

# **UIA 33<sup>rd</sup> Annual Symposium - Schedule of Events**

.....program subject to change without notice

## **Monday Schedule, September 22<sup>nd</sup>, 2003**

7:30am – 6:30pm Exhibits open  
7:30am – 8:30am Registration, Continental Breakfast  
8:30am – 8:45am Opening Address, Ron Manna UIA President

### **Morning Session: Industrial Processes**

*Chairman: Jeff Frantz*

8:45am – 9:15am “Ultrasonic Drawing of Composite Superconducting Wire-Part 2”  
Karl Graff

9:15am – 9:45am “Modern PVDF Air Ultrasound Transducers” Mitch Thompson

10:00am Coffee Break/Exhibits/

10:30am – 11:00am “New High-drive Piezoelectric Material Suitable for Stack-Actuator  
Applications”  
De Liufu, William Shelley, Andreas Hadjicostas, Mike Phillips, Adam Morris

11:00am – 11:45am “Multi-resonant Broadband Langevin Transducer Design”  
George Bromfield

12:00pm – 1:30pm Lunch and Business Meeting

### **Afternoon Session: High Power Ultrasonics**

*Chairman: Tom Kirkland*

1:45pm – 2:15pm “Mechanics of Ultrasonic Sheet Metal Welding, Part 2”  
Edgar deVries, Karl Graff

2:15pm – 2:45pm “Characterizing Energy Exchanges from High to Low Frequency Modes in  
Ultrasonic Cutting Systems”  
Andrea Cardoni, Dr Margaret Lucas

2:45pm – 3:15pm Coffee Break/Exhibits

3:15pm – 3:45pm “Use of Soft Aluminum Crush Foils to Improve Efficiency in High-Power  
Sandwich-Type Piezoelectric Ultrasonic Transducers”  
Tom Kirkland

3:45pm – 4:00pm Industrial Applications/ High Power Forum Panel will answer questions on today’s papers.

6:00pm – 7:00pm Wine and Cheese Reception

## ***Tuesday Schedule, September 23<sup>rd</sup>, 2003***

7:30am – 5:00pm Exhibits open  
7:30am – 8:30am Registration, Continental Breakfast

### **Tuesday Morning Session: Sonochemistry**

*Chairman: Dr Kenneth Suslick, Co-chair: Mark Schafer*

8:45am – 9:15am “Ultrasonic Spray Method of Preparing Encapsulated nanomaterials.”  
Won Hyuk Suh, Don-Kyu Lee, Yuri Didenko, Kenneth S. Suslick

9:15am – 9:45am “Applications of Sonochemistry to the Syntheses of Materials”  
Kenneth Suslick

9:45am – 10:15am “Intense Single Bubble Sonoluminescence from Concentrated Sulfuric  
Acid Solutions”  
David J. Flannigan, Stephen D. Hopkins, and Kenneth S. Suslick.

10:15am – 10:45am Break/Exhibits

11:00am – 11:30am “Sonochemically produced Protein Microsphere-A novel Contrast Agent  
in Optical Coherence Tomography”  
Elizabeth M. Dibbern, Farah Jean-Jacques Toublan, Kenneth S. Suslick,  
Stephen A. Boppart, Tin Man Lee.

11:30am – 12:00pm “Sonochemical Modification of the Magnetic Properties of  
Superconductors”  
Tanya Prozorov, Ruslan Prozorov, Kenneth S. Suslick

12:00pm – 1:30pm Lunch. **Presentation of Graduate Award Winner**

2:00pm Meet for trip to Medical Facility  
Image Science Center of Department of Radiology

3:00pm Return from Medical Facility and meet for Piezotech tour.

5:00pm (approximately) Return to hotel

## **Wednesday Schedule, September 24<sup>th</sup>, 2003**

7:30am – 1:00pm Exhibits open (at exhibitors' convenience)

7:30am – 8:30am Registration, Continental Breakfast

### **Morning Session: Medical**

*Chairman: Naren Sanghvi, co-chair Mike Phillips*

8:30am - 9:00am "Theoretical Design of an Ultrasound Phased Array for Prostate Treatment"  
Leon Frizzel PhD, Joseph S. Tan, Gary M. Warren.

9:00am – 9:30am "Clinical Applications- State of the art Diagnostic Ultrasound"  
Jim Chapman

9:30 – 10:00 "The role of Cavitation in a Variety of Medical Ultrasound Applications"  
Dr. Larry Crum

10:00am – 10:30am Break

10:30am – 11:00am "Development and Initial Clinical testing of a New Generation Ultrasonic  
Osteotome" Ron Manna

11:00am – 11:30am "Non-invasive Prostate Diseases Treatment with High Intensity Focused  
Ultrasound" Narendra T. Sanghvi

11:30am Symposium closing remarks.

12:00 – 1:00 Bistro lunch