University of BRISTOL

Ian Manners was born in London, England and, after receiving his Ph.D. from the University of Bristol, he conducted postdoctoral work in Germany and then in the USA. He joined the University of Toronto, Canada as an Assistant Professor in 1990 and was promoted to Full Professor in 1995 and was made a Canada Research Chair in 2001. In 2006 he returned to his Alma Mater to take up a Chair in Inorganic, Macromolecular and Materials Chemistry supported by an EU Marie Curie Chair. His research interests broadly focus on synthetic problems at molecular, macromolecular, and longer length scales. His current research projects include: catalytic main group chemistry and main group polymers, functional metallopolymers, crystallization-driven "living" self-assembly of block copolymers, nanoelectronics with soft materials, and biological-synthetic hybrids based on DNA and viruses. He is the recipient of a range of awards including a Sloan Fellowship (from the US), the Steacie Prize (from Canada) and the RSC Award in Main Group Chemistry. Most recently he received the RSC Peter Day Award for Soft Matter Materials Chemistry (2012) and a Humboldt Research Award from Germany (2011). He is an elected member of the Canadian and British National Academies of Science. His work is documented in over 560 career publications and 4 books and he has given over 400 invited lectures worldwide.

3M Lecturers

1962	**Sir Derek H. R. Barton, Imperial College**
1963	Sir Ronald Nyholm, University College
1964	F. C. Tompkins, Imperial College
1965	S. Winstein, U.C.L.A.
1966	F. A. Cotton, M.I.T.
1967	J. O. Hirschfelder, Wisconsin
1968	A. Eschenmoser, E.T.H, Switzerland
1969	**H. Taube, Stanford**
1970	S. A. Rice, Chicago
1971	F. H. Westheimer, Harvard
1972	R. G. Pearson, Northwestern
1973	W. A. Klemperer, Harvard
1974	G. Stork, Columbia
1975	R. J. P. Williams, Oxford
1976	J. A. Morrison, McMaster
1977	D. Arigoni, E.T.H., Switzerland
1978	J. Chatt, Sussex
1979	**J. A. Pople, Carnegie-Mellon**
1980	W. P. Jencks, Brandeis
1981	J. Halpern, Chicago
1982	Sir John Meurig Thomas, Cambridge
1983	R. Breslow, Columbia
1984	M. L .H. Green, Oxford
1985	**D. R. Hershbach, Harvard**
1986	**J. M. Lehn, Strasbourg**
1987	M. H. Chisholm, Indiana
1988	**R. A. Marcus, Cal. Tech.**
1989	**D. J. Cram, U.C.L.A.**
1990	D. Seyferth, M.I.T.
1991	D. A. Shirley, Berkeley
1992	K. U. Ingold, NRC
1993	H. Schmidbauer, Munich
1994	A. J. Bard, U. Texas, Austin
1996	R. Huisgen, Munich
1998	J. M. J. Fréchet, Berkeley
1999	R. W. Field, M.I.T.
2000	I. Dance, New South Wales
2001	K. C. Nicolaou, San Diego
2002	R. R. Birge, Connecticut/Syracuse
2003	D. Fenske, Karlsruhe
2004	A. Padwa, Emory
2005	N. Dovichi, Washington State
2006	K. N. Raymond, Berkeley
2007	K. Tamao, RIKEN and Kyoto University
2008	P. Corkum, NRC, Ottawa
2009	D. Astruc, Univ. Bordeaux
2010	Harry B. Gray, Cal. Tech.
2013	Ian Manners, Bristol, UK

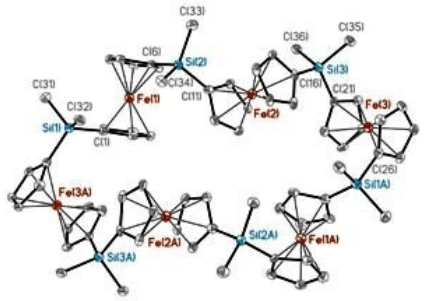
3M

Western UNIVERSITY · CANADA

The 3M University Lecturer in Chemistry 2013

Ian Manners

University of Bristol
Bristol, UK



April 15 & 16, 2013

http://www.inchm.bris.ac.uk/people/manners/home.html

Contacts
Joe Gilroy 519-661-2111 ext. 81561
joe.gilroy@uwo.ca
Paul Ragogna 519-611-2111 ext. 87048
pragogna@uwo.ca
Prof. Zhifeng Ding 519-661-2111 ext. 86161
zfding@uwo.ca
Sandy McCaw 519-661-2111 ext. 86350
smccaw@uwo.ca

Our website: http://www.uwo.ca/chem/

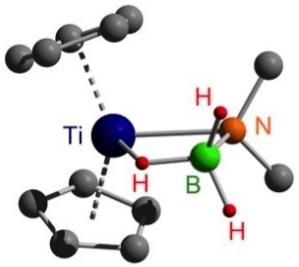
Monday, April 15, 2013
3:30 p.m.
B&GS Building ~~ Room 0165

REFRESHMENTS WILL BE SERVED
PRIOR TO THE LECTURE

Lecture 1

Catalysis in Service of Main Group Chemistry: Metal-Mediated and Metal-Free Dehydrocoupling/ Dehydrogenation of Amine-Boranes

Although metal-catalyzed reactions have played a profound role in organic synthesis, catalytic routes to main group molecules and materials are much less explored. In this talk the use of catalytic processes to dehydrogenate group 13 – 15 Lewis acid-Lewis base adducts such as amine-boranes and related species will be discussed. In addition to mechanistic details, unexpected discoveries such as metal-free hydrogen exchange reactions will be described. The work has relevance to the synthesis of new polymeric (e.g. polyaminoboranes, analogs of polyolefins with a BN backbone) and 2D materials and also to hydrogen storage and transfer chemistry.



Tuesday, April 16, 2013
3:30 p.m.
B&GS Building ~~ Room 0165

REFRESHMENTS WILL BE SERVED
PRIOR TO THE LECTURE

Lecture 2

Functional Nanomaterials via Crystallization-Driven "Living Self-Assembly"

Although chemical synthesis has evolved to a relatively advanced state, the ability to prepare well-defined self-assembled materials of controlled shape, size, and structural hierarchy is still in its relative infancy and currently remains the virtually exclusive domain of biology. In this talk the development of a promising new route to such materials, termed "crystallization-driven living self-assembly", will be described. This approach was discovered as a result of an investigation of the solution self-assembly behavior of block copolymers with crystalline polyferrocenylsilane metalloblocks in collaborative work with Mitch Winnik in Toronto. It offers an interesting and potentially powerful new route to well-defined micelles and hierarchical materials with controlled dimensions and a variety of potential applications and appears to be extendable to a wide range of different crystalline core-forming blocks, including biorelevant and pi-conjugated materials.