

Advanced Personal Protective Equipment: Challenges in Protecting First Responders
First Annual Conference, Virginia Tech, October 16-18, 2005

SUNDAY (10/16/2005) WORKSHOP SESSIONS

Registration Desk open 7:30am-5:00pm

Date: 10/16/05	SCHEDULE	WORKSHOP 1	WORKSHOP 2	WORKSHOP 3
SUNDAY MORNING WORKSHOP SESSION	9:00am – 12:00pm <i>(15-minute break at 10:30am)</i>	Lt. Mark Sisson Incident Response to Terrorist Bombings <i>Christiansburg, Virginia Police Department</i>	NIOSH/NPPTL Staff What Responders Need to Know About NIOSH Approved Respirators <i>National Institute for Occupational Safety & Health/National Personal Protective Technology Laboratory (NIOSH/NPPTL)</i>	Donald E. Brown & Charles D. Robinson Using Agent-Based Simulation for Input Assessment of a Disaster Response <i>University of Virginia</i>
LUNCH	12:00 – 1:30 pm	LUNCH (“on your own”)		
SUNDAY AFTERNOON WORKSHOP SESSION	1:30 – 4:30 pm <i>(15-minute break at 3:00pm)</i>	Lt. Mark Sisson Incident Response to Terrorist Bombings <i>Christiansburg, Virginia Police Department</i>	NIOSH/NPPTL Staff What Responders Need to Know About NIOSH Approved Respirators <i>National Institute for Occupational Safety & Health/National Personal Protective Technology Laboratory (NIOSH/NPPTL)</i>	Donald E. Brown & Charles D. Robinson Using Agent-Based Simulation for Input Assessment of a Disaster Response <i>University of Virginia</i>
RECEPTION	6:30 – 8:30pm	OPENING RECEPTION – EXHIBIT HALL (open to all registrants)		

MONDAY (10/17/2005) CONFERENCE SCHEDULE

Registration Desk open 7:00am-5:00pm

Date: 10/17/05	SCHEDULE	ACTIVITY
OPENING PLENARY SESSION	8:00-9:00am	Conference Introduction & Plenary Speaker, The Honorable George W. Foresman, Asst. to the Governor for Commonwealth Preparedness, Office of Commonwealth Preparedness, State of VA; “Metamorphosis: The Transformation in First Response”
		LECTURE SESSIONS
	9:00 – 10:15am	Disaster Response Management (Moderator: Jeff Lancaster, Virginia Tech—25 minutes per speaker) 1) <u>National Firefighter Technology Resource Center</u> <i>Thomas J. Kennedy, Center for Technology Commercialization—Public Safety Technology Center</i> 2) <u>Protecting Public Safety and Rescue Personnel from Vaccine Preventable Hepatitis</u> <i>Gerald M. Dworkin, Lifesaving Resources, Inc.</i> 3) <u>Emergency Planning and Response in a University Environment</u> <i>Zack Adams, Virginia Tech—Environmental Health and Safety Services (EHSS)</i>
	10:15 – 10:45am	BREAK (Refreshments, Exhibit/Poster Hall)
MONDAY MORNING LECTURE SESSIONS	10:45am – 12:30pm	PPE Standards for Emergency Responders (Moderator: Bruce Teele, NFPA—25 minutes per speaker, except 30 minutes for opening talk) 1) <u>NFPA Fire and Emergency Services Protective Clothing and Equipment Standards Program</u> <i>Bruce Teele, National Fire Protection Association)</i> 2) <u>What Has Changed in the NFPA Hazardous Materials Protective Clothing Standards?</u> <i>James P. Zeigler, DuPont Personal Protection</i> 3) <u>NIOSH Best Practices Functional Safety Guidance: What is it and How Does it Apply to Personal Protective Equipment?</u> <i>Tom Fisher, Janet Flynt, Joe Waters, Centers for Disease Control—National Institute for Occupational Safety and Health (CDC/NIOSH), Safety Requirements, Inc., Underwriters Laboratories (UL)</i> 4) <u>A Practical Tool for Heat Stress Risk Assessment and Planning</u> <i>James P. Zeigler, DuPont Personal Protection</i>

