

2013 Fall Meeting

2013 Fall - 246th NATIONAL ACS MEETING

Indianapolis, September 8-12, 2013

The 2013 FALL **GRAPHICAL
ABSTRACTS** are available on-
line

Program Meeting Chair Primary Contact: **Jeffrey Youngblood**

Program Meeting Chairs: **Sheng Lin-Gibson**, **Scott T. Iacono**

Call for papers

**PACS was open for author abstract submission on 1/21/2013 and closed on
3/18/2013**

THE POLY/PMSE PLENARY LECTURE AND AWARDS RECEPTION IS SCHEDULED FOR WEDNESDAY EVENING (5:30 PM, Hyatt Regency Indianapolis, Cosmopolitan Ballroom B)

Plenary Speaker: Barry Farmer, Air Force Research Laboratory

Theme: Chemistry in Motion

Program - Final

Hyatt Regency Hotel

AkzoNobel Award for Outstanding Graduate Research in Polymer Chemistry honoring Hua Lu Warren Ford. Joint POLY/PMSE

[Biomacromolecules for Therapeutics and Diagnostics Delivery](#)

Jianjun Cheng, Young Jik Kwon, Linda Shekhawat

**Biomacromolecules for Therapeutics and Diagnostics
Delivery**

**245th American Chemical Society National Meeting
September 8-12, 2013
Indianapolis, IN**

Call for Abstracts!!

Abstract submission in PACS closes on 3/18/2013 (abstracts.acs.org)

Symposium focuses on

2013 Fall Meeting

- Design and synthesis of new polymeric materials for biomedical applications
- Physical, chemical, and biological characterization of novel polymeric materials & devices
- Demonstration of addressing the current challenges in biomedical research by innovative polymeric materials

Confirmed Speakers:

Cory Berkland, Univ. Kansas; John Chiefari, CSIRO; Timothy Deming, UCLA; Darrell Irvine, MIT; Henry Kopecek, Univ. Utah; Ick-Chan Kwon, KIST; Sébastien Lecommadoux, Univ. Bordeaux; Hai-Quan Mao, Johns Hopkins Univ.; Niren Murthy, Univ. California, Berkeley; Suzie Pun, Univ. Washington; Theresa Reineke, University of Minnesota; Youqing Shen, Zhejiang Univ.; Molly Stevens, Imperial College London; Brent Sumerlin, Univ. Florida; Zhiyuan Zhong, Soochow Univ.

Session Organizers:

Jianjun Cheng, UIUC, jianjunc@illinois.edu
Young Jik Kwon, UC Irvine, kwonyj@uci.edu
Linda Shekhawat, Sigma-Aldrich, linda.shekhawat@sial.com

Biomacromolecules/Macromolecules Lectureship in Creative Polymer Science
Joe Mabry

Charles Overberger Award in Honor of James McGrath
Rick Laine. Joint POLY/PMSE

DSM Science and Technology Award
Travis Baughman

General Topics: New Synthesis and Characterization of Polymers
Dana Garcia

Herman F. Mark Polymer Chemistry Award in honor of Ken Wagener, University of Florida

Mark Scholars Award in honor of Rigoberto Advincula, Case Western Reserve University

Mark Scholars Young Award in honor of Rachel O'Reilly, University of Warwick

Monomer and Polymer Mimicry with Renewables
Stephen Miller, Robert Mathers

Polymers for Transportation and Aerospace
Sarah Morgan, Elizabeth Jordan, Mary Ann Meador, Michael Meador

Rational Design of Advanced Capacitor Films (invited only)
Sanat Kumar, Rampi Ramprasad, Mike Chung

[Sensing and Controlling Motion with Polymeric Materials](#)
Christopher Wohl, Michael Dickey. Joint POLY/PMSE

2013 Fall Meeting

Sensing and Controlling Motion with Polymeric Materials

**245th American Chemical Society National Meeting
September 8-12, 2013
Indianapolis, IN**

Program Theme:

Abstract & Preprint due:

Call for Abstracts!!

Understanding the motion of fluids and objects is important for a variety of research fields. In biological systems, artificial navigable devices can be utilized for controlled drug delivery, mimicking biological processes and locomotion, among other applications. In microfluidic devices, being able to controllably alter the flow rate and direction of nanoliter volumes of material enables a myriad of functions to be performed. For aeronautics, wind tunnel testing is utilized to study the influence of aircraft architectures and environmental factors on vehicle control, noise generation, and visibility. This symposium will focus on polymeric materials designed to sense, generate, or control motion, including: shear sensing materials, pressure sensitive coatings, shape responsive polymers, artificial cilia & flagella, micro- and nano-robotics, and flow-control microfluidic channels and devices.

Session Organizers:

Chris Wohl, NASA Langley Research Center, Advanced Materials and Processing Branch, christopher.j.wohl@nasa.gov

Michael Dickey, North Carolina State University, Department of Chemical and Biomolecular Engineering, mddickey@ncsu.edu

Sequence-Controlled Polymers
Jean-François Lutz, Tara Meyer, Makoto Ouchi, Mitsuo Sawamoto

[Structural Composites and Biomaterials: Modeling and Experiment](#)
James Moller, Hendrick Heinz, Rajiv Berry

Structural Composites and Biomaterials: Modeling and Experiments
245th American Chemical Society National Meeting
September 8-12, 2013
Indianapolis, IN

Program Theme: Chemistry in Motion

Abstracts due: 18 March 2013

2013 Fall Meeting

Call for Abstracts

This POLY symposium will focus on recent advances in fundamental understanding of Structural Composites and Biomaterials. This symposium aims to engender a dialogue and sharing of knowledge among experimental and simulation areas within the community. Predictions at a variety of length and time scales need to be validated by corresponding experiments. Presentations involving research in the following areas are solicited: (1) new insight into the interactions among biological molecules and surfaces and (2) new insight into the origins of strength and fracture in composite systems.

Session Organizers:

James Moller, Miami University, Department of Mechanical and Manufacturing Engineering, mollerjc@miamioh.edu

Hendrik Heinz, The University of Akron, Department of Polymer Engineering, hh29@uakron.edu

Rajiv Berry, Air Force Research Laboratory, Soft Matter Branch, rajiv.berry@wpafb.af.mil

POLY/PMSE Plenary Lecture & Awards Reception
Sheng Gibson-Lin, Jeff Youngblood, Scott Iacono

Other POLY-cosponsored symposia of interest

Physical Chemistry of Macromolecules
Division of Chemical Education (CHED) with cosponsorship by the POLY, PMSE, COLL, and PHYS Divisions of the ACS.
Paul Russo, Daniel Savin, Frank Blum
Please submit your abstract by March 29, 2013 via the ACS website

Membranes for Water Purification, Division of Environmental Chemistry cosponsored by POLY
Baoxia Mi, Kimberly L. Jones, David Jassby