Chemical & Biomolecular Engineering

ALLAN P. COLBURN MEMORIAL LECTURES

4/17/2019
Matthew Panzer
Tufts University
Design of Polymeric Scaffolds for Nonaqueous Ionogel Electrolytes

4/26/2019
James Swan
Massachusetts Institute of Technology
Large Scale Simulation of Colloidal Hydrodynamics: Heterogenous Particles, Structures and Flow Patterns

5/4/2018
Matthew Helgeson
University of California, Santa Barbra
Complex Nanoemulsions for Engineering Novel Soft Nanoparticles with Applications in Nanomedicine

10/7/2016
Bradley Olsen
Massachusetts Institute of Technology
Revisiting the Physical Chemistry of Polymer Networks

5/13/2016
Michelle O'Malley
University of California, Santa Barbra
Exploiting Anaerobes for Biomass Breakdown and Sustainable Chemistry

10/12/2012
Sarah Heilshorn
Stanford School of Engineering
Designer Self-Assembling Materials for Cell Encapsulation and Delivery

5/4/2012
Peter Tessier
Rensselaer Polytechnic Institute
Antibodies by Design
3/4/2011  
John Kitchin  
Carnegie Mellon University  
Oxygen Evolution on Multicomponent Oxide Electrocatalysts

4/24/2009  
Matt DeLisa  
Cornell University  
Manipulating quality control mechanisms in bacteria for preclinical development of protein therapeutics

4/11/2008  
Michael Strano  
Massachusetts Institute of Technology  
The Chemistry of Single-Walled Carbon Nanotubes: Applications to Biomolecule Detection, Nanotube Separation, and Electronic Networks

5/12/2006  
Patrick Doyle  
Massachusetts Institute of Technology  
Dynamics of complex fluids in microfluidic devices

3/11/2005  
Michael D. Graham  
University of Wisconsin-Madison  
DNA Dynamics in a Microchannel: Theoretical and Multiscale Simulation Studies of Relaxation, Diffusion and Shear-Induced Migration

4/23/2004  
Sharon C. Glotzer  
University of Michigan  
Bottom-up self-assembly for nanofabrication: Bio-inspired design rules from molecular simulation

11/1/2002  
Jay Keasling  
University of California, Berkley  
Remodeling microbial metabolism for synthesis of complex chemicals.

10/6/2000  
Linda Broadbelt  
Northwestern  
Unraveling Complex Kinetics via Detailed Mechanistic Modeling and Computational Chemistry

1997
Wesley R. Burghardt
Northwestern
Tests of Polymer Constitutive Equations for Modelling Complex Viscoelastic Flows

1996
John M. Vohs
University of Pennsylvania
Surface Science Studies of Model Supported Metal Catalysts

1994
Yannis Kevrekidis
Princeton University
Catalysis on Microstructured Surfaces

1993
Arup Chakraborty
University of California, Berkeley
Diffusion in Disordered Media: Ion Motion in Acidic Zeolites

1992
Doros Theodorou
University of California, Berkeley
Molecular Modeling of Polymers: Promises and Challenges

1991
Glenn Fredrickson
University of California, Santa Barbara
Thermodynamics of Heterogeneous Polymer Melts

1990
Alice Gast
Stanford
Conformations of Block Copolymers at Interfaces

1989
Sangtae Kim
Wisconsin
Parallel Computational Strategies for Hydrodynamic Interactions Between Complex Microstructures in Viscous Fluids

1988
H. Chia Chang
Notre Dame
Bubble Transport in Capillaries

1987
Julio Ottino  
*University of Massachusetts*

1986  
**Robert A. Brown**  
*Massachusetts Institute of Technology*  
Models and Intelligent Materials Processing: Czochralski Crystal Growth and Progress in Calculation and Measurement of Complex Viscoelastic Flows

1985  
**Klaus Jensen**  
*University of Minnesota*  
Chemical Vapor Deposition of Electronic Materials

1984  
**Matt Tirrell**  
*Princeton - MN*

1983  
**Rakesh K. Jain**  
*Carnegie-Mellon*  
Transport Phenomena in Tumor Microcirculation

1982  
**Michael Shuler**  
*Cornell*  
Mathematical Models for Individual Bacterium Cells

1981  
**A. C. Payatakes**

1981  
**T. W. Fraser Russell**  
*University of Delaware*  
Photovoltaic Unit Operations

1980  
**James Dumesic**  
*Wisconsin*  
Water-Gas Shift Over Magnetite: Investigation of the Regenerative Mechanism