



<http://www.ispac-conferences.org/>

## **ISPAC 2013 Second Call for Papers** **New Orleans, Louisiana, June 10-12, 2013** **Short Course, June 9, 2013**

ISPAC 2013 is shaping up to be a dynamic, interdisciplinary, and state-of-the-art event in New Orleans.

We will accept abstracts in all fields on polymer analysis and characterization; The preliminary program and list of main ISPAC 2013 focus areas is given below. Topics will include fundamental studies and applications but all have a strong focus on polymer analysis and characterization.

Provisions will also be made at ISPAC 2013 for job seekers and potential employers to meet.

Abstracts should be submitted for contributed, oral lectures (15 minutes each) and poster presentations. We will assume that the primary author will be the presenter.

You are able to upload your abstract online [here](#) or go to <http://www.ispac-conferences.org/ISPAC-2013-abstract-submission.aspx>

Poster presentations and oral presentations in all areas of polymer analysis and characterization are invited. Oral presentations will be accepted on a competitive, refereed basis.

All abstracts will be included in the Conference Notes to be provided to participants.

Please note there is also a Short Course on Polymer Characterization and Analysis on Sunday June 9, 2013. Details are at <http://www.ispac-conferences.org/ISPAC-2013-short-course.aspx>

**ONLINE REGISTRATION IS ACTIVE!** Please complete the online registration form accessible at the following address:

<http://www.ispac-conferences.org/ISPAC-2013-registration.aspx>

**There is also an online payment portal through PayPal for those wishing make payment online. Other payment methods are available and discussed at the registration link above.**

The conference venue will be the historic Hotel Monteleone in the French Quarter. The room block rate is \$165/night and is available 3 days pre and post the conference dates. More information on accommodations, link to the hotel block and hotel contact information can be found here: <http://www.ispac-conferences.org/ISPAC-2013-accommodation.aspx>

A list of activities for accompanying people will also be posted to the website soon.

Below is the Preliminary Program, subject to update and changes

## Preliminary Program for ISPAC 2013. Subject to change and updates

Date	Time	Speaker	Affiliation	Title
<b>Sunday</b> June 9, 2013	<b>ISPAC Short Course on Polymer Analysis and Characterization</b>			
	8:00-8:30am	Registration		
	8:30-10:00am	Dr. John McConville	Polymer Standard Services	Basics of Gel Permeation Chromatography, including multi-detection
	10:00am-10:30am	Refreshment pause		
	10:30am-noon	Prof. Harald Pasch	U. Stellenbosch S. Africa	Advanced Liquid Chromatography, including 2D-LC and Hyphenated Methods (LC-NMR, LC-FTIR, LC-MS)
	noon-1:30pm	Lunch provided by ISPAC		
	1:30-2:00pm	Prof. Marguerite Rinaudo	ISPAC	Characterization of Biopolymers
	2:00-2:30pm	Refreshment pause		
	2:30-4:00pm	Prof. Paul Russo	Louisiana State University	Light and x-ray scattering for polymer analysis and characterization
		<b>Scientific Program</b>		
<b>Monday</b> June 10,2013	<b>Morning Session Theme: Polymer Separations and Chromatography</b>			
	8:00-8:30am	Registration		
	8:30-9:00am	Prof. Jana Falkenhagen	Federal Materials Research Institute, Berlin, Germany	Coupling techniques for copolymer characterization with focus on LC-MS
	9:00-9:30am	Prof. Taihyun Chang	Postech Uni., Pohang, Korea	TBA (Interactive GPC)
	9:30-10:00am	Dr. Patricia Cotts	DuPont Central R&D, Wilmington, Delaware	TBA (Industrial multi-detector GPC applications)
	10:00-10:30	Discussion		
	10:30-11am	Refreshment pause		
	11:00am-12:30pm	Contributed Presentations		
	12:30-2:00pm	Lunch		<b><u>Poster Presentation set-up</u></b>
		<b>Afternoon Session Theme: Scattering and Spectroscopic Methods</b>		
2:00-2:30	Dr. Matthias Ballauff	Helmholtz Center for Materials and Energy, Berlin	Characterizing polymers by synchrotron X-ray radiation: Ideas, trends and opportunities	
2:30-3:00	Prof. Thomas Russell	U. Massachusetts, Amherst	Multi-length Scale Morphology for Low Band	

