

**Department of Civil & Environmental Engineering**  
**Selected Research Grants of the Last Five Years (Partial List)**

**Dr. Farshad Amini**

PI or Co-PI of more than 50 major research grants.

- Title: Investigating the Effect of Active Flipped Learning in STEM Education; PI: L. Li, Co-PI: Yin, T. Kewmbe, T, & F. Amini; National Science Foundation; Amount: \$350,000; 2016-2019
- Title: MRI: Acquisition of a Multi-Beam SEM/FIB for Multidisciplinary Materials Study and Training; NSF; PI: Li, Lin, Co-PI: F. Amini, W. Walters, A. Hamme; NSF; October 2015-September 2018; Amount: \$559,660.00.
- Title: MRI: Acquisition of a Multi-Beam SEM/FIB for Multidisciplinary Materials Study and Training; NSF; PI: Li, Lin, Co-PI: F. Amini, W. Walters, A. Hamme; NSF; October 2015-September 2018; Amount: \$559,660.00.
- Title: Enhancement of Surveying Engineering Laboratory to Support ABET-EAC Accredited Civil Engineering Program at Jackson State University; PI: F. Amini; 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; Amount: \$ 27,168.00; Supported by: MS Board for Licensure for Professional Engineers & Surveyors; Dates: 2016
- Numerical Water Quality and Contaminant Modeling, Engineer, Research, and Development Center, 2012-2014. PI: F. Amini; Amount: \$ 280,000.00.
- 2017-2022 Students Summer Research Internship Program, Engineer, Research, and Development Center, 2012-2017. PI: Y. Li, Co-PI: PI: F. Amini; Amount: \$ 2,000,000.
- Innovative Levee Strengthening and Testing under Full-Scale Overtopping Conditions, Department of Homeland Security (DHS), 2009-2012. PI: F. Amini; Co-PI: L. Li, Amount: \$ 1,000,000.
- High Performance Turf Reinforcement Mat Strengthened Levee under Combined wave and Storm Surge Turbulent Overtopping Conditions, DHS, 2011-2012. PI: F. Amini, Co-PI: Dr. L. Li; Amount: \$ 450,000.
- Long-Term Field Studies and Monitoring of Paving Fabric Systems to Reduce Reflective Cracking; Mississippi Department of Transportation (MDOT), 2005-2015. PI: F. Amini; Amount: \$ 218,000.
- Numerical Water Quality and Contaminant Modeling, Engineer, Research, and Development Center, 2012-2014. PI: F. Amini; Amount: \$ 120,000.
- Assessment of Pavement Infrastructure, Department of Transportation, 2010-2012. PI: F. Wang; Co-PI: F. Amini, and L. Li; Amount: \$ 712,500.

- 2012-2016 Students Summer Research Internship Program, Engineer, Research, and Development Center, 2012-2017. PI: Y. Li, Co-PI: PI: F. Amini; Amount: \$ 2,000,000.
- Summer Transportation Program; MDOT/FHWA; 2016-2017; PI: Lin Li; Co-PI: F. Amini; Amount: \$ 62,000.00
- Summer Transportation Program; MDOT/FHWA; 2015-2016; PI: Lin Li; Co-PI: F. Amini; Amount: \$ 62,000.00
- Summer Transportation Program; MDOT/FHWA; 2014-2015; PI: Lin Li; Co-PI: F. Amini; Amount: \$ 62,000.00
- Cost-Effectiveness Study of the Pavement Warranty Program in Mississippi, Mississippi Department of Transportation, 2011-2013. PI: Y. Qi, Co-PI: F. Wang & F. Amini; Amount: \$ 130,000.
- Evaluation of MDOT's Distress Thresholds for Maintained Pavement Projects, Mississippi Department of Transportation, 2009-2011. PI: F. Wang, Co-PI: F. Amini; Amount: \$ 120,000.
- Comparative Slope Stability Analysis for Hurricane Protection Systems Using the Method of Planes and the Method of Slices, Burns Cooley Dennis Inc., 2007-2008. PI: F. Amini; Amount: \$ 119,119.
- Hyper Velocity Impact - Environmental Resistant Nano Materials in Space Applications, NASA, PI: P. Sukanek, Co-PI: A. Alostaz et al., & F. Amini, 2013-2016; joint research with U. of Mississippi; Total Amount: 200,000 (JSU portion: 20K)
- Summer Transportation Program; MDOT/FHWA; 2013-2014; PI: Lin Li; Co-PI: F. Amini; Amount: \$ 58,000.00
- Summer Transportation Program; Mississippi Department of Transportation (MDOT), 2010-2012. PI: I Simone; Co-PI: F. Amini; F. Wang; Amount: 40,000.
- Summer Transportation Program; MDOT/FHWA; 2012-2013; PI: Lin Li; Co-PI: F. Amini; Amount: \$ 58,000.00
- Lake Chicot Display Center, U.S. Army Corps. of Engineers – Vicksburg District, 2007-2008. PI: F. Amini, Co-PI: L. Li; Amount: \$ 12,425.

