

NanoRisk Analysis: *Advancing the Science for Nanomaterial Risk Management*

An expert workshop bringing together researchers in risk analysis and nanotechnology to explore the role of risk analysis in nanomaterials and nanotechnology risk management.

September 10-11, 2008
Cafritz Conference Center (3rd floor of Marvin Center)
George Washington University, 800 21st Street NW, Washington, DC

Organized by the Society for Risk Analysis (SRA), Emerging Nanoscale Materials Specialty Group (EMNMS)

With thanks to our sponsors:

U.S. Environmental Protection Agency <i>National Center for Environmental Assessment, Washington, DC</i>	National Science Foundation <i>Decision, Risk, & Management Sciences Arlington, VA</i>	Johns Hopkins University <i>Institute for NanoBioTechnology Baltimore, MD</i>
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National Institute for Occupational Safety and Health <i>Washington, DC</i>	SRA and SRA <i>Emerging Nanoscale Materials Specialty Group</i> McLean, VA	U.S. Department of Defense <i>Strategic Environmental Research and Development Program, Arlington, VA</i>



The Emerging Nanoscale Materials Specialty Group of the Society for Risk Analysis





Risk Analysis: *Advancing the Science for Nanomaterial Risk Management*

Washington DC, September 10-11, 2008

Preliminary Program

Wednesday, September 10			
8:00-9:00	Continental breakfast		
9:00-9:15	Opening welcome	Jo Anne Shatkin	<i>SRA EMNMS (Chair); CLF Ventures</i>
9:15-9:40	Framing overview: Nanotechnology and risk assessment	Vicki Colvin	<i>Rice University Center for Biological and Environmental Nanotechnology</i>
9:40-10:30	Presentation and discussion of white papers		
	Paper 1: Uncertainty analysis and material characterization		
	Presenters:	Greg Paoli Jo Anne Shatkin	<i>Risk Sciences International</i> <i>SRA EMNMS; CLF Ventures</i>
	Discussants:	Shaun Clancy Carole LeBlanc Richard Pleus	<i>Evonik Industries</i> <i>U.S. Department of Defense</i> <i>Intertox/ANSI Nanotechnology Panel</i>
10:30-10:45	Break		
10:45-11:30	Paper 2: Exposure assessment		
	Presenters:	Andrew Maynard Linda Abbott	<i>Project on Emerging Nanotechnologies</i> <i>U.S. Department of Agriculture</i>
	Discussants:	J. Michael Davis David Dankovic Margaret MacDonell	<i>U.S. Environmental Protection Agency</i> <i>National Institute for Occupational Safety and Health</i> <i>Argonne National Laboratory</i>
11:45-12:30	Paper 3: Dose-response assessment		
	Presenters:	Nigel Walker Richard Canady	<i>National Toxicology Program</i> <i>U.S. Food & Drug Administration</i>
	Discussants:	Raymond David Tee Guidotti Bernadene Magnuson	<i>BASF Corporation</i> <i>George Washington University</i> <i>Cantox Health Sciences International</i>
12:30-1:30	Catered Lunch		
1:30-2:15	Paper 4: Risk characterization and risk-benefit tradeoffs		
	Presenters:	Richard Williams Kristen Kulinowski Garrick Louis	<i>Mercatus Center, George Mason University</i> <i>International Council on Nanotechnology</i> <i>University of Virginia</i>
	Discussants:	Roger Cooke Steffi Friedrichs Michael Holsapple	<i>Resources for the Future/Technische University Delft</i> <i>Nanotechnology Industry Association</i> <i>ILSI Health and Environmental Sciences Institute</i>

Wednesday, September 10 <i>(cont'd.)</i>			
2:15-3:00	Paper 5: Risk communication		
	Presenters:	Ann Bostrom	<i>University of Washington</i>
	Discussants:	Antje Grobe	<i>University of Stuttgart / Risk Dialogue Foundation</i>
		Jennifer Kuzma	<i>University of Minnesota</i>
		José Palma	<i>Universidade da Lisboa</i>
3:00-3:15	Break		
3:15-5:05	Panel: Data gaps and research needs for improving risk analysis of nanoscale materials and nanotechnology		
	Moderators:	Lorraine Sheremeta	<i>National Institute of Nanotechnology</i>
		Ronald White	<i>Johns Hopkins University</i>
	Panelists:	William Gullledge	<i>American Chemistry Council</i>
		Jennifer Kuzma	<i>University of Minnesota</i>
		Philippe Martin	<i>European Commission</i>
		Andrew Atkinson	<i>Environment Canada</i>
		Jeffery Morris	<i>U.S. Environmental Protection Agency</i>
		Nancy Rachman	<i>Grocery Manufacturers Association</i>
		Jennifer Sass	<i>National Resources Defense Council</i>
5:05-5:15	Closing remarks, Day 1	Jo Anne Shatkin	<i>SRA EMNMS; CLF Ventures</i>
5:30-7:00	Reception		
			<i>Co-sponsored by American Chemistry Council and SRA National Capital Area Chapter</i>
Thursday, September 11			
7:30-8:30	Continental breakfast		<i>Sponsored by NanoGram</i>
8:30-9:00	Charge for breakout sessions	Jo Anne Shatkin	<i>SRA EMNMS; CLF Ventures</i>
9:00-12:00	Concurrent breakout sessions on white papers: Do nanoscale material aspects/properties warrant new approaches?		
	Paper 1: Uncertainty analysis and material characterization	<i>Breakout Session Chair: Jo Anne Shatkin</i>	
	Paper 2: Exposure assessment	<i>Breakout Session Chair: Margaret MacDonell</i>	
	Paper 3: Dose-response assessment	<i>Breakout Session Chair: Richard Canady</i>	
	Paper 4: Risk characterization and risk-benefit tradeoffs	<i>Breakout Session Chair: Ronald White</i>	
	Paper 5: Risk communication	<i>Breakout Session Chair: Lorraine Sheremeta</i>	
10:30-10:45	Break		
12:30-1:30	Catered Lunch	Speaker: Philippe Martin	<i>Principal Administrator, European Commission, Health and Consumer Protection Directorate General, Public Health and Risk Assessment Directorate</i>
	Emerging themes, identified challenges, next steps		
1:30-2:45	Report-outs from breakout sessions		
2:45-3:00	Break		
3:00-4:00	Responses from white paper authors/presenters		
4:00-5:00	Open discussion	All	
5:00	Workshop close	Jo Anne Shatkin	<i>SRA EMNMS; CLF Ventures</i>

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*With thanks to our sponsors and all participants for their contributions to this workshop,
we look forward to joint progress in risk analysis for nanomaterials and nanotechnology risk management.*

Program Committee

Jo Anne Shatkin *(Program Chair; CLF Ventures and SRA EMNMS Chair)*

Ann Bradley *(Integral Consulting)*

Richard Canady *(U.S. Food & Drug Administration)*

Tee Guidotti *(George Washington University)*

Garrick Louis *(University of Virginia)*

Margaret MacDonell *(Argonne National Laboratory)*

Greg Paoli *(Risk Sciences International)*

Lori Sheremeta *(National Institute of Nanotechnology)*

Ronald White *(Johns Hopkins University)*

Richard Williams *(Mercatus Center, George Mason University)*

Lori Strong and David Drupa *(SRA Secretariat, Burk Inc.)*