Gap Polymer Photovoltaics

3:00-3:30 Prof. Murugappan Muthukumar U. Massachusetts, Amherst  
3:30-4:00 Discussion  
4:00-4:30 Refreshment pause  
4:30-6:00 Contributed Presentations  
6:00-7:00 Poster Exhibit and Refreshments

Characterization of polyelectrolytes in dilute solutions: Light scattering and electrophysiology

**Tuesday**

**Morning Session Theme: Characterization of therapeutic proteins and delivery systems**

June 11, 2013

8:30-9:00am Prof. Chris Roberts U. Delaware  
9:00-9:30am Dr. Dean Ripple US Nat'l. Inst. Standards & Technology (NIST)  
9:30-10:00am Prof. Elizabeth Topp Purdue University  
10:00-10:30am Discussion  
10:30-11:00am Refreshment pause  
11:00am-12:30pm Contributed Presentations  
12:30-2:00pm Lunch

Quantifying Protein Interactions from "Low" to "High" Concentrations Using Complementary Scattering Techniques  
TBA (Polymer particles as protein reference materials)  
TBA

**Afternoon Session Theme: Current challenges in analysis and characterization for new polymers and natural products**

2:00-2:30 Prof. Tim Lodge U. Minnesota, Editor, Macromolecules  
2:30-3:00 Prof. Scott Grayson Tulane University  
3:00-3:30 Prof. Thomas Davis U. New S. Wales Sidney, Australia  
3:30-4:00 Discussion  
4:00-4:30 Refreshment pause  
4:30-6:00 Contributed Presentations  
7:30-9:30 Conference banquet

Advanced hydrogels: design and characterization  
Application of MALDI-TOF MS and IMS-MS for elucidating macromolecular architecture  
TBA

**Wednesday**

**Session Theme: Modeling/computational approaches and comparison with experimental methods**

June 12, 2013

8:30-9:00am Sachin Shanbhag Florida State U.

Inverting Models of Polymer Rheology for Analysis and

## Characterization

9:00-9:30am	Prof. Tom McLeish	Durham U. , UK	TBA
9:30-10:00am	TBA	TBA	TBA
10:00-10:30am	Discussion		
10:30-11:00am	Refreshment pause		

11:00am- 12:30pm	Contributed Presentations		
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12:30-2:00pm	Lunch		
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2:00-3:30	Contributed Presentations		
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3:30-4:00	Refreshment pause		
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4:00-5:30	Contributed Presentations		
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**End of ISPAC  
2013**

## **Focus areas at ISPAC 2013**

### ***i) Latest developments in polymer separations and chromatography***

Interactive chromatography  
Multi-dimensional and hyphenated GPC  
Field Flow Fractionation

### ***ii) Scattering and spectroscopic methods for polymer analysis and characterization***

X-ray scattering  
Neutron scattering  
Light scattering (including DLS, SLS and electrophoretic LS)  
Electronmicroscopy and AFM  
Various spectroscopies, including NMR, IR, Raman

### ***iii) Modeling/computational approaches to polymer analysis and characterization and comparison with experimental methods***

Predicting polymer macroscopic properties from molecular level characterization  
Rheological and thermal analysis of polymers and associated modeling  
Applications to Polyolefins  
Online monitoring and process control of polymerization reactions

### ***iv) Characterization of therapeutic proteins and delivery systems.***

Characterization of therapeutic antibodies and protein higher order structure  
Characterization of protein aggregates in drug product development  
Characterization challenges for protein formulations from low to high concentration  
Computational characterization of protein structure and interactions

### ***v) Current challenges in analysis and characterization for new polymers and natural products***

Stimuli responsive polymers  
Natural products  
Nanomedicine  
Hybrid nanoparticles  
Bioconjugates  
Pharmaceutical drug delivery agents