Department of Energy Announces $37 Million to Build Research Capacity in Historically Underrepresented Institutions

Annoucement Number: *DE-FOA-0002931 FY 2023 Funding for Accelerated, Inclusive Research (FAIR)* *List Posted:* *8/7/2023*

Selection for award negotiations is not a commitment by DOE to issue an award or provide funding.

Principal Investigator	Title	Institution	City	State	9-digit zip code
Erdelyi, Bela	Intra-Beam Scattering and Beam Cooling for Circular Modes	Northern Illinois University	DeKalb	IL	60115-2864
Mustapha, Brahim	Intra-Beam Scattering and Beam Cooling for Circular Modes	Argonne National Laboratory	Lemont	IL	60439-4803
Kottos, Tsampikos	Enhanced Radiated Power via Engineered Eigenbasis Collapse	Wesleyan University	Middletown	CT	06459-6459
Sun, Xian-He	DTIO: Enabling Computational Storage using Data-Tasks and Asynchronous I/O	Illinois Institute of Technology	Chicago	IL	60616-3717
Franck Cappello, Bogdan Nicolae	DTIO: Enabling Computational Storage using Data-Tasks and Asynchronous I/O	Argonne National Laboratory	Lemont	IL	60439-4803
Wei, Lu	Entanglement Estimation for Quantum Computing: Theory, Algorithms, and NISQ-level Verification	Texas Tech University	Lubbock	TX	79409-1035
James Osborne	Entanglement Estimation for Quantum Computing: Theory, Algorithms, and NISQ-level Verification	Argonne National Laboratory	Lemont	IL	60439-4803
Kim, Changho	Machine-Learning-Based Surrogate Modeling for Stochastic Multiscale Simulation Methodology	The Regents of the University of California	Merced	CA	95343-5001
Andrew Nonaka	Machine-Learning-Based Surrogate Modeling for Stochastic Multiscale Simulation Methodology	Lawrence Berkeley National Laboratory	Berkeley	CA	94720-8099
Moore, Shirley	Performance and Scalability of Distributed Deep Learning	The University of Texas at El Paso	El Paso	TX	79968-0697
Joshua Suetterlein	Machine-Learning-Based Surrogate Modeling for Stochastic Multiscale Simulation Methodology	Pacific Northwest National Laboratory	Richland	WA	99354-1793
Saravanan, Vijayalakshmi	An Efficient Storage-Driven Machine Learning Model for Performance in the Era of Multimodal Scientific Data	University of South Dakota	Vermillion	SD	57069-2307
Khaled Ibraham	An Efficient Storage-Driven Machine Learning Model for Performance in the Era of Multimodal Scientific Data	Lawrence Berkeley National Laboratory	Berkeley	CA	94720-8099
Thompson, Michael	Developing temperature-jump X-ray crystallography to study dynamic biosynthetic enzymes at synchrotrons and XFELs	University of California	Merced	CA	95343-5001
Cohen, Aina	Developing temperature-jump X-ray crystallography to study dynamic biosynthetic enzymes at synchrotrons and XFELs	SLAC National Accelerator Laboratory	Stanford	CA	94305-7015
Dong, Tian	Evaluating water, sediment, and nutrient transport rates and accumulation patterns in alluvial ridge basins between the abandoned river channels (Resacas) of the Rio Grande Delta	University of Texas Rio Grande Valley	Edinburg	TX	78539-2909
Schwenk, Jon	Evaluating water, sediment, and nutrient transport rates and accumulation patterns in alluvial ridge basins between the abandoned river channels (Resacas) of the Rio Grande Delta	Los Alamos National Laboratory	Los Alamos	NM	87545-0600
Muthan, Bagyalakshmi	Understanding the Role of Duckweed Transcription Factor in Triacylglycerol Metabolism and Abiotic Stress Tolerance in Plants	West Virginia State University Research & Development Corp.	Institute	WV	25112-1000
Xu, Changcheng	Understanding the Role of Duckweed Transcription Factor in Triacylglycerol Metabolism and Abiotic Stress Tolerance in Plants	Brookhaven National Laboratory	Upton	NY	11973-5000
Xiong, Hui (Claire)	Emerging Properties through Controlled Phase Transformations for High Energy Sodium Ion Batteries	Boise State University	Boise	ID	83725-0001
Yang, Wanli	Emerging Properties through Controlled Phase Transformations for High Energy Sodium Ion Batteries	Lawrence Berkeley National Laboratory	Berkeley	CA	94720-8099
Cooley, Joya	Understanding the role of chemical pressure on thermal expansion tunability in earth-abundant materials	California State University Fullerton	Fullerton	CA	92831-3137
