AIChE Annual Meeting  
Monday, November 14, 2016

- Hilton San Francisco Union Square  
  - 8:48 a.m.  
    - **Session:** Nanostructured/Thin Film Photovoltaics, Group/Topical: Materials Engineering and Sciences Division  
      **Title:** Transparent Conductive Oxide Nanocrystals Coated with Insulators By Atomic Layer Deposition  
      **Who:** John Ephraim, Deanna Lanigan, Corey Staller, Delia Milliron and Elijah Thimsen  
      **Where:** Golden Gate 5
  
  - 8:54 a.m.  
    - **Session:** Gene Regulation Engineering, Group/Topical: Food, Pharmaceutical & Bioengineering Division  
      **Title:** Library and Model Derived Synthetic Terminators for Yeast  
      **Who:** Nicholas Morse and Hal Alper  
      **Where:** Continental 9  
    - **Session:** Regenerative Engineering Plenary (Invited Talks), Group/Topical: Materials Engineering and Sciences Division  
      **Title:** Cell, Peptide and Protein Delivery Problems in Regenerative Engineering  
      **Who:** Nicholas Peppas  
      **Where:** Plaza A
  
  - 9:30 a.m.  
    - **Session:** Gene Regulation Engineering, Group/Topical: Food, Pharmaceutical & Bioengineering Division  
      **Title:** Rational Modular Engineering of a Global RNA Regulator for Tunable Metabolic Control  
      **Who:** Abigail Leistra, Paul Amador, Arijit Bhuyan and Lydia Contreras  
      **Where:** Continental 9
  
  - 9:45 a.m.  
    - **Session:** Area Plenary: Area 8A Emerging Areas in Polymer Science and Engineering I (Invited Talks), Group/Topical: Materials Engineering and Sciences Division  
      **Title:** Ion Sorption, Diffusion and Transport in Charged Polymer Membranes  
      **Who:** Benny D. Freeman  
      **Where:** Continental 1
  
  - 9:48 a.m.  
    - **Session:** Biomolecular Engineering, Group/Topical: Food, Pharmaceutical & Bioengineering Division  
      **Title:** Exploiting Structural Effects of Post-Transcriptional RNA Modifications to Engineer Orthogonality of Amber Suppressor Transfer RNAs for Genetic Code Expansion
Who: Kevin Baldridge, Andre Maranhao, Emmalie Berkovsky, Anirudh Sivakumar, Andrew Ellington and Lydia Contreras  
Where: Continental 8  
10:00 a.m. - 12:30 p.m.  
- Session: Undergraduate Student Poster Session: Food, Pharmaceutical, and Biotechnology, Group/Topical: Student Poster Sessions  
Title: Enhancing Ethanol Production with RNA-Engineering of Zymomonas Mobilis  
Who: Bobi Simonsen, Katie Haning, Seung Hee Cho, and Lydia Contreras  
Where: Grand Ballroom B  
- Session: Undergraduate Student Poster Session: Materials Engineering and Sciences, Group/Topical: Student Poster Sessions  
Title: Formation of Biodegradable Gold Nanoclusters with High-NIR Absorbance for Biomedical Imaging  
Who: Mengdi Sun, Ehsan Moaseri, Behzad Chang, Lindsay Johnson, Keith Johnston and Thomas Truskett  
Where: Grand Ballroom B  
- Session: Undergraduate Student Poster Session: Materials Engineering and Sciences, Group/Topical: Student Poster Sessions  
Title: Nano-Hydrogel Systems for Biomolecule Targeting and Therapeutic Delivery  
Who: Justin Zhong, John Clegg and Nicholas Peppas  
Where: Grand Ballroom B  
1:24 p.m.  
- Session: Genome Scale Engineering, Group/Topical: Food, Pharmaceutical & Bioengineering Division  
Title: Optimization of a Tunable RNAi Screening Approach for Systems Engineering of Complex Phenotypes in Yeast  
Who: Nathan Crook, Jie Sun, Alexander Schmitz and Hal Alper  
Where: Continental 9  
2:15 p.m.  
- Session: Mid-Career Faculty Forum: What Comes after Tenure? (Invited Talks), Group/Topical: Education Division  
Title: And Now What? Dedicate Your Life to Helping the Students and Citizens of This World  
Who: Nicholas Peppas  
Where: Continental 3  
2:15 p.m.  

- **Session**: Mid-Career Faculty Forum: What Comes after Tenure? (Invited Talks)
  **Group/Topical**: Education Division
  **Title**: Session Panel Discussion
  **Who**: Daniel Lepek, Jason Keith, Milo Koretsky and Nicholas Peppas
  **Where**: Continental 3
  **Time**: 3:15 p.m.

- **Session**: Thermodynamics of Polymers
  **Group/Topical**: Materials Engineering and Sciences Division
  **Title**: Interactions and Complexation in Polyelectrolyte-Nanoparticle Systems (Invited Talk)
  **Who**: Venkat Ganesan, Victor Pryamitsyn and Gunja Pandav
  **Where**: Golden Gate 4
  **Time**: 3:15 – 5:45 p.m.

