Axalta Distinguished Lectures

The Axalta Distinguished Lectures at the University of Pennsylvania is part of an ongoing program of cooperation and interaction between scientists at Axalta Coating Systems and the Department of Chemistry of the School of Arts and Sciences at the University of Pennsylvania. As the only global company focused 100% on coatings, Axalta Coating Systems is committed to advancing the science, especially the chemistry of materials for producing coatings that are built to perform.

Past speakers:

1987 Herbert C. Brown – Purdue University
1988 George M. Whitesides – Harvard University
1989 Donald J. Cram – UCLA
1990 Paul C.W. Chu – University of Houston
1991 Jean-Marie Lehn – Université Louis Pasteur
1992 R.E. Smalley – Rice University
1993 Elias J. Corey – Harvard University
1994 P.G. de Gennes – École de Physique et Chimie
1995 Roald Hoffmann – Cornell University
1996 Yuan T. Lee – UC Berkeley
1997 George A. Olah – University of Southern California
1998 John C. Polanyi – University of Toronto
1999 Thomas R. Cech – HHMI; University of Colorado
2000 Ahmed H. Zewail – California Institute of Technology
2001 Michele Parrinello – ETH Zurich
2002 Harry B. Gray – California Institute of Technology
2004 Peter G. Schultz – Scripps Research Institute
2005 Steven Chu – Lawrence Berkeley National Laboratories
2006 Jean Fréchet – University of California, Berkeley
2007 Harold W. Kroto – Florida State University
2008 William Moerner – Stanford University
2013 Robert Langer – Massachusetts Institute of Technology
2014 Omar M. Yaghi – University of California-Berkeley
2015 Robert H. Grubbs - California Institute of Technology
2016 Daniel G. Nocera, Harvard University
2017 Craig J. Hawker, University of California, Santa Barbara

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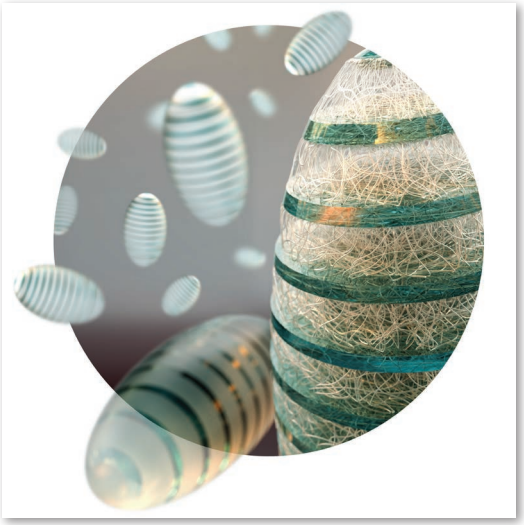
Axalta Distinguished Lectures

Sponsored by Axalta Coating Systems

Craig J. Hawker

Alan and Ruth Heeger Chair of Interdisciplinary Science
University of California, Santa Barbara

The Power of Organic Chemistry in Polymer Synthesis: Translation of Basic Materials Research into Social Benefits



Tuesday, October 24, 2017

Lecture 4 p.m.
Room 102
Department of Chemistry
School of Arts and Sciences
University of Pennsylvania
Philadelphia, Pennsylvania
For information call (215) 898-9722

Craig J. Hawker

Professor Craig J. Hawker, FRS is Clarke Professor and holds the Alan and Ruth Heeger Chair of Interdisciplinary Science at UCSB where he directs the California Nanosystems Institute and the Dow Materials Instiutute. He came to UCSB in 2004 after eleven years as a Research Staff Member at the IBM Almaden Research Center in San Jose, CA.

Professor Hawker's research activities focus on synthetic polymer chemistry and nanotechnology, integrating fundamental studies with the development of nanostructured materials for advanced properties and functions in microelectronics and biotechnology. This work has led to over 500 peer-reviewed papers and 70 patents with a number of materials being commercialized. He has helped establish a range of start-up companies - Relypsa, Intermolecular, Olaplex, Tricida and has been elected to the National Academy of Inventors. For his pioneering studies, Professor Hawker's recent honors include the 2017 Charles G. Overberger International Prize for Excellence in Polymer Research, the 2016 Belgian Polymer Award, 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 to the Royal Society in 2010.

The Power of Organic Chemistry in Polymer Synthesis: Translation of Basic Materials Research into Social Benefits

The orthogonal functionalization of polymeric materials is a critical design strategy for the "bottom-up" fabrication of nanostructured systems. In synthesizing these nanostructures, functional group interconversion and efficient organic transformations are key. With inspiration from these natural systems, such as marine organisms which use organic building blocks in unique ways to achieve materials with exceptional properties, the design of synthetic building blocks to mimic these capabilities and extend them to common polymeric materials and commercial products will be demonstrated.