NDIA

2017
Joint Service Power Expo

Onsite Agenda

Exhibit Hall Open - May 2-3, 2017
Conference - May 2-4, 2017
Virginia Beach Convention Center,
Virginia Beach, VA

Monday, May 01				
0900-1600	Exhibitor Move-in & Exhibitor Registration			
0900-1600	Conference Attendee Registration Check-in			
Tuesday, May 02				
0800-1700	Conference Attendee & Exhibitor Registration (continues)			
0800-0900	***CONTINENTAL BREAKFAST - BALLROOM FOYER***			
0900-0915	Opening Ceremony and Welcome Remarks - Ballroom 3			
0915-1000	*Keynote Address #1 - COL Wayne A. Barker, USA, Program Manager Soldier Warrior*			
1000-1030	***COFFEE BREAK IN EXHIBIT HALL***			
1030-1115	*Keynote Address #2 -DoD Approaches for Future Battery Technologies:* *Mr. Sam Stuart Chief Engineer Naval Surface Warfare Center Crane Division (19510)*			
1115-1200	*Keynote Address #3 Overview of Marine Corps Systems Commands Efforts in Power and Energy:* *Mr. James Smith Product Manager, Expeditionary Power Systems (19486)*			
1200-1300	*Lunch with Speaker: NAATBatt International-James J. Greenberger, Executive Director*			
	Session 1: ***Batteries Testing - Quality - Safety***	**Session 2:** **Applications**	**Session 3:** **Fuel Cells**	
Session Chairs	*Mr. Mike Brundage, USARMY RDECOM CERDEC*	*Dr. Tom Adams, NSWC Crane Code JXMR*	*Mr. Shailesh Shah, U.S. Army RDECOM CERDEC*	
1300-1330	19298 Analysis of Released Gases from Large Cylindrical Li-ion Cells During Thermal Runaway: *Mr. Martin Gillijam, Norwegian Defence Research Establishment (FFI)*		19183 Lithium Ion Micro Particle Fuel Cells for Both High Power and High Energy: *Dr. William Nunnally, Applied Physical Electronics, LV*	
1330-1400	19301 Lithium Ion Battery Off-Gas Sensor for Battery Health and Safety Monitoring: *Mr. Nick Frank, Nexceris*	19441 U.S. Naval Academy "Waste to Watts" (W2W) Prototype Electrical Plant – A Small Footprint, Shore and Expeditionary Food Waste Stream to Electricity Production: Capability: *Mr. Samuel Morthland, Mayvin*	19286 Deployable Hydrogen Fuel Supply for Clean and Quiet Power: *Mr. Stephn Szymanski, Proton OnSite*	
1400-1430	19351 Lithium-ion Battery & BMS Design - Considerations for Safe Design: *Mr. Tom Hoeger, Spectrum Technology Group*		19323 Advanced Hydrogen Fuel Cell Systems for Unmanned Aerial Vehicle Propulsion and Power: *Dr. James Sisco, Protonex Technology Corporation*	
1430-1500	***COFFEE BREAK IN EXHIBIT HALL***			