Stone, Kevin	Understanding the role of chemical pressure on thermal expansion tunability in earth-abundant materials	SLAC National Accelerator Laboratory	Stanford	CA	94305-7015
Liu, Yangyang	Designing Photoresponsive Nanosponges for Efficient and Reversible Capture and Release of Carbon Dioxide	California State University Los Angeles	Los Angeles	CA	90032-4226
Qi, Long	Designing Photoresponsive Nanosponges for Efficient and Reversible Capture and Release of Carbon Dioxide	Ames Laboratory	Ames	IA	50011-2416
Kattel, Shyam	Electrochemical nitrate reduction to ammonia on single-atom alloy catalysts	Florida A&M University	Tallahassee	FL	32307-3100
Thirunavukkuarasu, Komalavalli	Optoelectronic Properties of Artificially Tailored Quantum Materials	Florida A&M University	Tallahassee	FL	32307-3100

Wei, Pan	Optoelectronic Properties of Artificially Tailored Quantum Materials	Sandia National Laboratories - California	Livermore	CA	94550
Galib, Mirza	Rational Design of Concentrated Electrolytes for Beyond Li-ion Batteries with Machine Learning and Quantum Calculations	Howard University	Washington	DC	20059-0001
Elsaidi, Sameh	Controlling Densification-Induced Structural transformations in Metal-Organic Frameworks for Size-Selective Separations	Illinois Institute of Technology	Chicago	IL	60616-3717
Xu, Wenqian	Controlling Densification-Induced Structural transformations in Metal-Organic Frameworks for Size-Selective Separations	Argonne National Laboratory	Lemont	IL	60439-4803
Ozturk, Birol	Quantum Properties and Physics of Defects in 2D Transition Metal Dichalcogenides	Morgan State University	Baltimore	MD	21251-0001
Chowdhury, Sanchari	Light Mediated Synthesis of Single Atom and Single Atom Alloy Catalysts	New Mexico Institute of Mining and Technology	Socorro	NM	87801-4681
Padmanabhan, Prashant	Light Mediated Synthesis of Single Atom and Single Atom Alloy Catalysts	Los Alamos National Laboratory	Los Alamos	NM	87545-0600
Brown-Xu, Samantha	Photocatalyzed Degradation and Chemical Recycling of Polymers Using Visible Light Photo-oxidation Catalysts	Northeastern Illinois University	Chicago	IL	60625-4699
Chen, Lin	Photocatalyzed Degradation and Chemical Recycling of Polymers Using Visible Light Photo-oxidation Catalysts	Argonne National Laboratory	Lemont	IL	60439-4803
Burnap, Robert	Empowering research and engineering of biological CO2 uptake mechanisms by integrating molecular structure, genomic diversity, bioinformatics, and metabolomics	Oklahoma State University	Stillwater	OK	74078-1030
Yu, Jianping	Empowering research and engineering of biological CO2 uptake mechanisms by integrating molecular structure, genomic diversity, bioinformatics, and metabolomics	National Renewable Energy Laboratory	Golden	CO	80401-3111
Gao, Yunxiang	Solution-based Synthesis of Structurally Well-defined Carbon Nanobuds and Their Energy Applications	Prairie View A&M University	Prairie View	TX	77446-7446
Liu, Di-Jia	Solution-based Synthesis of Structurally Well-defined Carbon Nanobuds and Their Energy Applications	Argonne National Laboratory	Lemont	IL	60439-4803
Biddinger, Elizabeth	Structural influences in electrochemical dehydrogenation of liquid organic hydrogen carriers	City University of New York, CUNY - City College	New York	NY	10031-9107
Gutierrez-Tinoco, Oliver	Structural influences in electrochemical dehydrogenation of liquid organic hydrogen carriers	Pacific Northwest National Laboratory	Richland	WA	99354-1793
Bracco, Jacquelyn	Inhibition of Impurity Adsorption and Nucleation at Mineral-Water Interfaces via Chelator Adsorption	City University of New York, CUNY - Queens College	Flushing	NY	11367-1575
Lee, Sang Soo	Inhibition of Impurity Adsorption and Nucleation at Mineral-Water Interfaces via Chelator Adsorption	Argonne National Laboratory	Lemont	IL	60439-4803
Gu, Jing	Manipulate Spin Selectivity via Chiral Molecules in Solar Energy Conversion	San Diego State University Research Foundation	San Diego	CA	92182-1931
