

Programme

Time	Monday October 1, 2018-Afternoon
11:00-1:00	Registration, Lunch, Exhibits
	Keynotes and Invited Speakers <i>Session Chairs: Amanda Forster, Janet Ward</i>
1:00-1:10	Welcome and Practical Details
1:10-1:25	Dr. Stephanie Hooker, "Welcome from NIST"
1:25-1:40	Dr. Eric Wetzel, "Welcome from Department of Defense"
1:40-2:10	Keynote 1: Mr. Ross Guckert, Deputy Program Executive Officer- Soldier, United States Army
2:10-2:40	Keynote 2: Dr. Brian Holmes, National Intelligence University
2:40-3:15	Coffee break
	Session 1: Standards <i>Session Chairs: Kirk Rice, Phillippe Drapela</i>
3:15-3:45	Mark Greene, "The Next Revision of the NIJ Performance Standard for Ballistic Resistance of Body Armor, NIJ Standard 0101.07: Changes to Test Methods and Test Threats"
3:45-4:15	Thomas Payne, "Home Office Body Armour Standard (2017)- Scientific Rationale"
4:15-4:45	Michael Riley, "Practical Estimation of Uncertainty in Test Velocity Measurements"
4:45-5:15	Casandra Robinson, "Reducing Law Enforcement Officer Vulnerability by Closing the Gap in Body Armor Coverage and Fit"
5:15-5:45	Morgan Trexler, "Development of a Modular Load Sensing Headform"

Programme

Time	Tuesday, October 2, 2018- Morning
8:00-8:30	Registration and Continental Breakfast
	Session 2: Standards <i>Moderators: Hein Jager, Peter Matic</i>
8:30-9:00	James Thomas, "Pressure Sensing in Clay: Potential New Helmet Testing Metric for Backface Impact Severity"
9:00-9:30	Matthew Bevan, "Correlation between Round Impact Energy and Displaced Clay Volume for Three Classes of Armour"
9:30-10:00	Xin-lin Gao, "Constitutive Modeling of Ballistic Roma Plastilina No. 1 Clay"
10:00-10:15	Poster Intros: Cindy Bir, Aaron Forster, Ran Tao
10:15-10:45	Coffee break/Poster Session/Exhibits
	Session 3: Standards <i>Session Chairs: Hein Jager, Peter Matic</i>
10:45-11:15	Thomas Moynihan, "Ballistic and Non-Ballistic Helmet Requirements and their Effect on PE Helmet Weights"
11:15-11:45	Marjolein Van Der Jagtdeutekom, "Assessment of the secondary fragments from buried explosives"
11:45-12:15	Ian Crouch, "A review of ballistic testing methodologies for Hard Armour Plates in conjunction with, and without, Soft Armour Inserts"
12:15-12:30	Poster Intros: Ashok Bhatnagar, Subramaniam Rajan, Leigh Phoenix
12:30-1:30	Lunch/Exhibits

Programme

Tuesday, October 2, 2018- Afternoon	
Time	Session 4: Armour Materials <i>Session Chairs: Manon Bolduc Aaron Forster</i>
1:30-2:00	Kirk Rice, "Evaluation of Degradation Models for High Strength p-Aramid Fibers Used in Body Armour"
2:00-2:30	Naresh Bhatnagar, "Effect of matrix variation on the high strain rate performance of UHMWPE composite"
2:30-3:00	Mark Hazzard, "Finite Element Modelling of Impact on Composites made with Dyneema"
3:00-3:15	Poster Intros: Rob Kinsler, Riyadh Ratrout
3:15-3:45	Coffee break/Poster Session/Exhibits051307
	Session 5: Armour Materials <i>Session Chairs: Manon Bolduc, Aaron Forster</i>
3:45-4:15	A Ramezani, "Improvement of Ultra High Molecular Weight Polyethylene Armour Structures with Numerical Solutions"
4:15-4:45	Neelanchali Asija Bhalla, "Effect of STF packaging method on the impact resistance of UHMWPE ballistic composite"
4:45-5:15	Andrew Geltmacher, "Evaluation of Prior Dents on Ballistic Performance of High Density Polyethylene Specimens"
6:00-8:00	Reception at Westin, Washington, DC

Programme

Time	Wednesday, October 3- Morning
8:00-8:30	Registration and Continental Breakfast
	Session 6: Personal Armour/BABT <i>Session Chairs: Frederik Coghe, Adam Fournier</i>
8:30-9:00	Justin McKee, "Finite Element Simulation to Determine the Effect of Knit Architecture on Ballistic Response"
9:00-9:30	Timothy Zhang, "Indent Depth in the clay backing for soft and hard armour"
9:30-10:00	Karin Rafaels, "Can Clay Tell Us More Than Deformation"
10:00-10:15	Poster Intros: Thuy-tien Nguyen, Karin Rafaels, Angel Miranda-Vicario
10:15-10:45	Coffee break/Poster Session/Exhibits
	Session 7: Personal Armour/BABT <i>Session Chairs: Frederik Coghe, Adam Fournier</i>
10:45-11:15	Kathryn Loftis, "Estimating Obliquity of Ballistic impacts from Residual Damage to Hard Armour Plates"
11:15-11:45	Anan Azevedo, "Experimental assessment of the effect of damage on the ballistic resistance of ceramic inserts"
11:45-12:15	Jason Lo, "Carbon Nanotube Reinforced Alumina"
12:15-12:30	Poster Intros: Anthony Bracq, Peter Matic, Aris Makris,
12:30-1:30	Lunch/Exhibits

