



## NCMC-13 Agenda

**Advances in Library Fabrication  
April 28 – 29, 2008 ◊ Bldg. 101 / Lecture Room B**

### **Monday, April 28, 2008 ◊ Morning**

- 8:30 AM ***Arrival & Registration***
- 8:45 AM ***Welcome***  
**Eric Lin**, Chief, Polymers Division, NIST
- 8:50 AM ***Welcome & Workshop Introduction***  
**Michael Fasolka**, Director, NIST Combinatorial Methods Center

### **Coatings and Formulations Libraries**

- 9:00 AM ***Invited Lecture***  
**Chris Bowman**, University of Colorado  
*Photopolymerized Gradient Libraries*
- 9:50 AM **Carl Simon**, Biomaterials Group, Polymers Division, NIST  
*3D Tissue Scaffold Libraries*
- 10:15 AM ***Break***
- 10:30 AM ***Invited Lecture***  
**Dean Webster**, North Dakota State University  
*Coatings Formulations Libraries*
- 11:20 AM **Jiong Liu**, NCMC, Polymers Division, NIST  
*Adhesives Libraries and Parallel Edge Lift Off Testing*
- 11:45 AM ***Lunch: NIST Cafeteria***

### **Monday, April 28, 2008 ◊ Afternoon**

### **Library Fabrication – Microfluidics**

- 1:00 PM ***Invited Lecture***  
**Joyce Wong**, Boston University  
*Library Fabrication - Microfluidics*
- 1:45 PM ***Invited Lecture***  
**David LaVan**, Ceramics Division, NIST  
*Combinatorial Synthesis of Conductive Polymers Using Microfluidics*

2:30 PM **Break**

2:50 PM **NCMC Lecture**

**Thomas Chastek**, NCMC, Polymers Division, NIST  
*Microfluidic Synthesis Libraries*

**Discussion Session: Opportunities for the NCMC Partnership Model**

3:30 PM

*Industrial Interaction and Partnerships in the NIST Polymers Division*

**Kate Beers**, NCMC, Polymers Division, NIST

*A description of the mechanisms by which industry collaborates with the Division, including current collaborations, projects and future opportunities*

4:00 PM

***Discussions in Breakout Format***

**Topic:** How can the Polymers Division facilitate industrial R&D, innovation and economic growth through new/improved partnerships and business models like the NCMC?

**Goal:** Participants will provide feedback, generate ideas and discuss opportunities in the context of their own experience, and the needs of their organizations.

**Discussion Topic Areas:**

- 1) Idea Catalysis vs. Problem Solving - What is the best way for NIST Polymers to complement the industrial R&D investment?
- 2) Access to IP or People and other resources? – For NIST, the NCMC model added several options to how we can do business. In what form do you get the most valuable Technology/Information Transfer?
- 3) Expanded Partnerships – Can NIST Polymers use our expertise and leadership in fundamental polymer science to build diverse teams, including user facilities and universities?

5:30 PM

**Break**

6:00 PM

***Dinner at Growler's of Gaithersburg (see details and map in Workshop Binder)***

**Tuesday, April 29, 2008** ◇ Morning

8:30 AM **Reconvene**

8:55 AM **Welcome Back**  
**Derek Patton**, NCMC, Polymers Division, NIST

9:00 AM **Invited Lecture**  
**Nicolay V. Tsarevsky**, ATRP Solutions, Inc.  
*Molecular Libraries by ATRP*

**NCMC Research Updates**

9:50 AM **Derek Patton**, NCMC, Polymers Division, NIST  
*Polymer Brush and Surface Libraries*

10:20 AM **Break**

10:30 AM **NCMC Lecture**  
**Makoto Otani**, Ceramics Division, NIST  
*High-Throughput Screening Tools and Library Design for Thermoelectric Composition-Spread Films*

11:10 AM **Jun Young Chung & Thuy Chastek**, NCMC, Polymers Division, NIST  
*Advances in Buckling Mechanics*

11:40 AM **Lunch: NIST Cafeteria**

**Tuesday, April 29, 2008** ◇ Afternoon

1:00 PM **Wrap Up and Discussion Reporting**  
**Kate Beers, Derek Patton, & Carol Laumeier**, NCMC, Polymers Division, NIST

**NCMC Laboratory Tours and Demonstrations**

1:45 PM **Lab Tours and Demonstrations** – convene in the NCMC Labs, Building 224, Room B-207 (see Lab Tours Handout in Workshop Binder)

3:00 PM **Adjourn**

**Please mark your calendars to join us at NCMC-14 on November 6 – 7, 2008!**