Beard, Matthew	Manipulate Spin Selectivity via Chiral Molecules in Solar Energy Conversion	National Renewable Energy Laboratory	Golden	CO	80401-3111
Adelstein, Nicole	Atomic to mesoscale models of phase transitions for energy materials	San Francisco State University	San Francisco	CA	94132-1722
Wan, Liwen	Atomic to mesoscale models of phase transitions for energy materials	Lawrence Livermore National Laboratory	Livermore	CA	94550-0808
Lipke, David	Development of Containerless HTXRD Technique for In Situ Materials Characterization in Extreme Environments	University of Missouri (Rolla) (Mo. Univ of Sci and Tech)	Rolla	MO	65409-6506
Benmore, Chris	Development of Containerless HTXRD Technique for In Situ Materials Characterization in Extreme Environments	Argonne National Laboratory	Lemont	IL	60439-4803
Peng, Zhonghua	Intrinsically Porous Polyoxometalate-Based Frameworks for Critical Metal Recovery	University of Missouri, Kansas City	Kansas City	MO	64110-2446
Thallapally, Praveen	Intrinsically Porous Polyoxometalate-Based Frameworks for Critical Metal Recovery	Pacific Northwest National Laboratory	Richland	WA	99354-1793
Shi, Liang	Advancing Atomistic Understanding of Electronic Energy Transfer	University of California	Merced	CA	95343-5001
Johnson, Britta	Advancing Atomistic Understanding of Electronic Energy Transfer	Pacific Northwest National Laboratory	Richland	WA	99354-1793
Ye, Tao	Super-resolution 3D Atomic Force Microscopy of Electrochemical Interfaces	University of California	Merced	CA	95343-5001
Prendergast, David	Super-resolution 3D Atomic Force Microscopy of Electrochemical Interfaces	Lawrence Berkeley National Laboratory	Berkeley	CA	94720-8099
Bozhko, Dmytro	Macroscopic quantum states in antiferromagnets: Bose-Einstein condensation of anti-ferro-magnons	University of Colorado, Colorado Springs	Colorado Springs	CO	80918-3733
Novosad, Valentine	Macroscopic quantum states in antiferromagnets: Bose-Einstein condensation of anti-ferro-magnons	Argonne National Laboratory	Lemont	IL	60439-4803

Xu, Fang	Atomic Level Structure-activity Relationship of Small Molecule Activation on Single Atom Catalysts supported on 2D Boron-based Materials	The University of Texas at San Antonio	San Antonio	TX	78249-0603
Stacchiola, Darío J.	Atomic Level Structure-activity Relationship of Small Molecule Activation on Single Atom Catalysts supported on 2D Boron-based Materials	Brookhaven National Laboratory	Upton	NY	11973-5000
Khanal, Aaditya	Probing CO2 Dissolution and Mineralization in Deep Saline Aquifers with Experiment and Simulation	The University of Texas at Tyler	Tyler	TX	75799-0001
Green, Jason	Data-driven learning of dissipation from microscopy of chemically active materials	University of Massachusetts Boston	Boston	MA	02125-3300
Schluchter, Wendy	Understanding phycoerythrin biogenesis: Structural and biochemical studies of bilin lyase-isomerase MpeV	University of New Orleans	New Orleans	LA	70148-0001
Barisik, Murat	First principles multiphase modeling of mesoscale gas transport in porous reactive systems	University of Tennessee, Chattanooga	Chattanooga	TN	37403-2504
Sankaran, Ramanan	First principles multiphase modeling of mesoscale gas transport in porous reactive systems	Oak Ridge National Laboratory	Oak Ridge	TN	37831-6118
Ramsurn, Hema	Understanding the Mechanisms of Robust Coatings for Extreme Temperature Composites	University of Tulsa	Tulsa	OK	74104-3126
Ryder, Matthew	Understanding the Mechanisms of Robust Coatings for Extreme Temperature Composites	Oak Ridge National Laboratory	Oak Ridge	TN	37831-6118
Rahmani, Armin	Emergent phases, transport, and nonequilibrium dynamics of interacting Majorana fermions	Western Washington University	Bellingham	WA	98225-5946
Zhu, Jianxin	Emergent phases, transport, and nonequilibrium dynamics of interacting Majorana fermions	Los Alamos National Laboratory	Los Alamos	NM	87545-0600
Lowe, Calvin	Conceptual and engineering design and construction of a Hampton University located stellarator	Hampton University	Hampton	VA	23668-0108
Pablant, Novimir	Conceptual and engineering design and construction of a Hampton University located stellarator	Princeton Plasma Physics Laboratory	Princeton	NJ	08543-0451
