

	<u>2019 - 2020</u>
October 14, 2019	Prof. Jason Hicks (University of Notre Dame) "Plasma-Assisted Catalytic Activation of N ₂ for Ammonia Synthesis"
November 11, 2019	Prof. Ian Tonks (University of Minnesota) "Ti-Catalyzed Nitrene Transfer Reactions: Harnessing the TiII/TiIV Redox Couple for New Transformations"
December 9, 2019	Prof. Damien Guironnet (University of Illinois) "Engineering the Shape of Macromolecules Through Catalytic Polymerizations and Reactor Engineering"
January 13, 2020	Meeting Cancelled
February 10, 2020	Prof. Elizabeth Biddinger (City College of New York) "Electrosynthesis of Chemicals and Fuels: Electrochemistry at the Biorefinery"
March 9, 2020	Prof. Abhaya K. Datye (University of New Mexico) "Atom Trapping: Key to the Design of Thermally Stable and Regenerable Single Atom Catalysts"
April 13, 2020	Professor Omar Farha (Northwestern University) "Smart and Programmable Sponges"
August 27, 2020	Spring Symposium 2019 Pines Award Address – Dr. Christopher Nicholas (Honeywell UOP) "Well-Defined Materials for Hydrocarbon Transformations: Zeolite Structure / Property Relationships for Catalysis" Keynote Speaker – Prof. Yogesh Surendranath (Massachusetts Institute of Technology) "Bridging Molecular and Heterogeneous Electrocatalysis Through Graphite Conjugation" Keynote Address – Dr. Daniel Ruddy (National Renewable Energy Laboratory) "Molybdenum carbide catalysts for biomass upgrading – from bulk to nanoscale"

	<u>2018 - 2019</u>
October 8, 2018	Professor Ray Gorte (University of Pennsylvania) "Fabrication of Nano-Structured Catalyst Supports by ALD"
November 12, 2018	Professor Friederike Jentoft (University of Massachusetts Amherst) "Controlling Selectivity in Aldol Reactions by Tuning Catalyst Acid-Base Properties and Porosity"
December 10, 2018	Professor Bert Chandler (Trinity University) "Gold Catalysts for Hydrogen Purification: How Mechanistic Insights into CO and H ₂ Oxidation can Help Us Build Better Preferential Oxidation (PrOx) Catalysts"
January 14, 2019	Professor John Kitchin (Carnegie Mellon University) "Applications of Machine Learned Potentials in Surface Science, Catalysis and Materials"
February 11, 2019	Professor Josh Schaidle (National Renewable Energy Laboratory) "Resilient Technology Platforms for Carbon Management Enabled by Catalysis"
March 11, 2019	Dr. Bjorn Moden (PQ Corporation) "Advanced Zeolite Catalysis Technologies for Emission Control Applications"
April 16, 2019	Spring Symposium 2019 Pines Award Address – Professor Manos Mavrikakis (University of Wisconsin) "Molecular Modeling of Heterogeneous catalysis: Insights on the nature of the active site and improved catalysts" Keynote Speaker - Dr. Zili Wu (Oak Ridge National Laboratory) "Catalysis over Metal Oxides: Shape and Composition Effects" Keynote Address - Prof. Karena Chapman (Stony Brook University) "Operando, multi-modal probes of catalytic systems"

2017 - 2018

October 2, 2017	Professor Josephine M Hill (University of Calgary) "Catalyst Development from Sustainable Materials"
November 6, 2017	Professor Jingguang G. Chen (Columbia University) "Converting CO ₂ via Thermocatalysis and Electrocatalysis"
December 11, 2017	Dr. Ahmad Moini (BASF) "Novel Zeolite Catalysts for Diesel Emission Applications"
January 8, 2018	Professor George Huber (University of Wisconsin) "Commodity Chemicals from Biomass: Catalytic Conversion of Biomass into α,ω -diols"
February 12, 2018	Professor T. Brent Gunnoe (University of Virginia) "Transition Metal Catalyzed Hydroarylation of Olefins: New Catalysts for Alkyl and Alkenyl Arenes "
March 12, 2018	Professor Phillip Christopher (UC Santa Barbara) "Structural and Dynamic Characteristics of Supported Metal Catalysts at the Atomic Scale "
April 9, 2018	Dr. Michael Reynolds (Shell Corporation) "Opportunities for Catalysis in Recycling Produced Water from Shale Gas and Tight Oil Recovery Operations "
May 11, 2018	Spring Symposium 2018 Pines Award Address - Dr. Jerzy Klosin (Dow Chemical) Guest Speaker - Prof. Clark Landis (University of Wisconsin) Guest Speaker - Dr. Neil Schweitzer (Northwestern University)

