

2011 Fall Meeting

## 2011 Fall NATIONAL ACS MEETING

Denver, CO (August 28-September 1, 2011)

Denver meeting content provided by ACS

Program Meeting Chair Primary Contact: [Jeffrey Linhardt](#)

Program Meeting Chairs: [Kristi Kiick](#), [Jeffrey Linhardt](#), [Greg Tew](#)

THE POLY/PMSE PLENARY LECTURE AND AWARDS RECEPTION IS SCHEDULED FOR WEDNESDAY EVENING, August 31st, 5:30 PM at the Plaza AD Sheraton

Plenary Speaker: Professor Jim McGrath

Theme: The Chemistry of Air, Space, and Water

### Program

#### Advances in Polymer Composites.

Sarah Morgan ([sarah.morgan@usm.edu](mailto:sarah.morgan@usm.edu)), Jeffrey Gilman ([jeffrey.gilman@nist.gov](mailto:jeffrey.gilman@nist.gov)), Daniel Savin ([daniel.savin@usm.edu](mailto:daniel.savin@usm.edu))

## Advances in Polymer Composites

2011 Fall NATIONAL ACS MEETING

August 28 – September 1, 2011

Denver, CO

### CALL FOR PAPERS!

The *Advances in Polymer Composites* symposium at the upcoming fall national meeting in Denver will bring together researchers from academic, industrial and government laboratories to discuss advances and challenges in polymer matrix composites for aerospace, marine and infrastructure applications. Papers are encouraged which address fundamental structure-processing -property issues.

Topics Include :

- \_ Sustainable Polymer Composites**
- \_ Surfaces and Interfaces**
- \_ Nanocomposites**
- \_ Multi-scale Modeling**

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- \_Polymer Matrix Development**
- \_Composite Performance**
- \_Aerospace Applications**
- \_Defense Applications**

Preprints are due **March 21, 2011** at <http://abstracts.acs.org/index2.php>

**Organizers :**

**Jeffrey Gilman** [jeffrey.gilman@nist.gov](mailto:jeffrey.gilman@nist.gov)

Leader, Sustainable Composites Team, Polymers Division, NIST, 301-975-6573

**Sarah Morgan** [sarah.morgan@usm.edu](mailto:sarah.morgan@usm.edu)

Associate Professor, School of Polymers and High Performance Materials, University of Southern Mississippi, 601-266-5296

**Dan Savin** [daniel.savin@usm.edu](mailto:daniel.savin@usm.edu)

Assistant Professor, School of Polymers and High Performance Materials, University of Southern Mississippi, 601-266-5395

[Aerospace Applications of Polymers.](#)

Mary Ann Meador ([maryann.meador@nasa.gov](mailto:maryann.meador@nasa.gov)), Michael Meador ([michael.a.meador@nasa.gov](mailto:michael.a.meador@nasa.gov))

**Polymers for Aerospace Applications**  
**Fall 2011 National ACS Meeting, Denver**  
**Meeting Theme: Chemistry of Air, Space and Water**  
**August 28-September 1, 2011**

**Symposium Organizers:**

**Mary Ann Meador**, Senior Scientist

Durability and Protective Coatings Branch, Structures and Materials Division

NASA Glenn Research Center, Cleveland, OH, 44135

Phone: 216-433-3221, Fax: 216-977-7132, [maryann.meador@nasa.gov](mailto:maryann.meador@nasa.gov)

**Michael A. Meador**, NASA Nanotechnology Lead

Chief, Polymers Branch, Structures and Materials Division

NASA Glenn Research Center, Cleveland, OH, 44135

Phone: 216-433-9518, Fax: 216-977-7132, [michael.a.meador@nasa.gov](mailto:michael.a.meador@nasa.gov)

**Session Description/Topics:**

This symposium will cover various aspects of polymers, polymer composites, functional polymers and nanotechnology having current or future application in aerospace, with particular focus on new synthetic methodologies, processing techniques, characterization and applications. Specific topics will include multifunctional materials, sensors, self-healing polymers, stimuli responsive polymers, radiation protective polymers, etc. for use in aircraft, satellites, space vehicles, habitats, and astronaut equipment.