### **Dr. Danuta Leszczynska**

- Development of Efficient Computer System for Predictions of Ecological Effects of Organic Pollutants; ERDC; PI: D. Leszczynska; Amount: \$ \$108.789, March 1, 2012-March 1, 2013
- Prediction of Thermodynamically-Stable Adsorption Sites Using Chemical and Classical Models, Department of Army ERDC, PI: D. Leszczynska; Amount: \$ 64,999.61, March 1, 2012-March 1, 2013
- NanoQSAR, NSF thru MSU, PI: D. Leszczynska, Amount: \$6949.00, September 1, 2011-August 31, 2012
- Application of Random Forest and Multiple Linear Regression Techniques to QSPR Prediction of Partition Coefficients for Military Compounds, Department of Army ERDC,

,PI: D. Leszczynska, Amount: \$69,998.89, March 1, 2011-March 1, 2012

- Prediction of Thermodynamically-Stable Adsorption Sites Using Chemical and Classical Models, Department of Army ERDC, PI: D. Leszczynska, Amount: W912HZ-11-1-004, \$ 64,999.61, February 24, 2011-March 1, 2012
- Combined Experimental and Theoretical Study on Degradation Pathways of Organic Compounds in Water in the Presence of Nanotubes, DOE through ERDC, PI: D. Leszczynska, Amount: \$317,451, September 1, 2010- June 30, 2012
- High Performance Computational Design of Carbon Nanotubes Based Chemical Sensors, DOE through ERDC, PI: D. Leszczynska, Amount: \$300,349, September 1, 2010-August 31, 2011 (year 5), extended to June 30, 2012

### **Dr. Lin Li**

- Title: MRI: Acquisition of a Multi-Beam SEM/FIB for Multidisciplinary Materials Study and Training; Li, Lin, Co-PI: F. Amini, W. Walters, A. Hamme; NSF; Amount: \$559,660.00; October 2015-September 2018.
- MRI: Acquisition of ICP-OES for Multidisciplinary Environmental Studies and Training, NSF, Sept. 1, 2010- Aug. 2013. PI: Yadong, Co-PI: Lin Li; Amount: \$245,877.00
- HPTRM Strengthened Levee under Combined Wave and Storm Surge Turbulent Overtopping Conditions; DHS, Apr. 2011-Aug. 2012. PI: F. Amini; Co-PI: Lin Li; \$450,000.00.
- Innovative Levee Strengthening and Testing under Full Scale Overtopping Conditions; PI: F. Amini; Department of Homeland Security, Jan. 2009-Sep. 2011. PI: F. Amini; Co-PI: Lin Li; \$1,000,000.00.
- Using WiscLEACH to Estimate Groundwater Impacts from Coal Combustion Products in Highway Construction, RMRC, Federal Highway Administration, Jun 2008- May. 2011. PI: Lin Li; Amount: \$61,533.00
- Green Highway Rating System in Mississippi, Institute for Multimodal Transportation, Jackson State University, July 2010-June 2011. PI: Lin Li, Co-PI: F. Amini; Amount: \$35,000.00.
- Assessment of Critical Transportation Infrastructure; Department of Homeland Security, Oct. 2009-Sep. 2010. PI: F. Wang, Co-PI: F. Amini; Co-PI: L. Li; \$712,500.00.
- Lake Chicot Visitor Center Display, U.S. Army Corps. Of Engineers, Oct. 2007-Mar. 2008. PI: F. Amini; Co-PI: L. Li; Amount: \$12,425.00.
- Summer Transportation Program; MDOT/FHWA; 2013; PI: Lin Li; Co-PI: F. Amini; Amount: 58,000.