LUNCH	12:30 – 2:00pm	LUNCHEON: Featured Speaker, Richard Duffy, Assistant to the General President, International Association of Fire Fighters (IAFF); “Challenges in Personal Protective Equipment (PPE) Performance”
MONDAY AFTERNOON LECTURE SESSION	2:00 to 3:40pm	<p>Human/PPE Interface: Issues and Solutions (Moderator: Jon Williams, NPPTL—25 minutes per speaker)</p> <ol style="list-style-type: none"> 1) <u>Physiological Changes Associated with Fire Exposure in Fire Fighters</u> <i>Jonathan Kaufman, Naval Air Systems Command Pax River</i> 2) <u>Ergonomics Protocol for Next Generation Structural Firefighter PPE Evaluation</u> <i>Steven L. Johnson, University of Arkansas</i> 3) <u>Developing PPE Systems: Salient Issues Faced by Small and Large Manufacturers</u> <i>Jeff A. Lancaster, John G. Casali, Atul Deshmukh, Virginia Tech</i> 4) <u>Dissipation of Oxygen from Outward Leak of Closed-Circuit Breathing Device</u> <i>Kathryn M. Butler, Rodney A. Bryant, John G. Kovac, NIST/NPPTL</i>
BREAK	3:40 – 4:00pm	BREAK (Refreshments, Exhibit/Poster Hall)
MONDAY AFTERNOON LECTURE SESSION	4:00 to 5:30pm	<p>Novel PPE Ensembles (Moderator: Ron Shaffer, NPPTL—30 minutes per speaker)</p> <ol style="list-style-type: none"> 1) <u>A Lightweight Self-Contained Breathing Apparatus (SCBA) w/Integrated Full Body Cooling</u> <i>Harold L. Gier, Supercritical Thermal Systems, Inc.</i> 2) <u>Advanced Chemical/Biological (CB) Protective Fire Fighter Turnout Suit</u> <i>Roger L. Barker, Anthony S. Deaton, North Carolina State University</i> 3) <u>Next Generation Structural Fire Fighting PPE with Chemical/Biological (CB) Protection</u> <i>Jeffrey O. Stull, Richard M. Duffy, International Personnel Protection, International Association of Fire Fighters (IAFF)</i>

TUESDAY (10/18/2005) CONFERENCE SCHEDULE

Registration Desk open 7:00am-8:00am

TUESDAY MORNING LECTURE SESSION	8:00 –10:00am	<p>Electronics in PPE (Moderator: John Casali, Virginia Tech—30 minutes per speaker)</p> <p>1) <u>Design of a Wearable Electronics Package for Firefighter Monitoring</u> <i>Alton G. Dunn, Todd Leonhardt, Michael Masterman, Extreme Endeavors</i></p> <p>2) <u>Embedded Personal Location for First Responders</u> <i>Scott Thayer, Carnegie Mellon University</i></p> <p>3) <u>First Responder Thermal Imaging Performance Evaluation Research at NIST</u> <i>Francine Amon, Anthony Hamins, Nelson Bryner, National Institute of Standards and Technology (NIST)</i></p> <p>4) <u>Use of Combination Hearing Protectors and Communication Earpieces for First Responders</u> <i>Jeremie Voix, Sonomax Hearing Healthcare, Inc.</i></p>
	10:00 – 10:30am	BREAK (Refreshments, Exhibit/Poster Hall)
	10:30am–12:00pm	<p>Test Methods for PPE (Moderator: Bill Haskell, NIOSH/NPPTL—30 minutes per speaker)</p> <p>1) <u>Thermal Protective Performance Test for Fire Fighter Protective Clothing</u> <i>Kuldeep R. Prasad, National Institute of Standards and Technology (NIST)</i></p> <p>2) <u>Development of a Test Method for Measuring Stored Energy in Fire Fighter Turnouts</u> <i>Anthony S. Deaton, Roger L. Barker, North Carolina State University</i></p> <p>3) <u>A Passive Aerosol Sampler for Evaluation of Personal Protective Ensembles</u> <i>William P. King, Pengfei Gao, NIOSH/NPPTL</i></p>
LUNCH	12:00 – 2:00pm	<p>CLOSING LUNCHEON: Featured Speaker, Philip Mattson, U.S. Department of Homeland Security, Science and Technology Directorate; “Standards for Homeland Security Science and Technology”</p>