

FUNDED RESEARCH GRANTS (PARTIAL LIST)

Principal investigator or co-principal investigator of more than 50 major research grants from various funding agencies such as NSF, DHS, ARO, Navy, AFOSR, USGS, MDOT, ERDC, CARUP, D.C. Government, and other agencies. This information is summarized below.

Funding Agency	No. of Grants	Remarks
NSF	7	4 Research Grants; 2 Research Equipment; one Research/Education
Army Research Office	4	3 Research Grants; one Research/Education Equipment
Air Force Office of Scientific Research	1	Research
ERDC	9	8 Research, one Education
Navy	1	Research
DHS	2	Research
DOD	2	1 Research, one education
U.S.G.S.	5	Research
MDOT	11	7 Research, one Equipment, 4 Education
D.C. Government	1	Research
Army Corps. of Engineers	2	Research
CARUP	2	Research
BCD	1	Research
UDC	2	Research
U.S. DOT	4	Two Research, two Education
NASA	1	Research
MS Board	2	Education
Total	59	

NSF Grants

Title: MRI: Acquisition of a Multi-Beam SEM/FIB for Multidisciplinary Materials Study and Training

PI: Li, Lin, Co-PI: F. Amini, W. Walters, A. Hamme

Founding Agency: National Science Foundation,

Amount: \$559,660.00 (FUNDED)

Supported by: National Science Foundation,

Dates: October 2015-September 2018

Title: CSEM Enhancement Program
PI: F. Amini; Co-PI: Loretta Moore
Total Amount: \$ 343,700.00 (FUNDED)
Supported by: National Science Foundation
Dates: 2001-2007

Title: ESEM for Soil Liquefaction Research
PI: F. Amini
Total Amount: \$ 192,900.00 (FUNDED)
Supported by: National Science Foundation
Dates: 2002-2004

Title: Behavior of Stratified Sand-Gravel Composites under Seismic Liquefaction Conditions
PI: F. Amini
Total Amount: \$ 157,723.00 (FUNDED)
Supported by: National Science Foundation (NSF)
Dates: 1996 to 1999

Title: Research Equipment for Soil Dynamics Testing and Study of the Effect of Time on Dynamic Soil Properties. This grant provided both salary (about 60K) and equipment funds (60K) (Indirect cost: 22K)
PI: F. Amini
Total Amount: \$ 120,000.00 (FUNDED)
Supported by: National Science Foundation (NSF)
Dates: 1992 to 1995

Title: Active Control of Structures Instrumented with Optical Fiber Sensors under Earthquake Loading. (Simulation Studies as well as Experiments on Shake Table, Neural Networks Application in Identification and Control)
PI: J. C. S. Yang, G. Z. Qi, F. Amini, and J. Sirkus
Total Amount: \$ 229,425.00 (FUNDED)
Supported by: National Science Foundation (NSF)
Dates: 1992-1995

Title: Identification and Active Control of Structures under Earthquake Loading (Neural Networks Application in Identification and Control)
PI: J. C. S. Yang, G. Z. Qi, and F. Amini
Total Amount: \$ 50,000.00 (FUNDED)
Supported by: National Science Foundation (NSF)
Dates: 1991-1992

Other Grants

Title: Numerical Water Quality and Contaminant Modeling
PI: F. Amini
Total Amount: \$ 280,000.00 (FUNDED)

Supported by: DOD

Dates: October 1, 2016- November 30, 2018

Title: Enhancement of Surveying Engineering Laboratory to Support ABET-EAC Accredited Civil Engineering Program at Jackson State University

PI: F. Amini

Total Amount: \$ 25,000.00

Supported by: MS Board for Licensure for Professional Engineers & Surveyors

Dates: 2016

Title: Enhancement of Hydraulics Engineering Laboratory to Support ABET-EAC Accredited Civil Engineering Program at Jackson State University

PI: H. Das and F. Amini

Total Amount: \$ 27,168.00

Supported by: MS Board for Licensure for Professional Engineers & Surveyors

Dates: 2016

Title: Innovative Levee Strengthening and Testing under Full-Scale Overtopping Conditions

PI: F. Amini; Co-PI: Dr. Lin Li

Total Amount: \$ 1,000,000.00.00 (FUNDED)

Supported by: Department of Homeland Security (DHS)

Dates: 2009-2012

Title: High Performance Turf Reinforcement Mat Strengthened Levee under Combined wave and Storm Surge Turbulent Overtopping Conditions

PI: F. Amini; Co-PI: Dr. Lin Li

Total Amount: \$ 450,000.00 (FUNDED)

Supported by: Department of Homeland Security (DHS)

Dates: 2011-2012

Title: Summer Transportation Institute

PI: L. Li; Co-PI: F. Amini

Total Amount: \$ 58,000.00 (FUNDED)

