



## *Invitation to Participate*

**May 19 & 20, 2005**

(Thursday & Friday)

Niagara Falls Conference Center

Niagara Falls, NY

---

### The Industry/University Center for Biosurfaces: Controlling Fine-Particle Risks to Our Bodies, Homes, Workplaces, Schools, and Clinics

---

An Industry/University Cooperative Research program  
sponsored by the U.S. National Science Foundation  
at University at Buffalo and The University of Memphis,  
in cooperation with the Environmental Quality Systems Center sponsored by  
the New York State Office of Science, Technology and Academic Research.

#### Meeting Objective

Develop & Refine the Research Prospectus for 2005-2009.

Current Focus: Finely particulated materials and their interactions with living systems.

Topics being considered include bioaerosols, diesel exhaust, respiratory consequences, infection control, free radical reactions of particles in living tissues, and more.

#### Benefits to Attendees

This topic-specific workshop will identify research needs of greatest concern in regard to interactions of finely particulated materials with biological systems. Special attention will be given to “implants” of such materials in human tissues and indoor environmental quality issues. Development and refinement of IUCB’s Prospectus during this workshop will set the direction for research performed at the Center (University at Buffalo; The University of Memphis) for the 2005-2009 period.

#### Registration Cost

Includes buffet lunch both days, reception on May 19, continental breakfast on May 20, and breaks.

\$95 per person

Please use the attached registration form, if paying by check.

Or, you can register with credit-card payment on-line, after April 18,

at <http://www.buffalo.edu/faculty/research/iucb>

Industry/University Center for Biosurfaces [IUCB]

## **TECHNOLOGY ROADMAP: Critical Particle Controls**

---

- Who?* → stakeholders needing to control biological responses to fine particles  
*When?* → May 19 & 20, 2005 (Thursday/Friday)  
*Where?* → Niagara Falls Conference Center (Niagara Falls, NY)  
*Why?* → Prioritization of IUCB's research agenda for 2005-2009  
*What?* → Bioaerosols; indoor environmental quality issues; free radical reactions of particles in living tissues; diesel exhaust and respiratory consequences; infection control; homeland defense; hospital & clinical air quality; collective protection

### **May 19, 2005 (Thursday)**

---

- 8:30 am Breakfast meeting – IUCB Industry Advisory Board and government agencies
- 10:00 am Workshop **registration** and **networking**
- 12/noon Lunch – all attendees: your **introductions** and **expectations**
- 1:00 pm **WELCOME** from Industry Advisory Board Chairman, *Jack Barrett*
- 1:05 pm Design of a Massively-Parallel Multi-Threat **Live Agent Aerosol** Detoxification Experiment in a **600 Cubic Meter** Instrumented Test Chamber  
*Robert Baier* [Executive Director]
- 2:00 pm U.S. National Science Foundation Participation  
*Alex Schwarzkopf* [Senior Program Director, NSF IUCRC Programs]
- 2:15 pm Evaluation via the Industry/University Feedback Loop  
*Edward Zablocki* [IUCB Evaluator; UB Office of the V.P. for Research]
- 2:30 pm Hospitality Break – refreshments provided by Niagara Falls Conference Center
- 3:00 pm Unique Tools Available: Integrated **Virus** Detection System; COAST II **Bioaerosol** Collector; Montana Portable **Emission** Monitoring System; Infrared Impactor Particle **Speciation**; **Aircuity** Expert System; ASAP, **Autonomous Sampling** Aerosol System; more
- 4:00pm New York State Participation: NYSTAR Center for Environmental Quality Systems
- 4:30 pm **Open Discussion/planning for optimum experimental design**
- 5:30 pm Reception and Networking
- Evening Dinner and Tour on your own at astonishing Niagara Falls! (brochures available)

### **May 20, 2005 (Friday)**

---

- 8:00 am Hospitality coffee & breakfast snacks – provided by Niagara Falls Conference Center
- 8:30 am Particles in **Living Tissues**: Working in-vivo and in-vitro Models  
..Where we are ! ...Where we are going!.....

Friday Morning--- **Living Systems: Where we are .....Where we are going....**

Histopathology of Particle-instilled Rat Lungs

*Peter Nickerson* [Professor of Pathology, University at Buffalo]

Confocal Microscopy and Spectroscopy of Particles in Alveolar Macrophages

*Robert Baier* [Professor of Biomaterials, University at Buffalo]

Particulate Wear Debris from Radiation- Sterilized Implants

*Shah Jahan* [Professor of Physics and Director, IUCB University of Memphis site]

Atomic Force Microscope Investigations

*Sanjay Mishra* [Assistant Professor of Physics, University of Memphis]

Cellular Influences on Surface Oxides and Corrosion

*Joel Bumgardner* [Associate Professor of Biomedical Engineering, University of Memphis]

Bioinvasive Microbes, Medical Air Debris, and Optical Tweezer Studies

*Anne Meyer* [Research Associate Professor and Director, IUCB/University at Buffalo site]

