



Axalta's Distinguished Lecture Series at University of Pennsylvania Features Professor Omar Yaghi's Presentation on Metal-organic Frameworks

Leading researcher speaks on constructing new chemical structures

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PHILADELPHIA--(BUSINESS WIRE)--Professor Omar M. Yaghi, the James and Neeltje Tretter Professor of Chemistry at University of California-Berkeley, was the honored speaker at the *Axalta Distinguished Lectures Series* sponsored by Axalta Coating Systems and hosted by the Department of Chemistry at the University of Pennsylvania. Professor Yaghi's lecture titled, *Reticular Chemistry and the Design of New Materials*, explained how his group created metal-organic frameworks (MOFs) with extended crystalline order, and the subsequent design of new materials for clean energy storage and complex separations.

“We are grateful to Axalta for its support in bringing Dr. Yaghi to share his research with us this year. We look forward to continued collaborations with Axalta in the years ahead.”

According to Professor Yaghi, the logical synthesis of extended solids has been a long-standing objective in chemistry. The fundamental problem has been that linking molecular building units into extended structures often led to amorphous or poorly crystalline solids. The research indicated that the problem is now solved with the design and development of MOFs. The major conceptual advance is the use of metal-oxide clusters as anchors for joining organic linkers into robust crystalline open frameworks. This new approach is being applied to help develop materials with controlled porosity and pore-functionality. It has led to the design of less dense crystals, the highest surface area materials, and a large number of truly porous crystals. This chemistry has found applications in the storage of methane, separation of carbon dioxide, and catalysis.

“This year's lecture continues a long-history of collaborations with the University, a top academic institution, and is part of Axalta's commitment to foster innovation and the advancement of coating sciences, material sciences and chemistry,” explained Panos Kordomenos, Axalta Coating Systems Senior Vice President and Chief Technology Officer. “The collaboration between Axalta and the Department of Chemistry at the University of Pennsylvania helps to enable world-class scientists to share their research and perspectives with students, faculty members and Axalta researchers in an academic setting,” Kordomenos added.

Professor Yaghi has published more than 200 articles that have received an average of over 300 citations per article. He is widely known for inventing new materials that are useful in clean energy storage and generation. His recent work includes the design of crystalline materials capable of storage and separation of molecules or compounds such as hydrogen, carbon dioxide, water and volatile organics.

"The relationship and collaboration with Axalta has resulted in groundbreaking research programs and opportunities to interact with and learn from some of the most eminent scholars in the world," said Gary A. Molander, Department Chair and Hirschmann-Makineni Professor of Chemistry at the University of Pennsylvania. "We are grateful to Axalta for its support in bringing Dr. Yaghi to share his research with us this year. We look forward to continued collaborations with Axalta in the years ahead."

Axalta is committed to advancing the science, especially the chemistry of materials, for producing coatings that are built to perform. Prior series speakers have included world renowned scientists, including Nobel Prize laureates William Moerner (Chemistry 2014), Ahmed Zewail (Chemistry 1999), Harold Kroto (Chemistry 1996), Steven Chu (Physics 1997), Richard Smalley (Chemistry 1996), George Olah (Chemistry 1994), P.G. de Gennes (Physics 1991), Elias Corey (Chemistry 1990), Thomas Cech (Chemistry 1989), Donald Cram (Chemistry 1987), Jean-Marie Lehn (Chemistry 1987), John Polanyi (Chemistry 1986), Yuan Lee (Chemistry 1986), Roald Hoffmann (Chemistry 1981), and Herbert Brown (Chemistry 1979).

Axalta is a leading global company focused solely on coatings and providing customers with innovative, colorful, beautiful and sustainable solutions. From light OEM vehicles, automotive refinish and commercial vehicles to electric motors, buildings and pipelines, our coatings are designed to prevent corrosion, increase productivity and enable the materials we coat to last longer. With more than 145 years of experience in the coatings industry, the 12,000 people of Axalta continue to find ways to serve our more than 120,000 customers in 130 countries better every day with the finest coatings, application systems and technology. For more information visit axaltacoatingsystems.com and follow us @axalta on twitter.

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Left to right: Axalta's Panos Kordomenos, Professor Omar M. Yaghi (UC-Berkeley), Professor and Chair of Chemistry Department Gary A. Molander (University of Pennsylvania). (Photo: Business Wire)

Axalta Distinguished Lectures

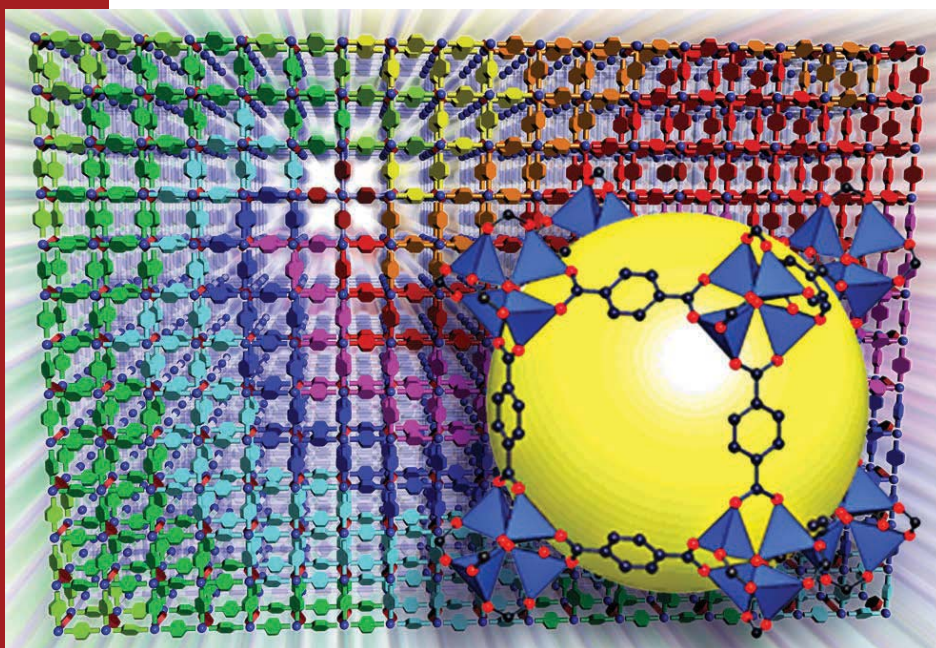
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Omar M. Yaghi

The James and Neeltje Tretter Professor of Chemistry
University of California-Berkeley

Reticular Chemistry and the Design of New Materials



Wednesday, October 22, 2014

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

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. The series began in 1987 and continued annually through 2008. It is resuming in 2013 as the Axalta Distinguished Lectures*. 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 - MIT

*Axalta Coating Systems is the new name of DuPont Performance Coatings which sponsored the lectures from 1987 – 2008.

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