

# Department of Energy Announces \$36 Million to Support Energy-Relevant Research in Underrepresented Regions of America

Announcement Number: DE-FOA-0003201

List Posted: 8/22/2024

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

Principal Investigator	Title	Institution	City	State	ZIP Code
Alsaleem, Fadi	UMNS: Ultrasonic MEMS Neuromorphic Sensor for Additive Manufacturing In-Process Monitoring	University of Nebraska-Lincoln	Lincoln	NE	68583-0861
Altuntas, Emine	Probing the Interplay of Strong and Weak Forces with Molecular Parity Violation	University of Oklahoma	Norman	OK	73072-0000
Anthony, John	Molecular Control of Spin-Entangled Triplet Excitons from Singlet Fission	University of Kentucky	Lexington	KY	40526-0001
Bai, Xiaojian	Neutron Scattering and Quantitative Modeling of Hybridized Quasi-particles in Quantum Magnets	Louisiana State University and A&M College	Baton Rouge	LA	70803-0001
Beckingham, Lauren	Impact of variations in molecular driving forces at substrate-mineral interfaces on mineral precipitation in porous media	Auburn University, Auburn, AL	Auburn	AL	36832-5888
Bui, Ngoc	Bio-inspired Membranes for the Recovery of Critical Materials from Complex Mixtures based on Metallopeptides	University of Oklahoma	Norman	OK	73019-9705
Cohen, Myra	Dependable, Explainable, Reusable, AI-Driven Computational Biology	Iowa State University of Science and Technology	Ames	IA	50011-2105
Fierro, Andrew	Pressure dependent light transport through sheaths	New Mexico Institute of Mining and Technology	Socorro	NM	87801-4680
Hatzenpichler, Roland	Ecophysiology of non-Euryarchaeotal methanogens and their impact on carbon cycling	Montana State University	Bozeman	MT	59717-2470
Hu, Chongze	Computational-Guided and Data-Driven Discovery of High-Entropy Two-Dimensional MXenes	The University of Alabama	Tuscaloosa	AL	35487-0104
Jenkins Smith, Hank	Establishing a Socio-Technical Observatory for Public Feedback into the Development of Fusion Energy Technologies	University of Oklahoma	Norman	OK	73019-9705
Korsch, Wolfgang	Fundamental Spin Physics	University of Kentucky	Lexington	KY	40526-0001
Kung, Patrick	Enhancing Quantum Networking Research Capabilities in Alabama: Integrating RF Photonic Controls for High-Frequency Cryogenic Links in GHz-THz Bands	The University of Alabama	Tuscaloosa	AL	35487-0104
Lawler, Keith	Probing Perovskite Chirality with the Orbital Angular Momentum of X-rays	University of Nevada, Las Vegas	Las Vegas	NV	89154-1055
Lewis, Peter	Hawaii-Berkeley Lab Partnership for a Gas Detector System With Ideal Capabilities	University of Hawaii	Honolulu	HI	96822-2234
Li, Gonghu	Understanding Charge Separation Across Heterojunctions for Solar Fuel Production on Single Atom Catalysts	University of New Hampshire	Durham	NH	03824-2620
Li, Siqi	3D-Simulation and validation for a multi-functional university-scale light source in IR-THz wavelengths	University of Hawaii	Honolulu	HI	96822-2234
Li, Wenzhen	Capture and Electrocatalytic Conversion of CO <sub>2</sub> to Multicarbon Chemicals	Iowa State University of Science and Technology	Ames	IA	50011-2105
Lu, Yongfeng	Target Fabrication and Pre-implosion Diagnostics for Laser Inertial Confinement Fusion Research Using Two-Photon Polymerization and Cryogenic Coherent Anti-Stokes Raman Scattering Microscopy	University of Nebraska-Lincoln	Lincoln	NE	68583-0861
Miller, Scott	Identification of the Chlorophyll d synthase: Implications for far-red light photosynthesis by crops	University of Montana	Missoula	MT	59812-0003
Mount, Brianna	LUX-ZEPLIN Data Analysis and Low Background Assay for Future Rare-Search Experiments	Black Hills State University	Spearfish	SD	57799-9504
Ovchinnikov, Dmitry	Engineering high-temperature magnetic quantum phases in atomically thin materials	University of Kansas	Lawrence	KS	66045-7552

Paillard, Charles	Characterizing and Controlling Domain walls in Emerging silicon-Compatible ferroelectrics (CODEC)	University of Arkansas	Fayetteville	AR	72701-3214
Polyakov, Igor	Role of Atlantification and Pacification in shaping regional freshwater and heat budgets of the Arctic Ocean from observations and modeling	University of Alaska Fairbanks	Fairbanks	AK	99775-7880
Prescod-Weinstein, Chanda	Cosmic Phenomenology of Ultralight Dark Matter Theories	University of New Hampshire	Durham	NH	03824-2620
Roy, Sougata	DREAM-TEAM: Developing a Robust Ecosystem for Additive Manufacturing of Tungsten for Extreme Applications and Management	Iowa State University of Science and Technology	Ames	IA	50011-2105
Santiesteban, Nathaly	Bridging Medium-and High-Energy Nuclear Physics Through Advancement of the Electron-Ion Collider (EIC)	University of New Hampshire	Durham	NH	03824-2620
Shafarman, William	Group-V Doping of CdTe-Alloy Polycrystalline and Single Crystal Thin Films	University Of Delaware	Newark	DE	19716-0099
Shi, Jian	Carbon-Negative Critical Metal Recovery from E-Wastes through Responsible Design of Solvents	University of Kentucky	Lexington	KY	40526-0001
Song, Xiaoqing	Advancing High Voltage Wide Bandgap Power Module Packaging for Transportation Electrification	University of Arkansas	Fayetteville	AR	72701-3214
Stoellinger, Michael	High-Fidelity Computational Tools for Arrays of Large Modern Aeroelastic Wind Turbines	University of Wyoming	Laramie	WY	82071-2000
Stuecker, Malte	Future Warming Pattern Constraints from Internal Climate Variability	University of Hawaii	Honolulu	HI	96822-2234
Toor, Fatima	Sub-Terahertz to Terahertz Metamaterial Coatings for Blackbody Radiation Shielding of Quantum Circuitry	University of Iowa	Iowa City	IA	52242-1320
Vaidya, Varun	Understanding Hot and Cold Nuclear Matter with Effective Field Theories	University of South Dakota	Vermillion	SD	57069-2390
Wang, Jinhui	Memristor Enabled Neuromorphic System with Robust Immunity to Non-ideal Property	University of South Alabama	Mobile	AL	26506-6845
Wang, Yuxin	Microwave Catalytic Recycle Propylene from Polypropylene Plastic Waste	West Virginia University	Morgantown	WV	26506-6845
Yu, Lingyu 'Lucy'	laser induced wideband ultrasonic guided waves modeling and machine learning driven interpretation	University of South Carolina	Columbia	SC	29208-0001
Zheng, Weiqing	Modulated Electrification of Chemical Manufacturing	University Of Delaware	Newark	DE	19716-0099
Zhou, Shan	Precise Polymeric Patch Design on Anisotropic Nanorings to Realize Controlled Orientation in Self-Assembled Photonic Metamaterials	South Dakota School of Mines & Technology	Rapid City	SD	57701-3901