2016 - 2017

October 10, 2016	Dr. Igor Slowing (US DOE Ames Laboratory/Iowa State University) "Quantitative Control of Polarity at Interfaces: Pseudo-Solvent Effects in Interfacial Catalysis"
November 14, 2016	Professor Paul Chirik (Princeton University) "Catalysis with Earth Abundant Metals"
December 5, 2016	Professor Justin Notestein (Northwestern University) "Oxide nanostructures: novel supports, active sites, and tandem catalysts"
January 9, 2017	Professor Warren Piers (University of Calgary) "First Row Transition Metal Complexes of a Dianionic Tetrapodal Pentadentate Ligand Framework"
February 13, 2017	Professor Rajamani Gounder (Purdue University) "Controlling the Spatial Density of Framework Aluminum and Extraframework Metal Sites in Zeolites and Consequences for Acid and Redox Catalysis"
March 13, 2017	Professor Karen I. Goldberg (University of Washington) "Catalysis, Mechanistic Understanding and Collaboration as Tools to Sustainable Production of Chemicals and Fuels"
April 10, 2017	Professor Jay A. Labinger (California Institute of Technology) "Upgrading Light Hydrocarbons via Organometallic Chemistry"
May 16, 2017	Spring Symposium 2017 Pines Award Address - Prof. Peter Stair (Northwestern University) Guest Speaker - Prof. Wenbin Lin (U of Chicago) Guest Speaker - Prof. Alan Goldberg (Rutgers University)

**Previous Years' Programs
Catalysis Club of Chicago**

2015-2016

October 24 2015	Professor Joachim Sauer (Humboldt University) Different C-H Bond Activation Mechanisms on Solid Oxide Catalysts
November 2, 2015	Prof. Paul Dauenhauer (Univ. of Minnesota) New Techniques to Address Complexity in Catalysis: Towards a Molecular Description of Renewable Energy Systems
December 7, 2015	Professor Randall Q. Snurr (Northwestern Univ.) Combined Modeling and Experimental Studies of Oxidation Catalysis in MOFs and Zeolites
January 11, 2016	Dr. Christopher Nicholas (UOP) Single Atom Catalysis for Hydrocarbon Transformations: Supported Organometallic Reagents for Olefin Metathesis and Arene Hydrogenation
February 8, 2016	Professor Eranda Nikolla (Wayne State University) Molecular approaches toward the development of efficient catalysts for electrochemical energy conversion
March 7, 2016	Prof. Götz Vesper (Univ. of Pittsburg) Chemical Looping: Process Intensification for Natural Gas Conversion
April 11, 2016	Dr. Wayne Schammel (Siluria Technologies) OCM at Siluria Technologies – Building the Future with Natural Gas
May 17, 2016	Spring Symposium Pines Award Lecture - DY Jan - Honeywell UOP "UOP Zeolitic Material (UZM) in Aromatic Alkylation " Keynote Speaker - Prof. Raul Lobo, University of Delaware "Biomass and Natural Gas Valorization by Zeolite Catalysis " Invited Speaker - Prof. Kendall Thompson – Purdue University "A Lesson in Dirty Chemistry: Computational Model for Light Olefin Epoxidation by Au-Metal Clusters on the External Surface of TS-1"