TUESDAY, MAY 02 (CONTINUED)				
	Session 4: Batteries Testing - Quality - Safety	**Session 5: Applications**	**Session 6: Fuel Cells**	
Session Chairs	*Mr. Mike Brundage, USARMY RDECOM CERDEC*	*Mr. Chris Hacker, NSWC Crane Code JXMT*	*Mr. Shailesh Shah, U.S. Army RDECOM CERDEC*	
1500-1530	19383 Impact Resistant Battery Electrolytes: *Dr. Gabriel Veith, Oak Ridge National Laboratory*	19509 SiC Based Power Conversion/Conditioning System for an Air- borne DEW System: *CAPT Dennis Mahoney, USN (Ret.), RCT Systems*	19325 High Performance, Air-Independent Fuel Cell Power System for Undersea Platforms: *Dr. James Sisco, Protonex Technology Corporation*	
1530-1600	19491 Safety Aspects of Hydrogen / Oxygen Fuel Cells for Autonomous Under Water Vehicles: *Dr. Carsten Cremers, Fraunhofer Institute for Chemical Technology ICT*	19514 Power System Test Bed for Ground Vehicles: *Mr. Thomas Byrd, Lockheed Martin MFC*	19690 Ardica Alane - Aluminum Hydride Fuel for Wearable Power, UUV, and UAV Applications: *Mr. Daniel Braithwaite, Ardica Technologies*	
1600-1630	19507 Lithium Battery Safety Requirements for U.S. Naval Applications: *Ms. Julie Simmons, NSWC*	19405 Innovation and Rapid Prototyping to Extend Silent Watch Capability for Expeditionary and Special Operations Vehicles: *Mr. John Fassino, NSWC Crane*	19338 In-Field Fuel Consumption Reduction with Solar, Battery, Fuel Cell Hybrid Power System: *Mr. Matt Otis, Protonex*	
	Please Joint the Government Panel in Ballroom 3 to begin at 1645			
1630-1745	*Government Panel: How To Do Business with the Government* *Mr. Michael Brundage, U.S. Army RDECOM CERDEC CP&ID; Mr. Matt Hutchens, DLA HQ J34 R&D; Mr. Nathan S Whipple, USAF AFMC AFNWC/NIBE; Mr. Keith DeVries, U.S. Navy NSWC Crane*			
1745 -1915	***NETWORKING RECEPTION IN EXHIBIT HALL***			
Wednesday, May 3				
0700-0800	***CONTINENTAL BREAKFAST - BALLROOM FOYER***			
	Session 7: Batteries Applications	**Session 8: Applications**	**Session 9: Fuel Cells**	
Session Chairs	*Mr. Tom Byrd Lockheed Martin MFC*	*Dr. Ashley Ruth, U.S. Army RDECOM CERDEC*	*Mr. Pedro Passapera, U.S. Army RDECOM CERDEC*	
0800-0830	19361 Applying Modular Scalable UPS Technology to Tactical Field Applications: *Mr. Paul Madden, Energy Technologies, Inc.*	19505 Advanced Ballistic Technology Integrated into the Con- formal Wearable Battery: Providing Protection and Power in a Single System: *Mr. Jeff Helm, Inventus Power*	18353 Single Soldier Porta-ble, JP-8/JP-5/ DF2 Fueled 1 kWe SOFC Power Generator: *Mr. Subir Roychoudhury, Precision Combustion, Inc.*	
0830-0900	19381 CAM-7®/LTO Lithium-Ion Cells for Logistically Robust, Damage-Tolerant Batteries: *Dr. David Ofer, CAMX Power*	19483 USMC Update of: (1) Mobile Electric Hybrid Power Sources (MEHPS), (2) Renewable Energy and (3) Battery Efforts: *Ms. Jennifer Gibson, USMC, MCSC*	19360 Facilitating a Hydrogen Fuel Cell Infrastructure in Support of Tactical Micro Grids®: *Mr. Paul Madden, PE, Energy Technologies, Inc.*	