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**Papers Submission:**

Due date: March 21, 2010 (Note: This deadline is before the Spring Meeting in Anaheim)

Submit using <http://abstracts.acs.org/index2.php>

*A preprint is required for all oral and poster submissions*

**AkzoNobel Award for Outstanding Graduate Research in Polymer Chemistry.**

Warren Ford ([wtford@okstate.edu](mailto:wtford@okstate.edu))

**Biomimetic Polymers.**

Robin Hissam ([Robin.Hissam@mail.wvu.edu](mailto:Robin.Hissam@mail.wvu.edu)), Abby Whittington ([awhit@mse.vt.edu](mailto:awhit@mse.vt.edu))

**Pi-Conjugated Polymers: Synthesis and Applications.**

David Germack ([dsgermack@gmail.com](mailto:dsgermack@gmail.com)), Anne McNeil ([ajmcneil@umich.edu](mailto:ajmcneil@umich.edu))

**$\pi$ -Conjugated Polymers: Synthesis and Applications**

**Fall 2011 National ACS Meeting, Denver  
August 28-September 1, 2011**

**Symposium Description:**

This POLY symposium will focus on recent advances in the synthesis and characterization of  $\pi$ -conjugated polymers. These polymers are being widely explored in the electronics industry for a variety of applications including printed electronics, displays, lighting, sensors, and organic photovoltaics. Presentations involving research in the following areas are encouraged to apply: (1) new developments in the chain growth synthetic methods (e.g., mechanistic studies, new catalysts, novel polymer syntheses). (2) New developments in the characterization of  $\pi$ -conjugated polymers and devices (e.g., measurement development, structure-property relationships of polymer composition, structure, morphology, opto-electronic properties, and device performance).

**Symposium Organizers:**

David S. Germack (Brookhaven National Laboratory)

Anne J. McNeil (U-Michigan)

Invited Speakers:

**Synthesis:**

Richard McCullough (Carnegie Mellon University)

Anton Kiriy (Leibniz-Institut für Polymerforschung)

Tsutomu Yokozawa (Kanagawa University)

Yanhao Geng (Chinese Academy of Sciences)

Christine Luscombe (University of Washington)

Jason Locklin (University of Georgia)

Guy Koeckelberghs (Katholieke Universiteit Leuven)

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Anne McNeil (University of Michigan)

**Characterization:**

Kion Norrman (RISO/Technical University of Denmark)  
Gary Rumbles (National Renewable Energy Lab)  
Ryan Nieuwendaal (National Institute of Standards and Technology)  
Paul Dastoor (University of Newcastle, Australia)  
Gilles Dennler (Konarka, Inc.)  
Benjamin Ocko (Brookhaven National Laboratory)  
David S. Germack (Brookhaven National Laboratory)

**DSM Polymer Technology Award: Polymers at the Biology-Materials Science Interface.**

Travis Baughman ([Travis.Baughman@dsm.com](mailto:Travis.Baughman@dsm.com)), Joseph Put ([jos.put@dsm.com](mailto:jos.put@dsm.com))

**General Topics in the Design, Synthesis, and Characterization of Polymers.**

Dana Garcia ([dana.garcia@arkemagroup.com](mailto:dana.garcia@arkemagroup.com))

**International Year of Chemistry Symposium: Controlled Radical Polymerization.**

Krzysztof Matyjaszewski ([km3b@andrew.cmu.edu](mailto:km3b@andrew.cmu.edu)), Brent Sumerlin ([bsumerlin@smu.edu](mailto:bsumerlin@smu.edu)), Nick Tsarevsky ([nvt@smu.edu](mailto:nvt@smu.edu))

**International Year of Chemistry Symposium: Controlled Radical Polymerization**

**Fall 2011 National ACS Meeting, Denver  
August 28-September 1, 2011**

**Organizers:**

**Krzysztof Matyjaszewski**

Carnegie Mellon University  
Department of Chemistry  
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**Brent S. Sumerlin**

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**Nicolay V. Tsarevsky**

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**Session Description:**

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The symposium will cover recent advances in controlled/living radical polymerization (CRP) systems. Topics covered will include nitroxide- and other stable free radical-mediated polymerizations, metal-catalyzed polymerizations including atom transfer radical polymerization, and techniques employing chain transfer, and addition-fragmentation chemistry, including reversible addition-fragmentation chain transfer polymerization. The lectures will cover mechanisms, synthesis and characterization of materials with novel molecular architectures, functionalities and composition.

With nearly 80 invited speakers confirmed, we encourage submissions for posters that highlight recent research in any area of CRP.

### **Paper Submission:**

Abstract and Preprint deadline: March 21, 2010 (Note: This deadline is before the Spring Meeting in Anaheim)

Submit using <http://abstracts.acs.org/index2.php>

### **International Year of Chemistry Symposium: Fluorine-Containing Polymers.**

Dennis Smith ([dwsmith@utdallas.edu](mailto:dwsmith@utdallas.edu)), Scott Iacono ([scott.iacono@usafa.edu](mailto:scott.iacono@usafa.edu)),  
Cassie Kettwich ([sharon.kettwich@usafa.edu](mailto:sharon.kettwich@usafa.edu)), Dylan Boday ([dboday@us.ibm.com](mailto:dboday@us.ibm.com))

