

Stephen K. Hashmi



Dr. A. Stephen K. Hashmi received his doctorate degree from Ludwig-Maximilians University in Munich, Germany, in 1991. After a postdoctoral fellowship with Prof. B. M. Trost at Stanford University, he held positions at the Free University of Berlin, Frankfurt University, the University of Vienna, the University of Tasmania, the University of Marburg, and the University of Stuttgart. Stephen is now Full Professor and Vice President at Heidelberg University.

His awards include the *Heisenberg Fellowship* of the *Deutsche Forschungsgemeinschaft*, the *Dr. Otto Röhm Memorial Fellowship*, the *Karl-Ziegler Memorial Fellowship*, the *ORCHEM Prize for Natural Sciences* from the German Chemical Society, and the *Hector Research Award*.

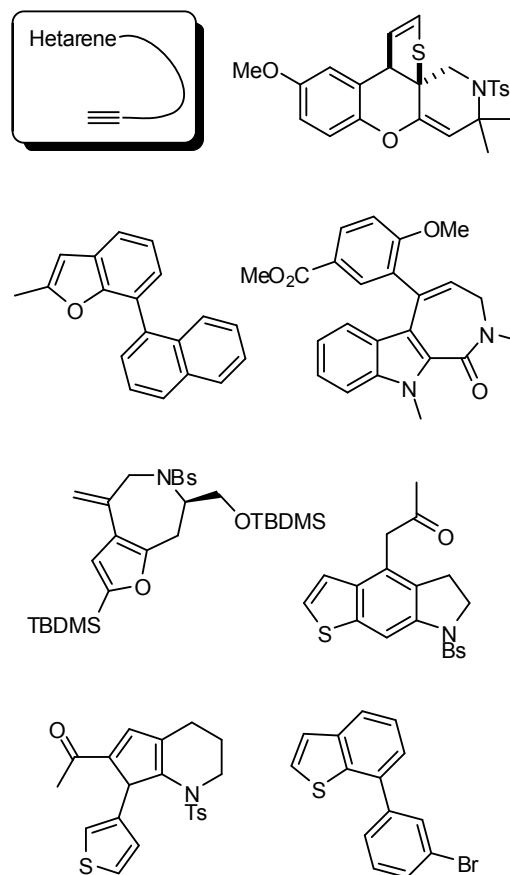
He is a member of the editorial board of *Gold Bulletin* (London, UK), the international advisory board of *ChemCatChem* (Wiley-VCH), the Hector Fellow Academy, the editorial board of *Chemistry—A European Journal*, and the academic advisory board of *Advanced Synthesis & Catalysis* (Wiley-VCH).

Lecture 1: Potpourri of Gold Catalysis

Monday, October 27, 4:00 pm

3M Centre 3250

This lecture will address the fundamental principles of homogeneous catalysis by gold. In addition, different aspects like catalyst preparation, methodology development, mechanistic studies and synthetic applications in the field of natural products and material science will be covered. Other subjects are vinylgold species, gold carbenoids and gold/palladium systems. Heterocycles are one major focus, but different types of carbocycles are also accessible.



Lecture 2: Dual Gold Catalysis and Related Subjects

Tuesday, October 28, 4:00 pm

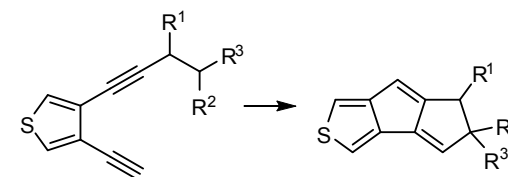
Biological and Geological Sciences 0165

Homogeneous catalysis by gold has emerged to an important sector of catalysis research. In the first years, initiated by two milestone publications from the year 2000, the efforts in methodology development clearly dominated, in the more recent past also an increasing number of applications in synthesis has been reported. All the time efforts to understand the basic mechanism of these reactions accompanied the field.

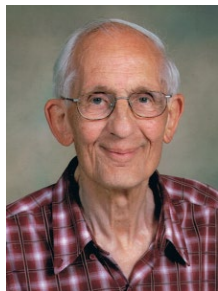
For twelve years, most of the reactions followed simple reaction mechanisms, basing on the interaction of one single gold centre in a gold complex or organogold compound with the substrate molecule. In most of these reactions vinylgold or alkylgold intermediates are involved, sometimes also gold carbenoids.

Now an entirely new family of reactions, basing on the activation of the organic substrates by two gold complexes at the same time (one σ -coordinated, the other π -coordinated), has been discovered. These open up entirely new synthetic possibilities and follow quite complex, new mechanisms. The different mechanistic possibilities will be discussed in detail.

Some of these new reactions even allow positional selective C,H activations of alkyl side chains, allowing to use simple alkyl side-chains for annellation processes.



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

Prof. Mike Kerr (host)

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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

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



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 2014

Fred Pattison
Senior Lecturer

Stephen K. Hashmi

Professor and Vice President

Heidelberg University



A two-part lecture series
October 27 and 28, 2014

Western  Science

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