

# Smart Coatings 2009

Embassy Suites Orlando North, Fl  
February 25-27, 2009

EASTERN MICHIGAN  
UNIVERSITY

## Registration form

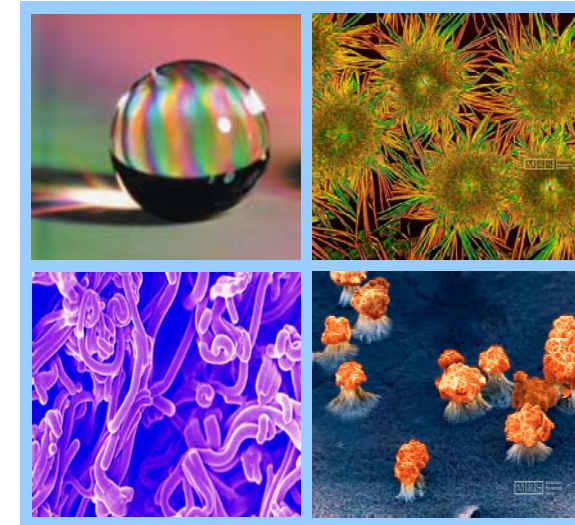
<input type="checkbox"/> Prof <input type="checkbox"/> Dr. <input type="checkbox"/> Mr. <input type="checkbox"/> Ms. <input type="checkbox"/> Mrs.	<input type="checkbox"/> I authorize Eastern Michigan University to charge
Full name _____	\$ _____
Job title _____	To my <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard _____
Affiliation _____	Account number _____
Address _____	Exp. Date _____
City _____ State _____ Zip code _____	Signature _____
Phone _____	<input type="checkbox"/> I will mail a check for the amount \$ _____,
Fax _____	Payable to "Eastern Michigan University,"
E-mail _____	Coatings Research Institute
	430 W. Forest Ave.
	Ypsilanti, MI 48197, USA
	Tel: 734.487.2203 Fax: 734.483.0085
<input type="checkbox"/> \$800 (\$700 before January 21)	<b>A block of rooms has been reserved for this conference at a special conference rate of \$142/night plus taxes. Rates and availability after Feb. 3, 2009 is not guaranteed.</b>
<input type="checkbox"/> \$400 Academia	<b>Embassy Suite Hotel: 407.834.2400</b>
<input type="checkbox"/> \$200 Student	
<input type="checkbox"/> \$60 Symposium dinner	

**Fee includes:** Conf. Proceedings, lunches and coffee breaks  
**Cancellation Policy:** Cancellation must be written notice received in the Coatings Research Institute before February 2, 2009. A \$100 processing fee will be applied. No cancellations after February 20, 2009.

## The Coatings Research Institute presents Smart Coatings 2009

# Smart Coatings 2009

EASTERN MICHIGAN UNIVERSITY  
Coatings Research Institute  
430 W. Forest  
Ypsilanti, MI 48197



Feb. 25-27, 2009  
Orlando, Florida

[www.emich.edu/smartcoatings](http://www.emich.edu/smartcoatings)

## Symposium Schedule

### Wednesday, Feb. 25, 2009

8:00-9:00 a.m.	Registration
9:00-10:15 a.m.	Session I
10:15-10:30 a.m.	Coffee Break
10:30-Noon	Session I
Noon-1:30 p.m.	Lunch
1:30-2:45 p.m.	Session II
2:45-3:00 p.m.	Coffee Break
3:00-4:30 p.m.	Session II
6:30 p.m.	Symposium Dinner

### Thursday, Feb. 26, 2009

8:30-10:15 a.m.	Session III
10:15-10:30 a.m.	Coffee Break
10:30-Noon	Session III
Noon-1:30p.m.	Lunch
1:30-3:00 p.m.	Session IV
3:00-3:15 p.m.	Coffee Break
3:15-4:15 p.m.	Session IV

### Friday, Feb. 27, 2009

8:30-10:00 a.m.	Session V
10:00-10:15 a.m.	Coffee Break
10:15-11:45 p.m.	Session V
Noon-1:30 p.m.	Lunch, Adjourn

### Symposium dinner

Join us for dinner at 6:30pm, Wed, Feb 25.  
Entertainment and drinks included. Cost for event is \$60 per attendee and may be paid upon registration.