0900-0930	19479 Second Generation Lithium-Ion 6T Battery Development: *Mr. Chris Silkowski, Navitas Systems*	19677 Revealing Performance Loss Mechanisms in Lithium-ion Cells: *Dr. Daniel Abraham, Argonne National Laboratory*	19492 UltraCell Fuel Cell Systems for Unattended Operations: *Mr. Ru Chen, UltraCell LLC*	
0930-1000	***COFFEE BREAK IN EXHIBIT HALL***			
	Session 10: Batteries Applications	**Session 11: Battery Chargers and Power Supplies**	**Session 12: Lessons learned**	**Session 13: Miscellaneous**
Session Chairs	*Mr. Joshua Baer Lockheed Martin MFC*	*Mr. William Ridge NSWC Crane Code JXMN*	*Mr. Marc Gietter Crystal Clear Consulting*	
1000-1030	19503 NiZn Battery Evaluation for Submarine Application: *Mr. Alexander Potter, NSWC Crane & Mr. Scott Lichte, Enersys Energy*	19377 Overview of CERDEC Energy Harvesting Efforts and Biomechanics Correlations for Future Energy Harvesting Rucksack Designs: *Ms. Julienne Douglas, U.S. Army CERDEC*	19316 No Failure Rule: Soldier Power from a Sailor's Perspective: *Mr. Brian Bosley, Solar Stik, Inc.*	19647 SiC and GaN Devices in High-Performance Harsh-Environment Applications: From Hybrid Electric-Turbo Chargers to Cryogenic Power Systems *Dr. Troy Beechner, Mainstream Engineering Corporation*
1030-1100	19511 Examining the Replacement of Lead Acid Batteries with Lithium Titanate Batteries in Military Vehicles to Enhance Performance, Improve Energy Storage, and Increase Energy Flexibility for Deployed Units: *Ms. Alexander Harvey, GTRI*	19378 Characterization of Energy Harvesting Assault Pack: *Ms. Alexis Moy, U.S. Army CERDEC*	19319 Deployment Lessons Learned from an Operational Energy Advisor: *Mr. Joe Amadee, Solar Stik, Inc.*	19661 Co-Extrusion: Advanced Manufacturing for Batteries and other Energy Devices: *Dr. Ranjeet Rao, Palo Alto Research Center*
1100-1130	19477 Development of a Safe, Lightweight Li-ion 28V Battery for Navy Aircraft: *Dr. Trung Nguyen, EIC Labs*	19382 Characterization of Solder Gait to Aid the Design and Modeling of Wearable Lower Limb Energy Harvesters: *Dr. Nathan Sharpes, U.S. ARMY CERDEC CP&I*	19391 Portable Power: The Best Source for the Job: *Mr. Forrest Harrington, Protonex Technology Corp.*	19662 Embedded Fiber-Optic Sensing for Accurate Internal Monitoring of Cell State in Advanced Battery Management Systems Dr. Peter Kiesel, PARC
1130-1300	***LUNCH WITH SPEAKER:*** *(Energy Informed Operations (EIO) Mr. Michael Gonzalez, Project Lead, Energy Informed Operations (EIO), Command Power and Integration Directorate (CP&I)*			
	Session 14: Batteries Applications	**Session 15: Battery Chargers and Power Supplies**	**Session 16: Smart Grids-Microgrids**	**Session 17: Miscellaneous**
Session Chairs	*Mr. Keith DeVries, NSWC Crane Code JXMN*	*Ms. Rebecca Morris, ACI Technologies*	*Ms. Sue Waggoner, NSWC Crane Code JXML*	*Mr. William Ridge, NSWC Crane Code JXMN*
1300-1330	19502 Powering the Strategic Deterrents: *Mr. Joseph Neukam, NSWC Crane*		19508 Expeditionary Operations – Powering a Forward Operating Base with a Smart Micro-Grid: *Mr. Matt Baker, Fairlead Integrated / Earl Energy*	19336 Enhanced Battery Management through Diagnostics and Prognostics: *Dr. Eric Dufek, Idaho National Laboratory*

1330-1400	19251 Vehicle-to-Grid Testing and Demonstration: *Mr. Dan Markiewicz, Concurrent Technologies Corp.*	19324 Power Quality in a Shipboard or Tactical Grid: *Mr. Walt MacGill, NOVA Power Solutions, Inc.*	19194 The Building is the Microgrid: *Mr. Jeffrey Anderson, Caterpillar Defense & Federal Products*	19296 Trends in Power Density - More Power Less Space: *Mr. S. Arnie Johnson, L3 Combat Propulsion Systems*
1400-1430	19465 Advanced CFx Cells for Military Applications: *Mr. Zeiad Muntasser, Engineered Power*		19330 Enabling a Total Microgrid Solution for Ex-peditionary Applications: *Mr. Max Dorflinger and Mr. Joe Birchak, LexTM3*	19418 USMC Vehicle Power Proto-Type Program Brief: *Mr. Badruddin Pirani, NSWC Crane*
1430-1500	***COFFEE BREAK IN EXHIBIT HALL***			
	Session 18: Power Management	**Session 19: Generators**	**Session 20: Smart Grids- Microgrids**	**Session 21: Miscellaneous**
Session Chairs	*Dr. Robert Hamlin Hamlen Enterprises, LLC*	*Dr. Clifford Cook, U.S. Army RDECOM CERDEC*	*Mr. Joshua Baer, Lockheed Martin MFC*	*Mr. Mark Tisher, NSWC Crane Code JXML*
1500-1530	19309 Ruck Deployable UPS For Hybridization: *Mr. Phil Robinson, Protonex*	19333 Lightweight, Soldier Portable, Multi- fuel, IC Engine Generators: *Mr. Subir Roychoudhury, Precision Combustion, Inc.*	19484 USMC Intelligent Power Management System (IPMS) Program: *CW05 Ralph Smith, USMC, MCSC*	19501 SCAPES Program Overview: *Mr. Keith DeVries, NSWC Crane*
1530-1600	19310 Power Manager Primer: *Mr. Phil Robinson, Protonex*	19350 Lightweight Multi-Fueled Transitional Power Generators: *Mr. Jason Targoff, Novatio Engineering, Inc.*	19513 Marine Corps Leverages the Microgrid Design Toolkit (MDT) for Renewable Energy Decision Support: *Dr. Nadine Miner, Sandia National Laboratories*	19264 Advances in Low Cost Manufacturing with Reclaimed Electrode Materials: *Mr. Steven Sloop, OnTo Technology, LLC*
1600-1630	19356 Blue Planet Energy Management System (EMS): *Mr. Steve Campbell, Blue Planet Buildings, Ltd.*	19369 Next Generation Air Force Flight Line Equipment: *Mr. David Moyer, Concurrent Technologies Corporation*	19656 Smart Energy Harvesting for Every Warfighter *Mr. Richard Sckilke, Nishati, Inc.*	
~ Evening on Own - Enjoy Virginia Beach ~				

