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
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
***Agenda as of 08apr2005***

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

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**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 I/UCRC 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

4:00 pm  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)

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**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!**

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**IUCB Contact for this Workshop:**  [baier@buffalo.edu]  phone:  716-829-3560
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 3rd Research Site at University of Illinois/Chicago  
**remarks by Farid Amiourche, 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

*IUCB Contact for this Workshop: baier@buffalo.edu phone: 716-829-3560*
# Registration Form

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

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

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http://www.buffalo.edu/faculty/research/iucb

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**Credit Card Authorization via mail or FAX TO 716-645-3475**  
___Visa  ___MasterCard  
___Discover  ___American Express  

Name on Credit Card

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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.

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<tr>
<th>Airline</th>
<th>American Eagle</th>
<th>Continental; Continental Express</th>
<th>Comair/Delta Connection</th>
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<tr>
<td>Independence Air</td>
<td>Jet Blue</td>
<td>Northwest Airlines</td>
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<td>United Airlines;</td>
<td>United Express</td>
<td>US Airways; US Airways Express</td>
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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.

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<th>Company</th>
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<td>Alamo</td>
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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

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