

J.K.N. JONES

John Kenyon Netherton Jones, Ph.D. Birmingham University. Assistant lecturer and then lecturer at Bristol University 1936-1944, he was engaged in munitions research and training during the Second World War. He resigned at the end of the war with the rank of captain, and returned to academic work as senior lecturer at Manchester University 1945-1948 and then as reader in chemistry at Bristol University 1948-1953. He came to Queen's in 1953 as Chown Research Professor of Chemistry, a position he held until his death in 1977.

Professor Jones' outstanding achievements in carbohydrate chemistry were recognized by his election as Fellow of the Royal Society of London in 1957 and of the Royal Society of Canada in 1959. The Division of Carbohydrate Chemistry of the American Chemical Society presented him with the Claude S. Hudson Award in 1969, and in 1975 he received the Anselme Payen Award from the Cellulose, Paper and Textile Division. In March 1975 he was awarded the third Sir Norman Haworth Memorial Medal of The Chemical Society (London).

Professor Jones was, at all times, an educator of the highest rank and an inspiration to a large number of graduate students, from whom he evoked, as a result of his enthusiasm, sincerity, and gentle character, tremendous respect and affection. All of his students, former research associates, colleagues, and friends will long remember this truly fine and outstanding gentleman.

The J.K.N. Jones Visitorship was established in memory of Professor Jones, and is funded by the income from the bequests made in his name by his friends, colleagues and former students.

PREVIOUS JONES LECTURERS

2014 • *W. Yang*

2013 • *D. Milstein*

2012 • *J.F. Stoddard*

2011 • *J.A. Caruso*

2010 • *T. Marks*

2010 • *G. van Koten*

2009 • *P.B. Corkum*

2008 • *M. Gruebele*

2005 • *W. Klemperer*

2001 • *G. Ozin*

1997 • *M.S. Brookhart*

1993 • *B.O. Fraser-Reid*

1990 • *S. Hanessian*

1982 • *R. U. Lemieux*



Department of Chemistry Queen's University

is honoured to host the
2015 Jones Lecturer:

Prof. Timothy Swager
Department of Chemistry,
Massachusetts Institute of
Technology
Cambridge, Massachusetts



"Molecular Electronics for
Chemical Sensors "

Friday, January 30, 2015
11:30 am

Room 117, Chernoff Hall

PROF. TIMOTHY SWAGER



Professor Timothy Swager

John D. MacArthur Professor of Chemistry
Director, Deshpande Center for Technological Innovation
Massachusetts Institute of Technology
Cambridge, Massachusetts

Timothy M. Swager is the John D. MacArthur Professor of Chemistry and the Director, Deshpande Center for Technological Innovation at the Massachusetts Institute of Technology. A native of Montana, he received a BS from Montana State University in 1983 and a Ph.D. from the California Institute of Technology in 1988. After a postdoctoral appointment at MIT he was on the chemistry faculty at the University of Pennsylvania and returned to MIT in 1996 as a Professor of Chemistry and served as the Head of Chemistry from 2005-2010. He has published more than 350 peer-reviewed papers and more than 50 issued/pending patents. Swager's honors include: Election to the National Academy of Sciences, an Honorary Doctorate from Montana State University, the Lemelson-MIT Award for Invention and Innovation, Election to the American Academy of Arts and Sciences, The American Chemical Society Award for Creative Invention, The Christopher Columbus Foundation Homeland Security Award, the Paris Sommelier Prix pour la Connaissance des Vins, le Grand Prix éleveur porcine of Mother Earth News, and The Carl S. Marvel Creative Polymer Chemistry Award (ACS).

Swager's research interests are in design, synthesis, and the study of organic-based electronic, sensory, high-strength, liquid crystalline, and colloid materials. His liquid crystal designs demonstrated shape complementarity to generate specific interactions between molecules and includes fundamental mechanisms for increasing liquid crystal order by a new mechanism referred to as minimization of free volume. Swager's research in electronic polymers has been mainly directed at the demonstration of new conceptual approaches to the construction of sensory materials. These methods are the basis of the Fido™ explosives detectors (FLIR Systems Inc), which have the highest sensitivity of any explosives sensor. Other areas actively investigated by the Swager group include radicals for dynamic nuclear polarization, applications of nano-carbon materials, organic photovoltaic materials, polymer actuators, and luminescent molecular probes for medical diagnostics. He is the founder of four companies (DyNuPol, Iptyx, PolyJoule, and C-2 Sense) and has served on a number of corporate and government boards.

SELECTED HONOURS & AWARDS

- Fellow of the Division of Polymer Chemistry [ACS]
- Elected to the National Academy of Sciences (2008)
- John Scott Award (2008)
- Lemelson-MIT Award for Invention and Innovation (2007)
- Elected to the American Academy of Arts and Sciences (2006)
- Christopher Columbus Foundation Homeland Security Award (2005)
- The Carl S. Marvel Creative Polymer Chemistry Award [ASC - Polymer Div] (2005)
- Clare Hall Visiting Fellow [U. Cambridge, England] (2005)
- Vladimir Karapetoff Award [MIT] (2000)
- Cope Scholar Award [ASC] (2000)
- Union Carbide Innovation Recognition Award (1997-8)
- Philadelphia Section Award [ASC] (1996)
- Camille Dreyfus Teacher-Scholar (1995-1997)
- Alfred Sloan Research Fellow (1994-1996)
- DuPont Young Faculty Award (1993-1996)
- NSF-Young Investigator (1992-1997)
- Office of Naval Research Young Investigator (1992-1995)