Thursday, May 04

0700-0800	***CONTINENTAL BREAKFAST - SUITE 1 FOYER, UPPER LEVEL***			
	Session 22: Power Management	**Session 23: Emerging Technologies**	**Session 24: Manufacturing Innovations**	
Session Chair	*Dr Robert Hamlin Hamlen Enterprises, LLC*	*Mr. Michael Eskra, Eskra Technical Products (ETP)*	*Mr. Alex Potter, NSWC Crane Code JXMT*	
0800-0830	19395 The iPOWER Energy-Focused Soldier Mission Planning App: *Dr. Richard Stroman, U.S. Naval Research Laboratory*	19451 3-Dimensional Nonwoven and Textile Substrates Associated with Iridium Oxide Nanoparticles for the Improvement of Specific Capacitance: *Ms. Kris Senecal, US Arny RDECOM, NSRDEC*	19365 Manufacturing Improvements for DLA Lithium Radio Batteries: *Mr. Joe Roskowski, TurnAround Factor*	
0830-0900	19443 Agile, Flexible Build Block Power: *Dr. Joel Fechter, Iris Technology Corporation*	19478 Cathodes for High Rate, Long Cycle Life Lithium Sulfur Batteries: *Dr. Michael Wixom, Navitas Systems*	19452 Engineering Materials for the Next Generation Energy Storage: *Dr. James Trevey, Forge Nano*	

0900-0930	19506 Merlin Handheld Radio Power Adapter: The Power Management Solution for the Dismounted Soldier: *Mr. Matthew Lappin, Iris Technology Corporation*	19480 Advance Si Anode for High Energy Lithium Ion Cells: *Dr. Pu Zhang, Navitas Systems*	19469 Low Cost, High Speed, Automated Laser Electrode Cutter: *Mr. Stephen Cordova, ADA Technologies, Inc.*	
0930-1000	***COFFEE BREAK - SUITE 1 FOYER, UPPER LEVEL***			
	Session 25: High Power Capacitors	**Session 26: Emerging Technologies**	**Session 27: Manufacturing Innovations**	
Session Chairs	*Ms. Yakira Howarth, U.S. Army RDECOM CERDEC*	*Mr. Sam Stuart, NSWC Crane Code JXML*	*MS. Paula Ralston, Eskra Technical Products (ETP)*	
1000-1030	19265 Structural All-Solid-State Mediator Supercapacitor: *Dr. Xiangyang Zhou, University of Miami*	19349 Portable Special Purpose Nuclear Reactor (2MW) for Remote Operating Bases and Microgrids: *Dr. Krishnan Ananth, Idaho National Laboratory*	19538 Solvent Free Additive Manufacturing Process for Lithium Batteries: *Mr. Michael Eskra, Eskra Technical Products (ETP)*	
1030-1100	19327 Ultracapacitor Lifetime Estimation: Testing the Real-Life Impact of ESR, Nominal Operating Voltage and Capacitance: *Mr. Egert Valmra, Skeleton Technologies*	19357 Nuclear batteries for Extreme Tempepatures and Long-Life Applications: *Dr. Tom Adams, NSWC Crane*	19539 Creating a Lead Acid Battery Which Competes with Lithium Ion: *Mr. Michael Eskra, Eskra Technical Products (ETP)*	
1100-1130	19458 Development of High Performance Supercapacitors in Cylindrical Cell Format: *Dr. Saemin Choi, Inmatech, Inc.*	19408 Experimental and Modeling Derivation of Critical Parameters of Betavoltaics: *Mr. Darrell Cheu, Purdue University*	19344 Li/(CF)x Battery for Extremely Low Temperature and High Power Applications: *Dr. Ryo Tamaki, EnerSys*	
1130	***~ 2017 JOINT SERVICE POWER EXPO ADJOURNS ~***			