<u>2014-2015</u>	
October 20 2014	Prof. Emiel Hensen (Eindhoven University of Technology) "Can we design the optimal heterogeneous catalyst?"
November 10, 2014	Dr. Eric Stach (Brookhaven National Laboratory) "Characterization of working catalysts with advanced electron microscopy methods"
December 9, 2014	Prof. Yuriy Roman (MIT) "A Molecular Approach to the Design of Earth-Abundant Hydrodeoxygenation Catalysts"
January 12, 2015	Prof. Susannah Scott (UC Santa Barbara) "Non-isothermal reaction kinetics and operando spectroscopies reveal the inherently dynamic behavior of catalysts"
February 9, 2015	Dr. Paul T. Barger (UOP LLC) "UOP Advanced MTO Technology – A New Route for the Production of Light Olefins"
March 9, 2015	Prof. Alexander Katz (UC Berkeley) The Homogenization of Heterogeneous Catalysis: Reactivity of Single Sites on Surfaces That Have No Parallel in Solution"
April 6, 2015	Prof. Roy Periana (Scripps Institute) "Designing Catalysts for CH Functionalization Based on the CH Activation Reaction"
May 14, 2015	Spring Symposium Pines Award Lecture - Prof. Fabio Ribeiro (Purdue University) "Insights into Heterogeneous Catalysis with Help from Kinetics, Spectroscopy, Theory and Designed Materials: Looking for the Active Site" Keynote Speaker - Prof. Matthew Neurock (University of Minnesota) "Insights into Active Sites and Catalytic Kinetics over Supported Metals at Reaction Conditions" Invited Speaker - Prof. David Flaherty University of Illinois) "Direct Synthesis of H ₂ O ₂ on Metal Clusters: Active Species and the Influence of Cluster Size and Composition" Invited Speaker - Prof. Rajamani Gounder (Purdue University) "Zeolites Containing Isolated Metal Cations for the Catalysis of Hydrocarbon Conversion and Pollution Abatement"

**Previous Years' Programs
Catalysis Club of Chicago**

2013-2014

October 14, 2013	Professor Carsten Sievers (Georgia Institute of Technology) "Spectroscopic Studies on the Surface Chemistry of Biomass-Derived Oxygenates"
November 11, 2013	Professor Robert J. Davis (University of Virginia) "Transformations of Alcohols over Solid Catalysts "
December 9, 2013	Professor Will Medlin (University of Colorado) "Selective Catalysis Through Control of the Near-Surface Environment"
January 13, 2014	Professor Randall Meyer (University of Illinois (Chicago)) "Geometric vs. Electronic Effects in Metal Nanoparticle Catalysts: Can We Exploit Both?"
February 11, 2014	Dr. Randall E. Winans (Argonne National Laboratory) "In Situ X-ray Scattering Studies of Catalytic Transformations"
March 10, 2014	Professor Ivo Hermans (University of Wisconsin) "Catalysis Research at the Interface of Chemistry and Chemical Engineering"
April 7, 2014	Professor Robert Rioux (The Pennsylvania State University) "Ni-Based Intermetallic Catalysts for Chemoselective Hydrogenation: Comparison Between Bulk and Nanoscale Materials"
May 13, 2014	Spring Symposium 2014 Pines Award Lecture-Dr. Hai-Ying Chen (Johnson Matthey) "Challenges and Solutions in Developing Zeolite Supported Transition Metal Catalysts for Lean-Burn NOx Emission Control" Invited Lecturer-Prof. Adam Hock (IIT/Argonne) "Chemistry at the Interfaces' for Energy Conservation, Conversion, and Production" Invited Lecturer-Prof. Jason Hicks (U of Notre Dame) "Parameters Controlling the Hydrodeoxygenation Selectivities of Bimetallic FeMoP Catalysts"

**Previous Years' Programs
Catalysis Club of Chicago**

2012-2013

October 8, 2012	Prof. Daniel E. Resasco (U of Oklahoma) "Reaction Pathways for the Hydrodeoxygenation (HDO) of Biomass-derived Furfurals and Phenolic Compounds"
November 6, 2012	Dr. James C. Stevens (Dow Chemical Company) "Polyethylene by Molecular Design: How Catalyst Research Enables Innovation in Large-Scale Polymers"
December 10, 2012	CANCELLED DUE TO POOR WEATHER
January 7, 2013	Prof. Michael Tsapatsis (University of Minnesota) "Hierarchically Porous Zeolites made by Repetitive Branching "
February 11, 2013	Prof. Bert Weckhuysen (Utrecht University) "In-situ Spectroscopy of Heterogeneous Catalysts at the Single Particle Level"
March 11, 2013	Prof. Beatriz Roldán (University of Central Florida) "Size- and Shape-Selected Metal Nanoparticle Catalysts and Their Evolution under Operando Conditions"
April 8, 2013	Prof. Rongchao Jin (Carnegie Mellon University) "Atomically Precise Gold Nanoclusters as New Model Catalysts "
May 7, 2013	Spring Symposium Keynote Speaker - Prof. Johannes A. Lercher (TU München) "From Understanding Elementary Steps to Designing Multifunctional Catalysts Integrated Strategies to Convert Biomass Keynote Speaker - Prof. Chris Jones (Georgia Institute of Technology) "Mixed Oxide Supports Reduce Methanol Selectivity in the Catalytic Synthesis of Higher Alcohols from Syngas over Potassium-Promoted Molybdenum Sulfide Catalysts" 2013 Herman Pines Award Lecture - Prof. W. Nicholas Delgass (Purdue University)"Catalytic Sites and Kinetics for Gas Phase Epoxidation of Propylene Over Au/TS-1"

