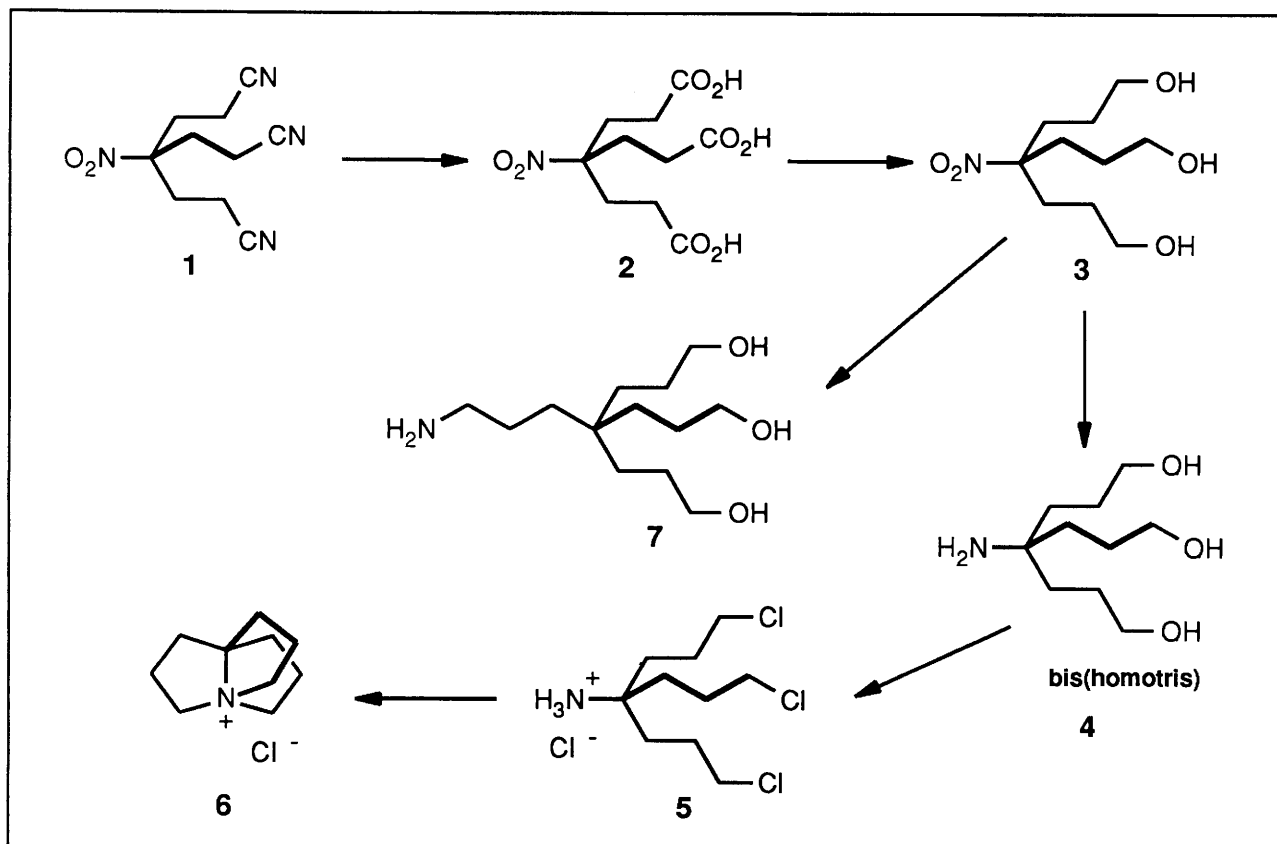
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The Growth of a Sapling

Professor George R. Newkome at the University of South Florida has developed¹⁻³ a most interesting new synthon, **bis(homotris)** [tris(3-hydroxypropyl)aminomethane, 4] for the preparation of "cascade molecules" or "arborols",⁴ polymers with precisely known molecular weights which possess hydrophilic surfaces and lipophilic interiors. These unimolecular micelles are likely to be useful in a host of applications, including chelating and solubilizing agents, controlled delivery of drugs, cross-linking agents and polymeric standards. Precursors to **bis(homotris)** also allow the synthesis of tetraalkyl-substituted quaternary carbon molecules such as **tris[homobis(homotris)]** [tris(3-hydroxypropyl)-3-aminopropylmethane, 7].



Salts and esters of the intermediate nitro acid^{2,5} may find a host of industrial applications, such as anticorrosive agents. The acid 2 and the azapropellane 6 were first made by Prof. F. Sorm,⁵ one of Czechoslovakia's ablest chemists. Naturally, happenings in Czechoslovakia have been much on our minds recently, and we are happy to be able to offer **1-azoniapropellane chloride (6)**, one of the most easily prepared propellanes utilizing **bis(homotris) (4)** as a starting material.

35,794-4	Tris(2-cyanoethyl)nitromethane (1)	10g \$10.00; 50g \$40.00
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36,566-1	1-Azoniapropellane chloride (6)	100mg \$18.00

References:

(1) Newkome, G.R.; Moorefield, C.N.; Theriot, K.J. *J. Org. Chem.* 1988, 53, 5552. (2) Newkome, G.R., U.S. Patent applied for. (3) Newkome, G.R.; Moorefield, C.N.; Johnson, A.L.; Baker, G.R., unpublished results. (4) Worthy, W. *Chem. Eng. News* 1988, 66, 19 (Feb. 22). (5) Sorm, F.; Beranek, J. *Chem. Listy* 1953, 47, 1359; *Chem. Abstr.* 1955, 49, 292c. (6) Bruson, H.A.; Riener, T.W. *J. Am. Chem. Soc.* 1943, 65, 23.



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