Embassy Suites

### Session I:

- 1. Smart Coatings: Overview**  
Jamil Baghdachi, Chair  
Eastern Michigan University, USA
- 2. Stimuli-Responsive Multi-Layers: From Mechanomutable Nanotubes to Living Cells with Synthetic Backpacks**  
Michael Rubner  
Massachusetts Institute of Technology, USA
- 3. Tailor-Made Polymer Surfaces for Microsystems Engineering-From Computer Hard Disks to DNA-Chips**  
Jürgen Rühle  
Laboratory for Chemistry & Physics of Interfaces, Germany
- 4. Surface Coatings for Blood Compatibility: Facts, Fictions, Fiascos and Feasibility**  
Buddy Ratner  
University of Washington, USA
- 5. Dual Stimuli-Responsive and Electrografted Smart Coatings**  
Rigoberto Advincula  
University of Houston, USA

### Session II:

- 6. New Nanostructured Functional Materials for Coatings by ATRP with PPM Amount Copper**  
Krzysztof Matyjaszewski  
Carnegie Mellon University, USA
- 7. Polymeric Film Formation by Physical Vapor Deposition Technique**  
Hiroaki Usui  
Tokyo University of Agriculture and Technology, Japan
- 8. Mendable Polymers and Coatings**  
Jamil Baghdachi  
Eastern Michigan University, USA
- 9. Solution-Process Thin Films for Organic Transistors and Solar Cells**  
Lynn Loo  
Princeton University, USA
- 10. Reactive Surfaces and Interfaces Utilizing 2-Vinyl-4,4-Dimethylazlactone(DMA): An Example for "Click" Chemistry**  
Jamie Messman  
Oakridge National Laboratory, USA

### Session III:

- 11. Coatings That Kill Bacteria and Viruses on Contact**  
Alexander Kilbanov  
Massachusetts Institute of Technology, USA
- 12. Functionality Opportunities for Hybrid Sol-Gel Coatings**  
Robert Akid  
Sheffield Hallam University, UK
- 13. Mechanically-Dynamic Polymer Nanocomposites**  
Christoph Weder  
Case Western Reserve University, USA
- 14. Responsive Polymers for Consumer Products Applications**  
Clay Bunyard  
Kimberly-Clark Corp., USA
- 15. Electroresponsive and Electrochemically Active Polyelectrolyte Systems**  
Paula Hammond  
Massachusetts Institute of Technology, USA
- 16. Nanostructured Antimicrobial Coatings via Polyurethane Having Co-Polyoxetane Soft Blocks**  
Kenneth Wynne  
Virginia Commonwealth University, USA

### Session IV:

- 17. Structural and Dynamic Properties of Polymerized Colloidal Crystalline Arrays**  
Curtis Frank  
Stanford University, USA
- 18. Supramolecular Polymers as Dynamic Films and Coatings**  
Stuart Rowan  
Case Western Reserve University, USA
- 19. Towards Autonomic Surfaces: Polymer Brushes, Enzyme Immobilization and Spatial-Temporal Modulation of Surface Properties**  
Richard Vaia  
AFRL, USA
- 20. Hydrogen-Bonded Polyelectrolyte Multilayers: From Fundamentals to Applications**  
Svetlana Sukhishvili  
Stevens Institute of Technology, USA
- 21. Mixed Brush as a Smart Coating that Enhances the Polymer Adsorption**  
Alexander Chervanyov  
Leibniz Institute of Polymer Research Dresden, Germany

### Session V:

- 22. Ionic Liquid and Ion-Containing Polymers for Shape Memory and Self-Healing**  
Tim Long  
Virginia Tech University, USA
- 23. Smart Corrosion Coatings for Military Applications**  
Peter Zarras  
NAVAIR-WD, USA
- 24. What's Better Than "Natural"?**  
John Du  
BYK Inc., USA
- 25. Smart Self-Healing Material Systems Using Inductive and Resistive Heating**  
Terrisa Duenas  
NextGen Aeronautics Inc., USA
- 26. Switching Wettability Using Photochromic Polymer Brushes**  
Jason Locklin  
University of Georgia, USA
- 27. Surface Detoxification Using Electrochemical Generation of Activated Hydrogen Peroxide**  
Patrick Kinlen  
Crosslink, USA
- 28. Concluding Remarks**  
Jamil Baghdachi, Chair



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