## **Fluorine Containing Polymers**

**222nd ACS National Meeting  
Aug 28-Sept 1, 2011 Denver, CO**

### **Abstracts due March 21, 2011**

PACS abstract submission now open: <http://abstracts.acs.org/index2.php>  
A POLY formatted preprint is required: <http://www.polyacs.org/11.html>

### **Oral & Poster Sessions Available**

Fluorine containing polymer science and technology is nearly 70 years old and fluoropolymer markets maintain a growth rate above the US GDP. In addition to perfluoropolymers, partially fluorinated polymers will continue to impact a wide range of technologies as better control of their unique optical, electronic, processing, extreme environment stability, and surface properties are achieved. This symposium offers a companion forum to the biannual Fluoropolymer workshop series sponsored by the ACS Division of Polymer Chemistry. Scientists, engineers, and technologists interested in the latest developments and advances in this diverse field are invited to contribute oral and poster presentations.

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**Topics include but not limited to:**

Fundamental and advanced technology tutorials  
Polymer and copolymer syntheses and mechanisms  
Structure / property relationships  
Coatings and surfaces  
Biology and biomedical applications  
Membranes and energy conversion applications  
Photonic and electronic applications  
Industrial elastomers and plastics  
Semi-fluorinated polymers for emerging applications

**Symposium Organizers**

**Prof. Dennis Smith**, The University of Texas at Dallas, [dwsmith@utdallas.edu](mailto:dwsmith@utdallas.edu)  
**Dr. Scott Iacono**, US Air Force Academy, [scott.iacono@usafa.edu](mailto:scott.iacono@usafa.edu)  
**Dr. Cassie Kettwich**, US Air Force Academy, [sharon.kettwich@usafa.edu](mailto:sharon.kettwich@usafa.edu)  
**Dr. Dylan Boday**, IBM Materials Engineering, [dboday@us.ibm.com](mailto:dboday@us.ibm.com)

**[International Year of Chemistry Symposium: Metal-Containing and Metallo-Supramolecular Polymers and Materials IV.](#)**

Ulrich Schubert ([ulrich.schubert@uni-jena.de](mailto:ulrich.schubert@uni-jena.de)), George Newkome ([newkome@uakron.edu](mailto:newkome@uakron.edu)), Ian Manners ([Ian.Manners@Bristol.ac.uk](mailto:Ian.Manners@Bristol.ac.uk))

# **Metal-containing and Metallo-supramolecular Polymers and Materials: Part IV**

ACS National Fall Meeting Denver, Colorado 2011

4-day Symposium (August 28<sup>th</sup> – September 1<sup>st</sup> 2011)  
Lecture and Poster Sessions

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**Topics:** *Transition metal containing polymers, catalysis, metallo-dendrimers, metallo-supramolecular systems, self-organization, functional materials, characterization, self-healing materials, organometallic polymers, ligand systems, nanostructures, organic/inorganic hybrids, metamaterials, solar cells, lighting, simulations, ...*

*Including POLY Preprints and followed by a Special Issue/Book publication*

**Organizers:**

**Ulrich S. Schubert**

Laboratory of Macromolecular and Organic Chemistry, Friedrich-Schiller-University Jena, Humboldtstr. 10, 07743 Jena, Germany, +49-3641-948201, fax +49-3641-948202, email: [ulrich.schubert@uni-jena.de](mailto:ulrich.schubert@uni-jena.de)

**George R. Newkome**

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**Ian Manners**

School of Chemistry, University of Bristol, Bristol BS8 1TS United Kingdom, +44-117-928-7649, Fax: +44-117-929-0509, e-mail: [Ian.Manners@Bristol.ac.uk](mailto:Ian.Manners@Bristol.ac.uk)

Please register for oral contributions or posters via the ACS meeting web page or in advance directly to the organizers. Deadline for submission is March, 2011. Please contact the organizers for further information.

**Nanoscience Challenges in the Chemical and Polymer Industries.**

David Londono ([j-david.londono@usa.dupont.com](mailto:j-david.londono@usa.dupont.com)), Joseph Pickel ([pickeljm@ornl.gov](mailto:pickeljm@ornl.gov)), Donna Nelson ([djnelson@ou.edu](mailto:djnelson@ou.edu))

**Polymer Coatings for the Environment, Energy, and Sustainability.** (co-sponsored by PMSE)

Peter Zarras ([peter.zarras@navy.mil](mailto:peter.zarras@navy.mil)), Jamil Baghdachi ([jamil.baghdachi@emich.edu](mailto:jamil.baghdachi@emich.edu)), Kenneth J. Wynne ([kjwynne@vcu.edu](mailto:kjwynne@vcu.edu))