Alfred, Marcus	Scale Up of Normalizing Flows for Likelihood-free Inference with Fusion Simulations	Howard University	Washington	DC	20059-0001
Churchill, Michael	Scale Up of Normalizing Flows for Likelihood-free Inference with Fusion Simulations	Princeton Plasma Physics Laboratory	Princeton	NJ	08543-0451
Pribram-Jones, Aurora	Localized electrons, ionization potentials, and non-thermal states in warm dense matter from the thermal projection-based initial maximum overlap method	University of California	Merced	CA	95343-5001
Graziani, Frank	Localized electrons, ionization potentials, and non-thermal states in warm dense matter from the thermal projection-based initial maximum overlap method	Lawrence Livermore National Laboratory	Livermore	CA	94550-0808
Kelso, Christopher	Estimating the Ultimate Sensitivity of Dwarf Galaxies to the Indirect Detection of Dark Matter	University of North Florida	Jacksonville	FL	32224-7699
Hooper, Daniel	Estimating the Ultimate Sensitivity of Dwarf Galaxies to the Indirect Detection of Dark Matter	Fermi National Accelerator Laboratory	Batavia	IL	60510-5011
Mei, Dongming	Demonstration of Home-Grown Crystals for Future SuperCDMS Experiment (DHGC-FSE)	University of South Dakota	Vermillion	SD	57069-2307
Ponce, Francisco	Demonstration of Home-Grown Crystals for Future SuperCDMS Experiment (DHGC-FSE)	Pacific Northwest National Laboratory	Richland	WA	99354-1793
Battat, James	Wellesley / UTA Training And Growth in Underrepresented Groups	Wellesley College	Wellesley	MA	02481-8203
Lazar, Alina	Investigating Large-Scale Models for High-Energy Physics Pattern Recognition	Youngstown State University	Youngstown	OH	44555-0001
Calafiura, Paolo	Investigating Large-Scale Models for High-Energy Physics Pattern Recognition	Lawrence Berkeley National Laboratory	Berkeley	CA	94720-8099
Saito, Shun*	Accelerating Dark Energy Science from Emission-Line Galaxy surveys and participation of women and underrepresented minority groups in Midwest	Missouri University of Science and Technology	Rolla	MO	65409-1060
Hearin, Andrew*	Accelerating Dark Energy Science from Emission-Line Galaxy surveys and participation of women and underrepresented minority groups in Midwest	Argonne National Laboratory	Lemont	IL	60439-4803
Deri, Melissa	Increasing Access to Radioisotopes by Advancing Radiochemical Training Capabilities	City University of New York, CUNY - Lehman College	Bronx	NY	10468-1527
Sanders, Vanessa	Increasing Access to Radioisotopes by Advancing Radiochemical Training Capabilities	Brookhaven National Laboratory	Upton	NY	11973-5000
Meles, Abraham	Bringing Experimental High-Energy Nuclear Physics to Navajo Nation	Navajo Technical University	Crownpoint	NM	87313-0849
da Silva, Cesar	Bringing Experimental High-Energy Nuclear Physics to Navajo Nation	Los Alamos National Laboratory	Los Alamos	NM	87545-0600
Adhikari, Prabal	Towards Simulating Quantum Chromodynamics with External Electromagnetic Fields on Noisy Quantum Computers	St Olaf College	Northfield	MN	55057-1574
Lin, Meifeng	Towards Simulating Quantum Chromodynamics with External Electromagnetic Fields on Noisy Quantum Computers	Brookhaven National Laboratory	Upton	NY	11973-5000

Sievert, Matthew	Precision Jet Drift and Energy Loss: An NMSU / LANL Partnership	New Mexico State University (NMSU, Las Cruces)	Las Cruces	NM	88003-8002
Vitev, Ivan	Precision Jet Drift and Energy Loss: An NMSU / LANL Partnership	Los Alamos National Laboratory	Los Alamos	NM	87545-0600
Jones, Ben	An Evaporatively Cooled Beamline Technology for the Project 8 Atomic Tritium Source	The University of Texas at Arlington	Arlington	TX	76019-0145
VanDevender, Brent	An Evaporatively Cooled Beamline Technology for the Project 8 Atomic Tritium Source	Pacific Northwest National Laboratory	Richland	WA	99354-1793
Jandel, Marian	Enhancing Nuclear Data Measurements at the UMASS Lowell Research Reactor	University of Massachusetts Lowell	Lowell	MA	01854-3692
Ota, Shuya	Enhancing Nuclear Data Measurements at the UMASS Lowell Research Reactor	Brookhaven National Laboratory	Upton	NY	11973-5000