Programme

Wednesday, October 3- Afternoon	
Time	Session 8: Standards <i>Session Chairs: Thomas Payne, Michael Riley</i>
1:30-2:00	Manon Bolduc, "Tactical ballistic shields operational testing protocol definition"
2:00-2:30	Mark Begonia, "Influence of flexible neck on head kinematic response during military helmet impact testing"
2:30-3:00	Jane Barnes-Warden, "Determination of the Cause of the Differing Ballistic Performance of 9 mm DM11 Bullets from Two Manufacturers"
3:00-3:20	Poster Intros: Courtney Cox, Joe Andrist, Aris Makris, Daniel Park
3:20-3:45	Coffee break/Poster Session/Exhibits
	Session 9: Standards <i>Session Chairs: Thomas Payne, Michael Riley</i>
3:45-4:15	Erik Carton, "Role of inertia in armour ceramics"
4:15-4:45	Nicky Gridley, "Using Material Combinations to reduce the effective Risk of Penetration from High Velocity Rounds in a Helmet"
4:45-5:15	Mat Philippens, "Assessment of Behind Armour Blunt Trauma risk for a combat helmet by a combined experimental and numerical method"

Programme

Time	Thursday, October 4- Morning
8:00-8:30	Registration and Continental Breakfast
	Session 10: BABT <i>Session Chairs: Daniel Bourget, Karin Rafaels</i>
8:30-9:00	Cyril Robbe, "Sensitivity studies of the BTTR surrogate and comparison between NLW and BABT applications"
9:00-9:30	Anthony Bracq, "Behind armor blunt trauma assessment by means of experimental and numerical approaches"
9:30-10:00	Eluned Lewis, "The virtues of VIRTUS: Development and introduction of the new VIRTUS body armour, load carriage and helmet system for UK Armed Forces personnel"
10:00-10:15	Poster Intros: Gary Tan, Yungchia Chen, Nicolas Prat
10:15-10:45	Coffee break/Poster Session/Exhibits
	Session 11: Human Factors/Personal Armour <i>Session Chairs: Daniel Bourget, Karin Rafaels</i>
10:45-11:15	Leonard Lombardo, "Two Sample Statistical Interference for Ballistic Limit Testing of Body Armour"
11:15-11:45	James Davis, "An analysis of the fit and function of the UK OSPREY body armour system for female users on combat operations"
11:45-12:15	Christopher Eckersley, "A Real Pain in the Neck: Design Limits on Magnitude and Location of Head Supported Mass"
12:15-12:30	PASS 2020
12:30-1:30	Lunch/Exhibits

Programme

Thursday, October 4- Afternoon	
Time	Session 12: Human Factors/Injury <i>Session Chairs: Peter Knudsen, Dale Bass</i>
1:30-2:00	Aernout Oudenhuijzen, "Digital Head Avatars for combat helmet fit"
2:00-2:30	Jean-Phillippe Dionne, "Use of Hybrid III mannequins for a blast overpressure standard test methodology"
2:30-3:00	Joost Op'Teynde, "The Lessons of History: Helmets and Primary Blast"
3:00-3:30	Jean Phillippe Dionne, "Realistic bomb suit blunt impact protection vs. standards requirements"
3:30-4:00	Coffee break/Poster Session/Exhibits
	Session 13: Injury <i>Session Chairs: Peter Knudsen, Dale Bass</i>
4:00-4:30	Thomas O'Shaughnessy, "Influence of helmet system on blast overpressure transmission into the brain"
4:30-5:00	Vanessa Alphonse, "Effect of helmet and eyewear on headform kinematic and kinetic response to primary blast overpressure exposure"
5:00-5:30	Marina Seidl, "Investigations on projectile ricochet off body armour"
5:30-6:30	
6:30-8:30	Conference Banquet at Willard Intercontinental Hotel

Programme

Time	Friday October 5, 2018- Morning
8:00-8:55	Continental breakfast
8:55-9:00	Welcome
	Session 14: Vulnerability <i>Session Chairs: Michael Maffeo, Janet Ward</i>
9:00-9:30	Sofia Hedenstierna, "Methodology for small arms vulnerability analysis of protected and unprotected man"
9:30-10:00	Sheridan Liang, "A comparison of the thoraco-abdominal anatomical data of the Visible Human Project Female to three living females"
10:00-10:45	Coffee break/Poster Session/Exhibits
	Session 15: Vulnerability <i>Session Chairs: Michael Maffeo, Janet Ward</i>
10:45-11:15	Mathieu Philippens, "Combat Helmet Blunt Impact Performance and Test Method and Head Injury Criteria"
11:15-11:45	Christophe Marechal, "Development of physical and numerical head substitute used for wound ballistic assessment"
11:45-12:00	Wrap Up and Adjourn
12:00-1:00	Lunch to go