**ACS Division of Polymer Chemistry Symposium**

**Polymer Coatings for the Environment, Energy and Sustainability**

**ACS Meeting in Denver, CO (August 28-September 1, 2011)**

**Abstracts and Preprints due by March 21, 2011.  
PACS is now open!!**

There is an increasing demand for coatings and thin films that can be multifunctional, stimuli responsive and at the same time produced economically, safely and sustainably. The current trend in coatings technology is to control composition on a molecular level and the morphology at the nanometer scale. The idea of controlling assembly of sequential macromolecular layers benefiting from macromolecular self-assembly, and the development of materials that can form defined structures with unique properties is being explored for both pure scientific research and industrial applications. This symposium will focus on three areas: (a) basic polymer science aimed at multifunctional films or coatings, (b) coating additives that modify properties especially surface properties, (c) specialized components that produce certain desired properties such as corrosion resistance and/or coatings or films that sense and respond to its environment. This symposium seeks contributions from academia, industry and government laboratories in the following areas: coating science facilitating the generation of energy from non-traditional sources; antifouling and fouling release coatings; coatings for corrosion inhibiting and sensing; specialty polymer coatings with unique properties such as self-patterning and coatings/films for remediation technologies (heavy metals and organic pollutants).

**Organizers:**

**Peter Zarras**, NAWCWD (Code 4L4200D), 1900 N. Knox Road (Stop 6303), China Lake, CA 93555-6106, (P) 760-939-1396, (F) 760-939-1617, [peter.zarras@navy.mil](mailto:peter.zarras@navy.mil)

**Jamil Baghdachi**, Polymers and Coatings, Eastern Michigan University, 118 Sill Hall, Ypsilanti, MI 48197, (P) 734-487-3192, [jamil.baghdachi@emich.edu](mailto:jamil.baghdachi@emich.edu)

**Kenneth J. Wynne**, Virginia Commonwealth University, 601 West Main Street, Room 444 P.O. Box 843028, Richmond, VA 23284-3028, (P) 804-828-9303; (F) 804-828-3846  
[kjwynne@vcu.edu](mailto:kjwynne@vcu.edu)

**Paper Submission:**

Abstract and Preprint deadline: March 21, 2011 (Note: This deadline is before the Spring Meeting in Anaheim)

Submit using <http://abstracts.acs.org/index2.php> <<http://abstracts.acs.org/index2.php>

**[Polymers in Water Purification](#)**. (co-sponsored by PMSE)



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Christopher Ober ([christopher.ober@cornell.edu](mailto:christopher.ober@cornell.edu)), Uli Wiesner ([ubw1@cornell.edu](mailto:ubw1@cornell.edu)), Eric M. V. Hoek ([emvhoek@ucla.edu](mailto:emvhoek@ucla.edu))

## **Polymers in Water Purification**

**ACS Meeting in Denver, CO (August 28-September 1, 2011)**  
**Abstracts and Preprints due by March 21, 2011.**  
**PACS is now open!!**

The polymer membrane technology that is currently revolutionizing global water purification strategies is based on materials and concepts that are now more than 30 years old. Relatively few fundamental polymer material innovations have been reported since wet phase inversion and interfacial polymerization membrane formation methods were developed in the 1960's and 1970's. Most industrial R&D has focused on better manufacturing methods to reduce defects and production cost with incremental, but continuous performance improvements coming over the last few decades. Optimal performance and stability of conventional polymer membranes are nearly fully realized, but membrane filtration and desalination processes remain relatively energy-intensive and fouling-prone. These constraints remain in the face of rising worldwide demand for clean water and the sustainability imperatives to control energy use. However, the 'age of nanotechnology' has brought forth entirely new classes of polymeric materials that can be explored for use in water treatment. This symposium will bring together members of different fields to discuss exciting and new advanced materials concepts that have recently been proposed for preparing better performing water purification membranes. These concepts include aligned-carbon nanotubes embedded in polymeric matrices, protein-polymer biomimetic materials, block-copolymer membranes with aligned cylindrical nanopores, inorganic/organic and organic/inorganic mixed matrix materials, chlorine-tolerant sulfonated and fluorinated polymers for conventional filtration and desalination applications, as well as new polymeric materials for emerging membrane processes like forward osmosis, reverse electrodialysis, and membrane distillation among others.

### **Organizers:**

Christopher Ober, Department of Materials Science and Engineering, Cornell University ([christopher.ober@cornell.edu](mailto:christopher.ober@cornell.edu))

Eric M.V. Hoek, Department of Civil & Environmental Engineering, University of California, Los Angeles ([emvhoek@ucla.edu](mailto:emvhoek@ucla.edu))

Ulrich Wiesner, Department of Materials Science and Engineering, Cornell University ([ubw1@cornell.edu](mailto:ubw1@cornell.edu))

**Mark Senior Scholar Award: Symposium in Honor of Jimmy Mays**

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**Mark Scholar Award: Symposium in honor of Timothy E. Long**

**Mark Young Scholar Award: Symposium in Honor of Javid Rzayev**