2011-2012

October 10, 2011	Professor SonBinh Ngyuen (Northwestern University) "Heterogenizing Homogeneous Catalysts through Covalent Integration into Porous Materials: Challenges and Opportunities"
November 14, 2011	Professor Christophe Copéret (ETH Zurich) "Molecular Understanding of Heterogeneous Catalysts: From the Supports to the Active Sites"
December 5, 2011	NO SPEAKER
January 9, 2012	Professor Suljo Linic (University of Michigan) "Designing Alloy Catalysts Based on Molecular Insights: Alloys for Hydrocarbon Reforming, Direct Electrochemical Oxidation of Hydrocarbons at Solid Oxide Fuel Cells, and Oxygen Reduction Reaction"
February 13, 2012	Professor Peng Chen (Cornell University) "Single-Nanoparticle Catalysis at Single-Turnover and Nanometer Resolution"
March 12, 2012	Dr. Alak Bhattacharyya (UOP/Honeywell) "From Black Oil to Silver Fuel: Nano-Catalysts for Slurry Hydrocracking of Heavy Oil"
April 16, 2012	Professor John Monnier (University of South Carolina) "Synthesis, Characterization, and Evaluation of Supported Bimetallic Catalysts Prepared by Electroless Deposition"
May 15, 2012	Spring Symposium Keynote Speaker - Prof. Yong Wang (Washington State Univ.) "Thermochemical conversion of biomass intermediates to fuels/chemicals" 2012 Herman Pines Award Lecture - Dr. Stuart Soled (ExxonMobil Research and Engineering Co.) "Learnings from Co Fischer-Tropsch Catalyst Studies"

<u>2010-2011</u>	
October 11, 2010	Dr. Steve Schmidt (Grace Davison Specialty Catalysts) "Improving Raney® Catalysts through Surface Chemistry"
November 8, 2010	Professor Melanie Sanford (University of Michigan) "New Advances in Pd Catalysis"
December 6, 2010	Professor Christopher T. Williams (University of South Carolina) "Viewing Solid-Liquid Catalytic Interfaces with Attenuated Total Reflection Infrared Spectroscopy"
January 10, 2011	Dr. Jeffrey T. Miller (Argonne National Laboratory) "Determination of CO, H ₂ and H ₂ O Coverage by XANES on Pt and Au During Water Gas Shift Reaction: Experiment and DFT Modeling"
February 14, 2011	Professor Aditya Bhan (University of Minnesota) "Catalysis in a Pocket: Catalytic Consequences of Spatial Constraints in Acidic Zeolites"
March 7, 2011	Dr. Jeffrey Elam (Argonne National Laboratory) "Atomic Layer Deposition for Catalyst Synthesis"
April 11, 2011	Professor Dionisios G. Vlachos (University of Delaware) "Design of Emergent-Behaving Catalytic Materials"
May 19, 2011	Spring Symposium Keynote Speaker - Prof. Enrique Iglesia (UC Berkeley) Prof. Jinguang Chen (U Delaware) - 2011 Herman Pines Award Lecture