Supported by: Mississippi Department of Transportation (MDOT)

Dates: 2016

Title: Summer Transportation Institute

PI: L. Li; Co-PI: F. Amini

Total Amount: \$ 58,000.00 (FUNDED)

Supported by: Mississippi Department of Transportation (MDOT)

Dates: 2015

Title: Long-Term Field Studies and Monitoring of Paving Fabric Systems to Reduce Reflective Cracking

PI: F. Amini

Total Amount: \$ 218,000.00 (FUNDED)

Supported by: Mississippi Department of Transportation (MDOT)
Dates: 2005 - 2016

Title: Summer Transportation Institute
PI: L. Li; Co-PI: F. Amini
Total Amount: \$ 58,000.00 (FUNDED)
Supported by: Mississippi Department of Transportation (MDOT)
Dates: 2014

Title: Numerical Water Quality and Contaminant Modeling (L-9)
PI: F. Amini
Total Amount: \$ 63,000.00 (FUNDED)
Supported by: DOD
Dates: 2013-2014

Title: Hyper-Velocity Impact Resistant and Self Healing Nano Materials in Space Applications
PI: F. Amini (Peter Sukanek; Al-Ostaz, & F. Amini, et al.)
Total Amount: \$ 20,000.00 (FUNDED)
Supported by: NASA
Dates: 2013-2016

Title: Numerical Water Quality and Contaminant Modeling
PI: F. Amini
Total Amount: \$ 120,000.00 (FUNDED)
Supported by: DOD
Dates: 2012-2014

Title: Summer Transportation Institute
PI: L. Li; Co-PI: F. Amini
Total Amount: \$ 58,000.00 (FUNDED)
Supported by: Mississippi Department of Transportation (MDOT)
Dates: 2013

Title: Assessment of Pavement Infrastructure
PI: F. Wang; Co-PI: F. Amini; L. Li
Total Amount: \$ 712,000.00 (FUNDED)
Supported by: US Department of Transportation
Dates: 2010-2012

Title: Summer Internship Program
PI: Y. Li, Co-PI: PI: F. Amini
Total Amount: \$ 2,000,000.00 (FUNDED)
Supported by: DOD/ERDC
Dates: 2012-2017

Title: Cost-Effectiveness Study of the Pavement Warranty Program in Mississippi

PI: Qi, Y., Co-PI: F. Wang & F. Amini
Total Amount: \$ 130,000.00 (FUNDED)
Supported by: Mississippi Department of Transportation (MDOT)
Dates: 2011-2013

Title: Summer Transportation Institute
PI: L. Li; Co-PI: F. Amini
Total Amount: \$ 58,000.00 (FUNDED)
Supported by: Mississippi Department of Transportation (MDOT)
Dates: 2012

Title: Evaluation of MDOT's Distress Thresholds for Maintained Pavement Projects
PI: F. Wang; Co-PI: F. Amini
Total Amount: \$ 120,000.00 (FUNDED)
Supported by: Mississippi Department of Transportation (MDOT)
Dates: 2009-2011

Title: Comparative Slope Stability Analysis for Hurricane Protection Systems Using the Method of Planes and the Method of Slices
PI: F. Amini
Total Amount: \$ 119,119.00 (FUNDED)
Supported by: Burns Cooley Dennis Inc.
Dates: 2007-2008

Title: Lake Chicot Display Center
PI: F. Amini; Co-PI: L. Li
Total Amount: \$ 12,425.00 (FUNDED)
Supported by: U.S. Army Corps. of Engineers – Vicksburg District
Dates: 2007-2008

Title: Protective Technology Research
Principal Investigator: F. Amini
Supported by: U.S. Army Engineering, Research, and Development Center (ERDC)
Total Amount: \$463,000.00 (FUNDED)
Dates: 2003-2006

Title: Scientific Visualization of Soil Liquefaction for the Design and Maintenance of Seismic Dams
PI: F. Amini; Co-PI: S. Rahman
Supported by: Engineering, Research, and Development Center (ERDC)
Total Amount: \$ 39,700.00 (FUNDED)
Dates: 2003-2004

Title: Research on Potential Applications of the Static and Dynamic Cone Penetrometers in MDOT Pavement Design and Construction
PI: F. Amini

Total Amount: \$ 35,700.00 (FUNDED)
Supported by: Mississippi Department of Transportation (MDOT)
Dates: 2002-2003

Title: Research on Applications of Paving Fabrics to Reduce Reflective Cracking
PI: F. Amini
Total Amount: \$ 37,000.00 (FUNDED)
Supported by: Mississippi Department of Transportation (MDOT)
Dates: 2003-2004

