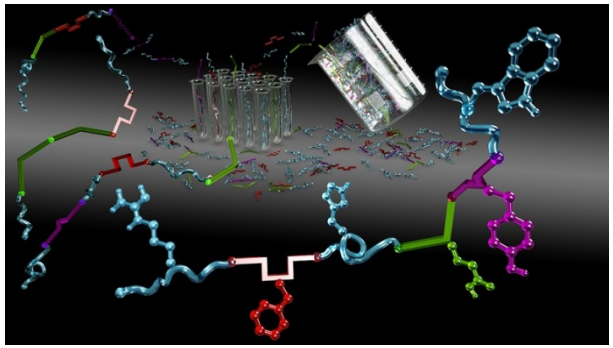
Craig J. Hawker

Professor Craig J. Hawker, FRS is Clarke Professor and holds the Alan and Ruth Heeger Chair of Interdisciplinary Science at the University of California, Santa Barbara. Professor Hawker's research activities focus on synthetic polymer chemistry and materials design, integrating fundamental studies with the development of nanostructured systems for application in the biomedical, advanced electronic materials and personal care industries. A range of materials have being commercialized with Professor Hawker being involved in the establishment of numerous companies. He has served on the Scientific Advisory Boards of Symyx Technologies, Ilypsa Therapeutics, Intermolecular, Tricida and Relypsa and is co-inventor of Olaplex. Hawker was recently inducted into the National Academy of Inventors. His scientific work has led to over 450 peer-reviewed papers and 60 patents with Professor Hawker's recent honors including the 2013 American Chemical Society Award in Polymer Chemistry, the 2012 Centenary Prize from the Royal Society of Chemistry and an Arthur C. Cope Scholar Award from the American Chemical Society in 2011. Professor Hawker has been honored with election as fellow to the Royal Society (London), American Association for the Advancement of Science, American Chemical Society and the Royal Society of Chemistry. Professor Hawker received a PhD in organic chemistry from the University of Cambridge and his undergraduate degree from the University of Queensland.

Lecture I
New Approaches to Molecular Building Blocks and Macromolecular Architectures

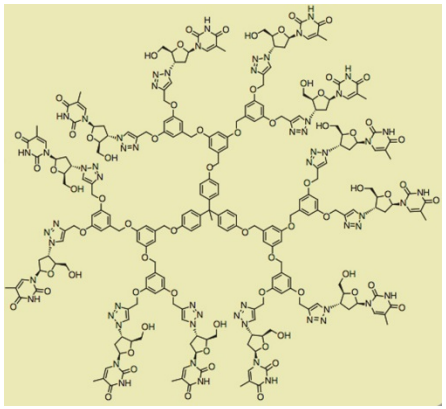
Monday, May 2, 3:00 pm
Room 0153, Biological and Geological Science



The orthogonal functionalization of polymeric materials is a promising design strategy for the "bottom-up" fabrication of nanostructured systems. In synthesizing these functional nanostructures, the molecular characteristics and functional group placement within the chemical building blocks dictate properties, assembly and ultimate use. These features will be illustrated with examples ranging from new strategies for the fabrication of nanostructured particles to novel hydrogels and surface coating inspired by marine organisms

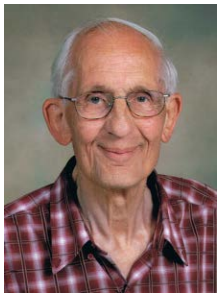
Lecture II
The Power of Organic Chemistry in Polymer Synthesis and Commercial Materials

Tuesday, May 3, 3:00 pm
Room 0153, Biological and Geological Science



For the successful synthesis of polymeric materials, efficient chemistry is required. This enabling feature also underlies the viability of commercial materials. The identification of efficient organic 'click' transformations and their application in areas ranging from biomaterials to personal care will be discussed.

Fred L.M. Pattison



(1923–2010) Fred Pattison was born in Scotland, where he received his early education. He enrolled at the University of Cambridge in England in 1941 to study Natural Science. Fred remained there to obtain a Ph.D. in Organic Chemistry under the supervision of Dr. B.C. Saunders. He then moved to Halifax, Nova Scotia to lecture at Dalhousie University for a year before joining Western in 1948 as an Assistant Professor of Chemistry.

Fred established a Ph.D. program in the department. His research on biologically active organic fluorine compounds produced many scientific papers, garnered the award of an Sc.D. by the University of Cambridge, and resulted in the publication of a book, *Toxic Aliphatic Fluorine Compounds*. In 1959, he became Professor and Head of the Department, and he presided over the expansion of the department and its move to new facilities.

In 1965, Fred decided on a career change. At the age of 42, he enrolled at Western as a first-year medical student. After completing his M.D. four years later, he interned at St. Joseph's Hospital in London and served for a year as resident in the Family Practice Program. As well, he was enrolled in a diploma program in venereology at the University of Liverpool. In 1971–73, Fred followed up a long-standing interest in the peoples of Canada's North by working with the International Grenfell Association. He provided solo medical care to about 6,000 people scattered along 120 miles of the Atlantic coast of Newfoundland.

Fred returned to London in 1973, when he joined Western's Student Health Services, holding the position of Director at his formal retirement in 1988. During the same period, he was a clinical assistant professor in the Faculty of Medicine, giving instruction in venereology, and director of the Middlesex-London Sexually Transmitted Disease Clinic.

After retiring, Fred was able to resume his connection with the Chemistry Department as Professor Emeritus. In light of his long service and many contributions to chemistry and medicine at Western, it is entirely fitting that the department dedicate a lecture series bearing his name.

Contact Information

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Previous Fred Pattison Senior Lectureships

1992	Sir Derek Barton, Texas A & M University
1993	Barry Trost, Stanford University
1995	Stephen J. Benkovic, Penn State University
1996	Steven V. Ley, University of Cambridge
1997	Anthony J. Kirby, University of Cambridge
1998	Larry E. Overman, Univ. of California, Irvine
1999	Sir Fraser Stoddart, Northwestern University
2000	Dennis Curran, University of Pittsburgh
2001	Joseph Lambert, Northwestern University
2002	Anthony Barrett, Imperial College
2003	Richard Wolfenden, UNC Chapel Hill
2004	Victor Snieckus, Queen's University
2005	Lutz F. Tietze, Georg-August University, Göttingen
2006	Juan C. (Tito) Scaiano, University of Ottawa
2007	François Diederich, ETH Zürich
2008	Erik J. Sorensen, Princeton University
2009	Chad A. Mirkin, Northwestern University
2010	Dennis A. Dougherty, CalTech
2011	Guy Bertrand, Univ. Of California, Riverside
2013	Darren Dixon, University of Oxford
2014	Stephen K. Hashmi, Heidelberg University

Light snacks and refreshments will be served 15 minutes prior to each lecture.

ACCESSIBILITY
The University of Western Ontario

If you require this information in an alternate format, or if any other arrangements can make this event more accessible to you, please contact us.

The Department of Chemistry
presents the
2016 Fred Pattison Senior Lecturer

Craig J. Hawker

Clarke Professor
University of California Santa Barbara

A two-part lecture series
May 2 and May 3, 2016

Western Science
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