**Previous Years' Programs
Catalysis Club of Chicago**

<u>2009-2010</u>	
October 12, 2009	Professor Manos Mavrikakis (University of Wisconsin – Madison) "On the Role of Hydrogen in Heterogeneously Catalyzed Reactions"
November 9, 2009	Professor Jingguang Chen (University of Delaware) "Rational Design of Bimetallic Catalysts for Hydrogenation and Reforming Reactions"
December 7, 2009	Professor Bala Subramaniam (The University of Kansas) "Gas-Expanded Liquids for Sustainable Catalysis and Novel Catalytic Materials"
January 11, 2010	Professor Eduardo Wolf (University of Notre Dame) "A Novel Combustion Synthesis Method for Preparing Active and Selective-High Area Multicomponent Catalysts for Hydrogen Production from Bio-alcohols"
February 8, 2010	Dr. Eric Stangland (Dow Chemical Company) "Oxychlorination of Ethane over LaOCl/LaCl ₃ Catalysts: Chlorination without a Reducible Metal Center"
March 8, 2010	Professor Michael Harold (University of Houston) "Spatio-Temporal Features of NO _x Storage and Reduction on Pt/BaO/Al ₂ O ₃ Monolithic Catalysts"
April 12, 2010	Professor George Huber (University of Massachusetts) "Pyrolysis Based Technologies for the Conversion of Lignocellulosic Biomass into Fuels and Chemicals"
May 19, 2010	Spring Symposium Keynote Speaker - Prof. Bruce Gates (UC Davis) Dr. James Rekoske (UOP LLC) - 2010 Herman Pines Award Lecture

**Previous Years' Programs
Catalysis Club of Chicago**

2008-2009

October 13, 2007	Professor Richard Adams (University of South Carolina) "Bimetallic Clusters for Facile Activation of Hydrogen and Catalytic Hydrogenations"
November 10, 2007	Professor Robert J. Davis (University of Virginia) "Conversion of Biorenewable Molecules to Fuels and Chemicals"
December 1, 2007	Professor Charles Campbell (University of Washington) "Thermodynamics and Kinetics of Surface Chemical Reactions in Catalysis"
January 12, 2008	Professor Fabio H. Ribeiro (Purdue University) "Catalysis on a Crowded Surface: The Role of Surface Oxygen on NO Oxidation over Pt"
February 9, 2008	Professor Clark Landis (University of Wisconsin) "Enantioselective Hydroformylation: Converting a Commodity Scale Process to the Production of Chiral Synthons"
March 9, 2008	Dr. Mark Jones (Dow Chemical Company) "Chemical Industry Needs: Where does Alkane Activation Fit?"
April 13, 2008	Dr. Yong Wang (Pacific Northwest National Laboratory) "Catalytic Conversion of Biomass to Fuels and Chemicals"
May 18, 2008	Spring Symposium Keynote Speaker - Prof. Francisco Zaera (UC Riverside) Prof. Tobin Marks (Northwestern University) - 2009 Herman Pines Award Lecture

**Previous Years' Programs
Catalysis Club of Chicago**

2007-2008

October 8, 2007	Professor Michael T. Klein (Rutgers University) "Molecule-Based Modeling of Heavy Hydrocarbon Structure and Reactions: Discrete and Statistical Approaches"
November 12, 2007	Professor Steven Suib (University of Connecticut) "Selectivity in Catalysis: Catalyst Design, Unique Activation, and Kinetic Studies"
December 10, 2007	Dr. Charles H. F. Peden (Pacific Northwest National Laboratory) "Novel Nano-Dispersed Early Transition Oxide Catalysts on Mesoporous Silica"
January 14, 2008	Professor Umit S. Ozkan (Ohio State University) "Role of Catalysis in Fuel Cells: Nanostructured CN _x Catalysts for Oxygen Reduction Reaction in PEMFCs and DMFCs"
February 11, 2008	Dr. Peter Nickias (Dow Chemical Company) "Homogeneous Catalysis at Dow: Vignettes in Olefin Polymerization"
March 10, 2008	Professor James Dumesic (University of Wisconsin/Madison) "Catalytic Production of Fuels and Chemicals from Biomass-derived Oxygenated Hydrocarbons"
April 14, 2008	Professor Wayne Goodman (Texas A&M University) "Catalysis by Au and Au Alloys: From Single Crystals to Nanoparticles"
May 15, 2008	Spring Symposium Keynote Speaker - Professor Bruce Gates (UC Davis) Dr. Aleksey Yezerets (Cummins Inc.) - 2008 Herman Pines Award Lecture

