

SIUE Student Research Symposium

3:30 p.m., Monday, March 11, 2013

Morris University Center, Meridian Ballroom

Nitrogen and Phosphorus: Fertilizer from the Atmosphere to the Oceans

Monday, March 11, 2013

7:00 pm Meridian Ballroom, Morris University Center

Dr. Christopher C. Cummins

Professor Cummins's work in inorganic chemistry has been recognized by numerous prestigious organizations. He has had a remarkable career, graduating with a Ph.D. from MIT in 1993 and being immediately hired by MIT as an assistant professor. By 1996 he was promoted to the rank of professor. So far in his 20-year career he is the author of over 150 research articles, advisor to 21 Ph.D. graduates, and serves on the boards of many of the most important inorganic chemistry journals. He has been the recipient of Harvard University's E. Bright Wilson Prize, the ACS Award in Pure Chemistry, the NSF Alan T. Waterman Award, an Alexander von Humboldt Research Award, the Dannie-Heineman Preis of the Akademie der Wissenschaften zu Göttingen, the ACS F. Albert Cotton Award in Synthetic Inorganic Chemistry, and the Raymond and Beverly Sackler Prize in the Physical Sciences. Most recently, he has been awarded the first *Inorganic Chemistry* Lectureship Award from the American Chemical Society for "for his creativity, rigor and record of research success in the field of inorganic chemistry".

As one of the most recognized young chemists in America, Professor Cummins will share with the SIUE community his insights into the forefront of inorganic chemistry.

It is our great pleasure to have Dr. Cummins as recipient of the 37th Probst Memorial Lecture.

The Probst Lecture Series

The Department of Chemistry initiated the Probst Lecture series in 1975 as a memorial to one of its founding faculty members, Professor William J. Probst. Each year a noted chemist is invited for a visit that features several lectures. A morning lecture focuses on the guest's contributions to chemical research, while an evening lecture usually consists of a topic that is broad in scope to attract the interest of alumni, faculty, and students throughout the arts and sciences.

PROBST LECTURE SERIES

- 1976 **Dr. Robert E. Buckles** "Halogen Addition Reactions: Simple Reactions Which Are Not So Simple"
- 1977 **Dr. Paul D. Bartlett** "Competing Reaction Mechanisms in Organic Oxidation"
- 1978 **Dr. Melvin S. Newman** "New Chemistry Involved in Studies on Synthesis of Carcinogenic Compounds"
- 1979 **Dr. Carl Djerassi** "The Future of Human Birth Control"
- 1980 **Dr. William N. Lipscomb** "How Do Enzymes Work?"
- 1981 **Dr. Mildred Cohn** "Nuclear Probes of Enzymatic Reactions"
- 1982 **Dr. Leo A. Paquette** "The Dodecahedron Story"
- 1983 **Dr. Michael Kasha** "A New Look at the History and Design of String Instruments: Guitar, Viola, Violin"
- 1985 **Dr. Paul Gassman** "How to Bend a Carbon-Carbon Bond"
- 1986 **Dr. Jacqueline K. Barton** "Molecular Travels Along the DNA Strand"
- 1987 **Dr. John William Birks** "Nuclear Winter - Ultraviolet Spring"
- 1988 **Dr. Peter Kollman** "Use of Computer Simulations in Chemistry"
- 1989 **Dr. Norman R. Farnsworth**, "Prospects for Finding Anticancer Drugs from Plants and Marine Organisms"
- 1990 **Dr. Lawrence K. Montgomery**, "Organic Superconductors? You Must Be Kidding"
- 1991 **Dr. James L. Dye** "Electride Structures"
- 1992 **Dr. Harold Kroto** "C₆₀, Buckminsterfullerene, The Celestial Sphere Which Fell to Earth"
- 1993 **Dr. Frederick Hawthorne** "Boron Neutron Capture Therapy"

- 1994 **Dr. Terence C. Owen** "Pretty Colored Chemistry for Biology and Medicine: Better Things for Better Living..."
- 1995 **Dr. Roald Hoffmann** "The Same and Not the Same: the Rift Between the Sciences and Humanities"
- 1996 **Dr. Alfred Bader** "The Adventures of a Chemist Collector"
- 1997 **Dr. Fred Basolo** "The Early History of Metal Complexes to Illustrate How Science Works"
- 1998 **Dr. Ronald Breslow** "The Chemistry of Tomorrow will Change Our World"
- 1999 **Dr. Janet Osteryoung** "Research: Who Pays and Who Benefits"
- 2000 **Dr. Allen J. Bard** "Cold Fusion and Pathological Science"
- 2001 **Dr. Purnendu K. Dasgupta** "Science and Scientists: Culpability and the passage of innocence"
- 2002 **Dr. William R. Heineman** "Chemistry Sensors: Why They Are Important to You"
- 2003 **Dr. George B. Richter-Addo** "Small, Versatile, and Potent: NO and You"
- 2004 **Dr. Bassam Z. Shkhashiri** "Science Is Fun"
- 2005 **Dr. Robert F. Curl** "The discovery of the fullerenes and the new world of carbon chemistry"
- 2006 **Dr. Vicente Verez-Bencomo and Dr. René Roy**, "Carbohydrate and biological recognition. Impact on the development of vaccines."
- 2007 **Ms. Susan Marie Frontczak**, "Manya: A Living History of Marie Curie"
- 2008 **Dr. Dale C. Poulter**, "The Terpenome. A Cornucopia of Natural Molecules for Life, Health, and Commerce"
- 2009 **Dr. William A. Eaton**, "Searching for a Cure for Sickle Cell Disease"
- 2010 **Dr. Gary M. Hieftje**, "Teaching and Research: Symbiosis or Conflict?"
- 2011 **Dr Jerald Schnoor**, "Water Sustainability in a Changing World"
- 2012 **Dr. Mark von Itzstein**, "Viruses in the 21st Century - an Alternative Approach to Tackling Viral Diseases,"

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SIUE Student Government Activities Fees

Thirty-seventh Annual **WILLIAM J. PROBST MEMORIAL LECTURES**

Dr. Christopher C. Cummins

Massachusetts Institute of Technology