- **Session**: Poster Session: Bioengineering
  **Group/Topical**: Food, Pharmaceutical & Bioengineering Division
  **Title**: Diminished Effectiveness of Neutralizing Antibodies for Respiratory Illnesses Due to Mass Transfer Limitations
  **Who**: Andrea DiVenere and Jennifer Maynard
  **Where**: Grand Ballroom B
  **Time**: 3:20 p.m.

- **Session**: Carbon Nanomaterials Graduate Student Award Session
  **Group/Topical**: Nanoscale Science and Engineering Forum
  **Title**: Synthesis, Gas Permeation and Selectivity of Highly Elastic Poly(dimethylsiloxane)/Graphene Oxide Composite Elastomer Membranes
  **Who**: Heonjoo Ha, Jaesung Park, Benny D. Freeman and Christopher Ellison
  **Where**: Golden Gate 7
  **Time**: 4:35 p.m.

- **Session**: Bionanotechnology for Gene and Drug Delivery II
  **Group/Topical**: Nanoscale Science and Engineering Forum
  **Title**: Recognitive Methacrylated Alginate Nanoparticles for Protein Therapeutics
  **Who**: Nicholas Peppas and Julia Vela Ramirez
  **Where**: Golden Gate 6
  **Time**: 4:39 p.m.

- **Session**: Sustainable Electricity: Generation and Storage
  **Group/Topical**: Sustainable Engineering Forum
  **Title**: The Effect of Centralized Energy Storage on an Integrated Distributed Photovoltaics/CHP System for District Power, Heating and Cooling
  **Who**: Abigail Ondeck, Thomas F. Edgar and Michael Baldea
  **Where**: Union Square 19 & 20
  **Time**: 5:25 p.m.

- **Session**: Graduate or Special Topics Courses: Course Development and Best Practices
  **Group/Topical**: Education Division
Title: Tutorial on the SMART-CN Education Modules for Incorporation in the Advanced Undergraduate or Graduate Engineering Curriculum
Who: Debalina Sengupta, Yinlun Huang, Cliff Davidson, Thomas F. Edgar, Mario Richard, and Mahmoud El-Halwagi
Where: Continental 3

- Session: Poster Session: Materials Engineering & Sciences (08A - Polymers), Group/Topical: Materials Engineering and Sciences Division
  Title: The Development of New Synthetic Approaches to Epoxide Polymerization
  Who: Nathaniel Lynd
  Where: Grand Ballroom B

- Session: Poster Session: Materials Engineering & Sciences (08A - Polymers), Group/Topical: Materials Engineering and Sciences Division
  Title: Single Polymerization Determination of Reactivity Ratios Via in Situ Spectroscopic Techniques and a Simple Nonterminal Model for Chain Copolymerization
  Who: Bryan Beckingham, Gabriel Sanoja and Nathaniel Lynd
  Where: Grand Ballroom B

- Session: Poster Session: Materials Engineering & Sciences (08B - Biomaterials), Group/Topical: Materials Engineering and Sciences Division
  Title: Optimization of Cationic Nanogel Composition for Enhanced Co-Delivery of siRNA and Chemotherapeutics
  Who: David Spencer, Bryan Luu and Nicholas Peppas
  Where: Grand Ballroom B

  Title: Decoding the Pair Correlations and Thermodynamics of Microscopic Cluster Self-Assembly
  Who: Jonathan Bollinger and Thomas Truskett
  Where: Grand Ballroom B

- AiChE Annual Meeting Reception
  Who: The McKetta Department of Chemical Engineering
  Where: Golden Gate 6

- Hotel Nikko San Francisco
  - Session: Process Intensification, Group/Topical: Computing and Systems Division
    Title: High-Resolution Process Design: Flowsheet Optimization with Embedded High Fidelity Unit Models
    Who: Richard Pattison and Michael Baldea
    Where: Monterey 1
  - 3:10 p.m.
- **Session:** CAST Rapid Fire Session: III, Group/Topical: Computing and Systems Technology Division
  **Title:** Beyond Foptd Models in Tuning PI Controllers
  **Who:** Yongjeh Lee, Jietae Lee, and Thomas Edgar
  **Where:** Monterey I

- 3:15 p.m.

- **Session:** Applications of Engineered Structured Particulates, Group/Topical: Particle Technology Forum
  **Title:** Polyelectrolyte Coating of Nanoparticles for Applications in High Salinity Media
  **Who:** Joohyung Lee, Ehsan Moaseri, Muhammad Iqbal, Yunping Fei, Chola Dandamudi, Behzad Chang, Eric Annestrand, Mengdi Sun, Nijia Zhou, Bonnie Lyon-Marion, Jae Jin Han, Kurt Pennell, Christopher Ellison, and Keith Johnston
  **Where:** Bay View (Hotel Nikko San Francisco)