

Emerging Research & Researchers

NASA-related Projects at Louisiana Universities

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Louisiana Space Grant Consortium / Louisiana NASA EPSCoR

RAP projects

NASA EPSCoR

Current Research Award Program (RAP) Projects (2013-present) Funded via the NASA EPSCoR Research Infrastructure Development Grant Program

Project Title	Institution	P-I Name	Email Address	Phone #	NASA Center
Multi-scale forensic examination of geopolymer binder subjected to elevated temperature beneath the flame trench	LaTech	Erez N. Allouche	allouche@latech.edu	318-257-2852	NASA SSC NASA GRC
A Generalized Finite-Difference-Time-Domain Method for Solving the Complex Ginzburg-Landau Equation	LaTech	Weizhong Dai	dai@coes.latech.edu	318-257-3301	NASA GSFC
Computational Investigation of Mechanical Behavior and Plasticity Mechanisms of CFRP Composite Panels during Impact and Perforation	ULL	Ahmed Khattab	khattab@louisiana@edu	337-482-6971	NASA MSFC
Alpha/Beta Voltaics with Poly(3-hexylthiophene) Conjugated Polymer	LaTech	Sandra Zivanovic	sz@latech.edu	318-257-5145	NASA GRC
Development of Carbon Nanotube Based Multifunctional Electrochemical Probes for Single Cell Analysis	LaTech	Prabhu U. Arumugam	parumug@latech.edu	318-257-5211	NASA ARC
System for Classification of 3D Dynamic Hand Gestures	LaTech	Rastko Selmic	rselmic@latech.edu	318-257-4641	NASA GSFC
Quantum Sensing Enhancements for Astronomical Observation	LaTech	Scott Shepard	sshepard@latech.edu	318-257-3083	NASA GSFC

REA Awards

Space Grant

Current/Recent Research Enhancement Award (REA) Program Projects (2012-present) Funded via the NASA Space Grant College & Fellowship Program Grant 2010-15 Cycle

Year	Principal Investigator	Institution	REA Project Title
2014	Michael L. Cherry	LSU	Terrestrial Gamma Flashes at Ground Level
2014	Ahmed Khattab	ULL	Microstructure-Property Relationships in Aluminum Foam Sandwich Panels during Impact and Perforation
2014	Ying (Jane) Wang	LSU	Novel High-Capacity Cathode Materials for Superior Lithium-Ion Batteries in Space Systems
2013	Daniel D. Gang	ULL	Development and Evaluation of Nano-Scaled Mesoporous Sorbents for Space Environmental Control and Life Support System (ECLSS)
2013	Patrick L. Garrity	Loyola	Increased Power Generation Efficiency through Thermoelectric Metamaterials
2013	Adarsh Radadia	LaTech	Characterizing the Bio-Graphene Interface Using Biomolecular Field Effect Transistors
2013	Kaisa E. Young	Nicholls	Legacy of the Spitzer Space Telescope: Star Formation in Perseus
2013	Ning Zhang	McNeese	Numerical investigation of Flapping Wing Aerodynamics
2012	Adam Baran	LSU	Frozen Propellants: Fundamental Study of End Oriented Consumption by Direct Contact Melting
2012	William J. Emblom	ULL	Hydroforming microscale features in 304 stainless steel sheet for fuel cell and microfluidic applications
2012	Emad Habib	ULL	Physical Analysis of Systematic Uncertainties in Satellite-Based Rainfall Estimates and Development of Algorithm Enhancements
2012	Qinghao Meng	SUBR	A Novel Impact-tolerant 3D Biomimetic Fabric Composite for Aerospace Structures
2012	Ingmar Schoegl	LSU	Heat Recirculating Combustion for Aerospace Applications

R & D Capabilities and Expertise

Louisiana researchers have capabilities that span a broad range:

From Aeronautics and Astrophysics To Earth Science To Materials (of all types) To Power Systems To Propulsion To Structures To Thermal Etc.

And these are applicable to a wide range of NASA needs.

Moreover, University researchers must have a broad expertise in their general area(s) of concentration. This allows them to apply their expertise to problems/solicitations from NASA, or DOE, or DOD or NSF (plus other agencies). University researchers tend to NOT be concentrated in 'niche areas' as is often the case at national laboratories.

Thus, we need to develop the partnerships (which we have been discussing) between NASA researchers and Louisiana researchers who have the general capabilities to aid in a given technology area.

The LaSPACE/EPSCoR office can supply contact information as needed.