Title: Acquisition of Superpave for CE Program enhancement at JSU
PI: F. Amini
Total Amount: \$ 125,000.00 (FUNDED)
Supported by: Mississippi Department of Transportation (MDOT)
Dates: 2002-2003

Title: Computer-Based Unix Laboratory
PI: M. Manzoul, F. Amini, and S. White
Total Amount: \$ 138,000.00 (FUNDED)
Supported by: Army Research Office (ARO)
Dates: 2002-2003

Title: Liquefaction at Depth
PI: F. Amini
Supported by: Stennis Space Center, DOD-Navy
Total Amount: \$100,000.00 (FUNDED)
Dates: 2001-2002

Title: Microstructure Features of Particulate Materials Using ESEM
PI: F. Amini
Supported by: Army Research Office (ARO)
Total Amount: \$237,000.00 (FUNDED)
Dates: 1998 to 2000

Title: Microstructure Features and Dynamic Macro-Behavior of Particulate Materials
PI: F. Amini
Supported by: Air Force Office of Scientific Research
Total Amount: \$ 49,570.00 (FUNDED)
Date: 1997

Title: Behavior of Stratified Undrained Contractive Silty Sands Under Seismic Liquefaction Conditions
PI: F. Amini
Total Amount: \$ 120,000.00 (FUNDED)
Supported by: Army Research Office (ARO)
Dates: 1993 to 1995

Title: Liquefaction of Layered Silty Sands

PI: F. Amini

Total Amount: \$ 28,698.00 (FUNDED)

Supported by: Army Research Office; Dates: 1994-1995

Title: Performance Tests for Model Sand Filters

PI: F. Amini and F. F. M. Chang

Total Amount: \$ 10,000.00 (FUNDED)

Supported by: D.C. Government

Date: 1993

Title: An Experimental Study of the Optimal Thickness of Sand Layer in a Sand Filter Water Quality Structure

PI: F. Amini and F. F. M. Chang

Total Amount: \$ 31,733.00 (FUNDED)

Supported by: U.S. Geological Survey, Dept. of Interior

Dates: 1993-1994

Title: Definition of Groundwater Flow in the Water Table Aquifer of the Downtown Washington D.C. Area

PI: F. Amini & G. Matheson

Total Amount: \$ 42,185.00 (FUNDED)

Supported by: U.S. Geological Survey, Dept. of Interior

Dates: 1994-1995

Title: Definition of Groundwater Flow and Water Quality in the Water Table Aquifer of the Southern Anacostia River Basin

PI: F. Amini & G. Matheson

Total Amount: \$ 20,526.00 (FUNDED)

Supported by: U.S. Geological Survey, Dept. of Interior

Dates: 1993-1994

Title: Definition of Groundwater Flow and Water Quality in the Water Table Aquifer of the Southern Anacostia River Basin

PI: F. Amini;

Total Amount: \$ 20,526.00 (FUNDED)

Supported by: U.S. Geological Survey, Dept. of Interior;

Dates: 1993-1994

Title: A New Procedure for Estimation of Soil Parameters for Use in Slope Stability Analysis in Northern Virginia

PI: F. Amini

Total Amount: \$ 5,120.00 (FUNDED)

Supported by: Center for Applied Research and Urban Policy (CARUP),

Date: 1990

Title: Dynamic Soil Behavior under Impulse Loading Conditions Considering Nonlinear Effects

PI: F. Amini

Total Amount: \$ 4,495.00 (FUNDED)

Supported by: Academic Affairs, Peer Reviewed Faculty Senate Research, UDC, Date: 1991

Title: Dynamic Soil Behavior under Impulse Loading Conditions

PI: F. Amini

Total Amount: \$ 5,000.00 (FUNDED)

Supported by: Academic Affairs, Peer Reviewed Faculty Senate Research, UDC

Date: 1990

Title: Transportation Research and Education Enhancement Program through Graduate Students
Support at JSU

PI: F. Amini

Total Amount: \$ 16,348.00 (FUNDED)

Supported by: FTA

Dates: 2007-2008

Title: Enhancement of JSU Transportation Engineering through Financial Assistance to students

PI: F. Amini

Total Amount: \$ 25,800.00 (FUNDED)

Supported by: FTA

Dates: 2007-2008

Title: Enhanced K-12 Outreach for Metropolitan Transportation Education

PI: L. Li; Co-PI: F. Amini

Total Amount: \$ 10,159.00 (FUNDED)

Supported by: FTA

Dates: 2007-2008

Title: Summer Transportation Institute

PI: I. Simone; Co-PI: F. Wang & F. Amini

Total Amount: \$ 10,000.00 (FUNDED)

Supported by: Mississippi Department of Transportation (MDOT)

Dates: Summer 2011