- 10:30 am Hospitality Break – refreshments provided by Niagara Falls Conference Center
- 10:50 am Facilitated Discussion and **Life Form Completion**  
Goal: Focus and define priority projects for Center's 2005-2009 research agenda, seeking industry "buy-in" to a mutual-benefit, intensive, managed research program.
- 11:50 am Life Forms Collected
- 12/noon Lunch—Introduction of Potential 3<sup>rd</sup> Research Site at University of Illinois/Chicago  
*remarks by Farid Amirouche, Professor, UIC*
- 1:00 pm Feedback Session  
*moderated by Ed Zablocki*  
Process: **Structured**, open **discussion** based on "LIFE" form responses collected earlier in workshop.  
Goal: Continue development of 2005-2009 research agenda, **prioritizing** strawman **projects** and **timelines**.
- 2:00 pm Draft Gantt Chart Development  
*moderated by Anne Meyer*  
Process: Open discussion to revise/**refine Gantt Chart**, including initial investment targets  
Goal: Refine project prioritization; identify funding needs and opportunities
- 3:00 pm Summary Remarks and **Projected Action** Items  
*Robert Baier*
- 3:15 pm Adjourn Open Sessions:  
Follow-up executive (closed) meeting of NSF Representatives with IUCB Board  
*Alex Schwarzkopf, Edward Zablocki, Industry, Regulatory and Military Members*
- 4:45 pm Advisory Board instructions to university Center Directors and Faculty

# Registration Form

Please mail with payment to UB Foundation Activities #9385-526381  
P.O. Box 900, Buffalo, NY 14226-0900

**May 19 & 20, 2005**

(Thursday & Friday)

Niagara Falls Conference Center - Niagara Falls, NY

The Industry/University Center for Biosurfaces:

**Controlling Fine-Particle Risks  
to Our Bodies, Homes, Workplaces,  
Schools, and Clinics**

**Registration: \$95 per person**

Payable to: UB Foundation Activities #9385-526381  
P.O. Box 900  
Buffalo, NY 14226-0900

On-line registration (with credit card payment) will be available after April 18 at  
<http://www.buffalo.edu/faculty/research/iucb>

**Mr./Ms./Dr.**

\_\_\_\_\_  
Title (Circle One)                      First Name                      M.I.                      Last Name

\_\_\_\_\_  
First Name for Badge

\_\_\_\_\_  
Institution/Company

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

\_\_\_\_\_  
City    State                      Zip

\_\_\_\_\_  
e-mail address    phone number    fax number

**Credit Card Authorization via mail or FAX TO 716-645-3475**

Visa                       MasterCard  
 Discover                       American Express

\_\_\_\_\_  
Name on Credit Card

\_\_\_\_\_  
Credit Card Number

\_\_\_\_\_  
Expiration Date on Card

## Travel Arrangements: Going to Niagara Falls, NY and Accommodations

[Important note for your travel arrangements: Niagara Falls, Ontario is across the Niagara River on the U.S./Canada border. The meeting is in the U.S., in Niagara Falls, NY]

By car: Please see the Niagara Falls Conference Center website for driving directions:  
<http://www.niagarafalls-cc.com/Directions.html>

Directions are provided for driving from the Buffalo/Niagara International Airport;  
from the city of Buffalo; from Albany & areas east; from Cleveland (west);  
from Pittsburgh (southwest); and from Toronto (north).

By air: The closest airport is the Buffalo/Niagara International Airport (Buffalo, NY).  
Airlines flying into this airport are listed below.

AirTran	American Eagle	Continental; Continental Express	Comair/Delta Connection
Independence Air	Jet Blue	Northwest Airlines	Southwest Airlines
United Airlines; United Express	US Airways; US Airways Express		

### Ground Transportation:

Niagara Falls, NY is a 30-minute drive from the Buffalo/Niagara International Airport.

The cost of a taxi, one-way, is approximately \$45.

Rental car companies on site at the Buffalo/Niagara International Airport are listed below.

Alamo	Avis	Budget	Enterprise
Hertz	National		

Hotel Accommodations: Please contact the hotel of your choice, directly.

There are many mid-price hotels in the city of Niagara Falls. Hotels that are located close to the Niagara Falls Conference Center and that have a AAA Rating of 3 diamonds are listed below. A more complete listing of hotels is available on the Niagara Falls Conference Center website:

<http://www.niagarafalls-cc.com/Accommodations.html>

<b>Hotel; Street Address</b>	<b>Phone</b>	<b>Distance to Conference Center</b>
Comfort Inn – “The Pointe” 1 Prospect Point	800-284-6835 716-284-6835	2 blocks
Hampton Inn 501 Rainbow Boulevard	716-285-6666	2 blocks
Holiday Inn at the Falls 231 Third Street	716-282-2211	Across street
Holiday Inn Select 300 Third Street	716-285-3361 716-278-2622	100 yards

### **Questions?**

If you have questions about IUCB’s May 19/20, 2005 meeting, or if you want additional information about traveling in the Buffalo/Niagara region, please contact Bob Baier or Anne Meyer (University at Buffalo).

**phone:** 716-829-3560; [baier@buffalo.edu](mailto:baier@buffalo.edu) [aemeyer@buffalo.edu](mailto:aemeyer@buffalo.edu)