<u>2006-2007</u>	
October 9, 2006	Professor Brent H. Shanks (Iowa State University) "Heterogeneous Catalyst Design for Biorenewable Conversions"
November 6, 2006	Professor Susannah Scott (University of California/Santa Barbara) "Redesigning Heterogeneous Catalysts for the Metathesis of Alkenes and Alkanes, with Insight from Organometallic Chemistry"
December 4, 2006	Professor Matthew Neurock (University of Virginia) "First Principles Elucidation and Design of Electrocatalytic Materials"
January 8, 2007	Dr. J. W. Adriaan Sachtler (UOP LLC) "Application of Combinatorial Methods to Heterogeneous Catalysis"
February 12, 2007	Dr. Stu Soled (ExxonMobil Research and Engineering Co.) "Recent Advances in the Synthesis of Catalytic Materials"
March 12, 2007	Dr. Leo E. Manzer (Catalytic Insights Inc) "Toward a Sustainable Economy: Conversion of Biomass to Chemicals and Fuels"
April 9, 2007	Professor Scott Anderson (University of Utah) "Catalysis by Size-selected Cluster Deposition "
May 16, 2007	Spring Symposium Keynote Speaker - Professor Alexis Bell (UC Berkeley) Keynote Speaker - Dr. Galen Fisher (Delphi Corporation) Professor Chunshan Song (Penn State University) - 2007 Herman Pines Award Lecture

2005-2006

October 10, 2005	Professor Wolfgang Hoelderich (University of Technology) "The Use of Heterogeneous Catalysts in the Synthesis of Pharmaceuticals"
November 7, 2005	Professor Enrique Iglesia (University of California, Berkeley) "Mechanism and Structural Requirements for CH ₄ Reactions Catalyzed by Supported Metal Clusters"
December 5, 2005	Professor Jochen Lauterbach (University of Delaware) "High-Throughput Catalysis"
January 9, 2006	Dr. Christopher Marshall (Argonne National Laboratory) "Selective Catalytic Reduction of NO _x with Diesel Fuels as Reductants"
February 13, 2006	Professor Bert Weckhuysen (University of Utrecht) "Snapshots of Catalysts at Work: Probing Heterogeneous Catalysts with Spectroscopy and Microscopy"
March 13, 2006	Dr. Michael F. Carolan (Air Products and Chemicals, Inc.) "ITM Syngas: Ceramic Membrane Technology for Lower Cost Conversion of Natural Gas"
April 10, 2006	Professor Vadim V. Guliants (University of Cincinnati) "Probe Molecule Chemisorption – Low Energy Ion Scattering Study of Surface Active Sites Present in the Orthorhombic Mo-V-(Te-Nb)-O Catalysts for Propane (Amm)oxidation"
May 16, 2006	Spring Symposium Keynote Speakers Dr. Jeffrey Miller (BP Corporation) - 2006 Herman Pines Award Lecture

2004-2005

October 4, 2004	Professor Daniel E. Resasco (University of Oklahoma) "Combined Deep Hydrogenation and Ring Opening of Poly-aromatic Hydrocarbons for Diesel Quality Improvement"
November 1, 2004	Dr. Paul Fenter (Argonne National Laboratory) "Observations of the Mineral-water Interface with High-Resolution X-ray Scattering Techniques: Interfacial Water and Adsorbed Ions"
December 6, 2004	Dr. Russell W. Johnson (Honeywell Corporation) "The Use of Catalysts for Environmentally Sound Conversion of Explosives and Propellants"
January 10, 2005	Dr. Piotr Zelenay (Los Alamos National Laboratory) "Electrocatalysis - The Key to Polymer Fuel Cell Success"
February 7, 2005	Professor Nigel D. Browning (University of California-Davis) "Atomic Resolution Electron Microscopy for Catalysis"
March 7, 2005	Dr. Frits Dautzenberg (SERENIX LLC) "Better Reactions.....by Design"
April 4, 2005	Dr. Saeed Alerasool (Engelhard Corporation) "Emerging Trends in Industrial Catalysis: From Cleaner Fuels to Healthier Foods"
May 19, 2005	Spring Symposium Keynote Speakers Professor Isreal Wachs (Lehigh University) - 2005 Herman Pines Award Lecture Professor Krijn De Jong (Utrecht University) Professor Levi Thompson (University of Michigan)

