

**FY20 DEPSCoR Winners**

<b>Institution of Higher Education (IHE)</b>	<b>IHE Location (State)</b>	<b>Principal Investigator</b>	<b>Project Title</b>
University of Alabama - Huntsville	AL	Dr. Robert Frederick	DURIP: Characterizing Reaction Dynamics and Decomposition Pathways of New Solid Fuels for SCRAMJET and RAMJET Combustors
University of Arizona	AZ	Dr. Linran Fan	Stimulated Brillouin Scattering with III-Nitride Integrated Photonics
University of Arizona	AZ	Dr. Oliver Monti	Time reversal symmetry breaking in quantum materials without magnetism
University of Arkansas	AR	Dr. David Huitink	Combinatorial Reliability Risk in Power Electronics: Embedded Assessment in Automated Design
Wesleyan University	CT	Dr. Michelle Personick	DURIP: Spectroscopic Characterization of the Surface of Multifunctional Bimetallic and Plasmonic Catalysts
University of Hawai'i Manoa	HI	Dr. Rui Sun	A Comprehensive Chemical Dynamics Study on the Decomposition Mechanism of Nitramine-/Nitro-Amine-Based Energetic Materials and Their Cocrystal in the Condensed Phase
University of Notre Dame	IN	Dr. Robert Rosenbaum	Using Meta-plasticity to Discover the Biophysics of Learning
Purdue University	IN	Dr. Yaroslav Rosokha	Dynamics of beliefs, power, and inequality in within- and between-group cooperation and conflict.
Iowa State University of Science and Technology	IA	Dr. Valery Levitas	DURIP: System for Materials Study under High Pressure, Strain Rates, and Large Deformations
University of Iowa	IA	Dr. David Miles	Constellation Ready Magnetometer
Iowa State University	IA	Dr. Thomas Ward	Development of Novel Molecule-Based Measurement Techniques to Characterize Aero-Thermo-Elastic Interactions of Super-/Hyper-sonic Flows and Solid Surfaces
University of Kentucky	KY	Dr. Luis Sanchez Giraldo	Measures of information via representation learning
University of Louisiana at Lafayette	LA	Dr. Natalia Sidorovskaia	Glider's Deepwater Hurricane Reconnaissance in the Gulf of Mexico
University of Minnesota, Twin Cities	MN	Dr. Ryan Caverly	On-the-Fly Flight Test Maneuver Optimization and Nonlinear Modeling of Hypersonic Systems
Missouri University of Science and Technology	MO	Dr. Xiangyang Dong	Additive Manufacturing and Multi-physical Study of 3D Continuous Carbon Fiber Structural Powered Composites
Washington University in Saint Louis	MO	Dr. John Meacham	Understanding the role of microbial extracellular electron uptake in human pathogens using multi-modal microfluidics
University of Nevada, Reno	NV	Dr. Fang Jiang	A neurally-inspired approach to enhance perception and performance in novel visual environments via a generative network enabled Virtual Reality
University of North Dakota	ND	Dr. Deniz Cakir	Discovering New Atomically Laminated Transition Metal Borides with Diverse Properties
University of Tulsa	OK	Dr. William LePage	A new surface engineering approach for fatigue-resistant AM microlattices
Brown University	RI	Dr. Srinath Sridhar	Interactive Spatial Object Search Engine
University of Memphis	TN	Dr. R. Driggers	DURIP: Multi-Drone, Multi-Sensor Concept Research