**Previous Years' Programs
Catalysis Club of Chicago**

2003-2004

October 13, 2003	Professor Roel Prins (ETH Zurich) "A Multinuclear MAS NMR Study of the Flexibility of the Al Coordination and of Dealumination and Realumination of Zeolites"
November 10, 2003	Professor Thomas E. Mallouk (Pennsylvania State University) "Searching the Periodic Table for Better Catalysts and Electrocatalysts"
December 8, 2003	Professor Alexis T. Bell (University of California/Berkeley) "Defining the Structural and Compositional Requirements of Catalytically Active Centers"
January 12, 2004	Dr. Aleksey Yezerets (Cummins Inc.) "Understanding Oxidation Kinetics of Diesel Particulate Matter"
February 9, 2004	Professor Franz Geiger (Northwestern University) "Surfaces and Interfaces Studied by Second Harmonic and Sum Frequency Generation Spectroscopy: Bridging Molecular Science with the Macroscale"
March 8, 2004	Professor Johannes Lercher (Technische Universität München) "Functional Characterization of Solid Acids and Bases"
April 12, 2004	Professor John Meurig Thomas (University Cambridge) "Molecular Design of New Nanoporous Materials for an Environmentally Conscious Age"
May 18, 2004	Spring Symposium Keynote Speakers Dr. Alak Bhattacharyya (BP) - 2004 Herman Pines Award Lecture Professor Francisco Zaera (University of California/Riverside)

2002-2003

October 14, 2002	Professor Kenneth S. Suslick (University of Illinois) "Sonochemical Preparation of Nanostructured Catalysts"
November 11, 2002	Professor Suzanne Harris (University of Wyoming) "Relating Catalytic Activity, Structure, and Bonding in Molybdenum Carbides and Nitrides"
December 9, 2002	Dr. Robert L. Bedard (UOP) "Hydrothermal Chemistry of Metal Silicates"
January 13, 2003	Professor Laurence D. Marks (Northwestern University) "New Developments with Surface Structures"
February 10, 2003	Dr. Thomas Vogt (Brookhaven National Laboratory) "High-Pressure Structural Chemistry of Zeolites"
March 10, 2003	Dr. Terry J. Burkhardt (ExxonMobil Chemical Company) "Why Metallocenes For Polyolefins?"
April 14, 2003	Professor Jens Weitkamp (University of Stuttgart) "Disproportionation of Ethylbenzene as a Test Reaction for Acidic Zeolite Catalysts"
May 20, 2003	Spring Symposium Keynote Speakers James A. Dumesic (University of Wisconsin) - 2003 Herman Pines Award Lecture Professor Kenneth N. Raymond (University of California, Berkeley)

2001-2002

October 8, 2001	Professor Chunshan Song (Pennsylvania State University) "Catalytic Fuel Processing for High- and Low-Temperature Fuel Cells. Challenges and Opportunities"
November 12, 2001	Dr. Jennifer Holmgren (UOP) "Heterogeneous Catalysis: Role of Combinatorial Methods in New Technology Commercialization"
December 3, 2001	Professor John Bercaw (California Institute of Technology) "Hydrocarbon Activation and Oxidation with Electrophilic Platinum Complexes"
January 14, 2002	Professor Levi Thompson (University of Michigan) "Novel Fuel Processor Catalysts and Reactors"
February 11, 2002	Professor Mark Barteau (University of Delaware) "Experimental and Theoretical Studies of Surface Intermediates in Olefin Epoxidation Catalysis"
March 11, 2002	Professor Matthew Neurock (University of Virginia) "From First-Principles to Catalytic Turnovers: Molecular Engineering Bimetallics for Oxygenate Synthesis"
April 8, 2002	Dr. Leo Manzer (DuPont) "Catalytic Synthesis of Fluorocarbons: Past, Present and Future"
May 20, 2002	Spring Symposium Keynote Speakers Dr. James Brazdil (BP Corporation) - 2002 Herman Pines Award Lecture Professor Harold Kung (Northwestern University) Professor Eduardo Wolfe (University of Notre Dame)

2000-2001

October 9, 2000	Professor Tobin Marks (Northwestern University) "Metal-Ligand Bonding Energetics and the Invention of New Transition Metal-and f-Element-Mediated Catalytic Processes"
November 13, 2000	Professor Ken Seddon (Queen's University, Belfast) "Ionic Liquids, Neoteric Solvents for Organic Synthesis"
December 11, 2000	Professor Ayusman Sen (The Pennsylvania State University) "Low Temperature, Selective Catalytic Oxidation of Hydrocarbons"
January 8, 2001	Dr. James Brazdil (BP) "Sol-gel Synthesis and Solid State Characterization of Vanadium Antimony Oxide Catalysts for Propane Ammoxidation to Acrylonitrile"
February 12, 2001	Professor Helmut Knözinger (Universität München) "From Powder Mixtures to Supported Catalysts"
March 12, 2001	Professor Raymond Gorte (University of Pennsylvania) "Developing Solid-Oxide Fuel Cells that Operate on Real Fuels"
April 9, 2001	Dr. Gary McVicker (ExxonMobil Corporation) "Use of Model Compounds to Probe the Acidity of Solid Acid Catalysts"
May 22, 2001	Spring Symposium Keynote Speakers Professor Lanny Schmidt (University of Minnesota) - 2001 Herman Pines Award Lecture Professor Ayusman Sen (Pennsylvania State University)

1999-2000

October 11, 1999	Professor Lanny Schmidt (University of Minnesota) "High Selectivity of Ethane to Ethylene in Millisecond Reactors"
November 8, 1999	Professor James Schwarz (Syracuse University) "The Nature of Protons on the Surfaces of Catalytic Materials"
December 6, 1999	Dr. Robert McCabe (Ford Research Laboratory) "Automotive Exhaust Catalysis: Not Your Typical Industrial Catalytic Process"
January 10, 2000	Dr. Jeffrey T. Miller (BP Amoco Research Center) "Metal Support Interactions in Pt Catalysts: A New Model"
February 7, 2000	Professor Greg Rorher (Carnegie Mellon University) "Microscopic Evaluation of Anisotropic Reactivity on Oxide Surfaces"
March 13, 2000	Dr. Robert Furrato (Engelhard Corporation) "The Fuel Cell: New Catalyst Challenges"
April 10, 2000	Professor Israel Wachs (Lehigh University) "Methanol: A 'Smart' Chemical Probe Molecule"
May 11, 2000	Spring Symposium Keynote Speakers Dr. John Monnier (Eastman Chemical Co.) - 2000 Herman Pines Award Lecture Professor Richard Gonzalez (Tulane University) Professor Eduardo Wolf (Notre Dame)

1998-1999

October 12, 1998	Professor Roel Prins (ETH Laboratorium für Technische Chemie) "Kinetics of the Hydrodenitrogenation of Quinoline and Alkylanilines Over Sulfided NiMo/Al ₂ O ₃ Catalysts"
November 9, 1998	Professor James Haw (University of Southern California) "NMR and Theoretical Studies of Solid Acidity"
December 7, 1998	Dr. Stephen Dunne (UOP Company) "Modeling of Cold Start Hydrocarbon Traps Emission Reduction"
January 18, 1999	Dr. Walter Partenheimer (DuPont Experimental Station) "Models and Principles in the Oxygenation of Hydrocarbons"
February 15, 1999	Dr. Swathy Sathirajan (General Motors Corporation) "Proton Exchange Membrane (PEM) Fuel Cell for Automotive Applications"
March 15, 1999	Professor Abhaya Datye (University of New Mexico) "The Genesis of Iron Fischer-Tropsch Catalysts for Coal to Liquids Conversion"
April 26, 1999	Professor Avelino Corma (Universidad Politecnica de Valencia) 1998 F. G. Ciapetta Lectureship "Designing Molecular Sieve Catalyst for Producing Chemicals and Fine Chemicals"
May 19, 1999	Spring Symposium Keynote Speaker Professor Harold H. Kung (Northwestern University) - 1999 Herman Pines Award Lecture

1997-1998

October 13, 1997	Dr. Jennifer Holmgren (UOP) "PILCs and Other Interesting Layered Solids"
November 10, 1997	Professor Raul Lobo (University of Delaware) "The Role of Electrostatic Forces Between Guest and Host in Determining the Properties of Zeolites"
December 8, 1997	Professor Julie d'Itri (University of Pittsburgh) "Selective Hydrogenolysis of Heterolytic Molecules: Carbon-Chlorine Bond Cleavage Catalyzed by Supported Palladium"
January 12, 1998	Dr. Robert Farrauto (Engelhard Corporation) "Environmental Catalysts: Present and Future Challenges"
February 9, 1998	Professor Richard Masel (University of Illinois) "What Is Metallic Function?"
March 9, 1998	Professor James Haw (Texas A&M University) "NMR and Ab Initio Studies of Solid Acids"
April 13, 1998	Professor Mark Barteau (University of Delaware) "Vaulting the Pressure: Catalysis of C-C Bond Formation on Metal Oxides"