### **Dr. Yadong Li**

- 2012-2016 Students Summer Research Internship Program, U.S. Army Corps of Engineers Engineer Research and Development Center (ERDC), April 1, 2012 – March 31, 2016. PI: Yadong Li, Co-PI: Farshad Amini; Amount: \$2,000,000.
- MRI: Acquisition of An ICP-OES for Multidisciplinary Environmental Studies and Training, National Science Foundation, Sept. 1, 2010- Aug. 2013. PI: Yadong, Co-PI: Lin Li; Amount: \$245,877

- Rubber Sample Testing; INSA, LLC; PI; Y. Li; Co-PI: Yiming Liu; Jan 2013-Dec 2015; \$73,873
- Enhancing Transportation Education through Real-World Design Projects, Institute for Multimodal Transportation (IMTRANS), Jackson State University, July 1, 2009-June 30, 2010. PI: Yadong Li; Amount: \$11,913
- Research Experiences for Teachers, National Science Foundation, July 1, 2006-June 30, 2007. PI: Yadong Li; Amount: \$20,000
- Study of E-waste Environmental Hazards and Treatment, National Science Foundation CAREER Award, July 1 2003-June 30 2008. PI: Yadong Li; Amount: \$400,398

### **Dr. Wilbur Walters**

- JSU-MPA Explorers Program, NASA Marshall Space Flight Center, June 1 2011 – December 15 2014, PI: W.Walters; Amount: \$150,000.
- JSU-MPA Explorers Program, NASA Marshall Space Flight Center, May 1 2010 – December 15 2010, PI: W.Walters; Amount: \$59,993.
- Precision Control of Piezoelectric Actuators with an Inversion Based Approach, Jackson State University Scholars Program, June 2010 –October 2010, PI:H.Shih, Co-PI: W.Walters \$10,000.
- Hybrid Nanocomposite Coatings for Improved Impact Resistance and Bond Durability, Office of Naval Research, PI: W.Walters, July 2009 – June 2012; PI: W.Walters; Amount: \$900,000.
- NUE-Nanotechnology in Undergraduate Education and Student Research at Jackson State University, National Science Foundation, PI: W.Walters, August 2008- July 2010; Amount: \$200,000

### **Dr. Feng Wang**

- MDOT funded “Cost-Effectiveness Study of the Pavement Warranty Program in Mississippi”, 2012-2014, Co-PI, \$150k.
- MDOT funded “Simulation Study of Emergency Evacuation of Mississippians near Grand Gulf and River Bend Power Plants due to a Nuclear Accident”, 2012-2014, PI, \$160k.
- MDOT funded “State-of-Practice Approaches and Technologies for Inventory Data Collection of Mississippi’s Public Road System”, 2012-2013, Co-PI, \$60k.
- USDOT funded “Assessment of Pavement Infrastructure for Use in a Pavement Management System”, 2010-2012, PI, \$725k.
- MDOT funded “Evaluation of MDOT’s Distress Thresholds for Maintained Pavement Projects”, 2010-2012, PI, \$120,421.
- MDOT funded “Emergency Evacuation Study for the Greater Jackson Area: DYNASMART-P Deployment in Mississippi DOT”, 2009-2011, PI, \$59,544.
- IMTrans funded project “Development of Operational Strategies for Emergency Evacuation on a Metropolitan Freeway Network”, 2008-2009, PI, \$50k.

### **Dr. Wei Zheng**

- Investigation of Effects of Scaffolding Creative Problem Solving Through Question Prompts in Project-Based Service Learning, National Science Foundation, 10/01/2010-09/30/2013, PI: Wei Zheng, Co-PIs: Valerie Shelby, and Jianjun Yin, Amount: \$499,677.
- Instrumentation and Computational Modeling for Evaluation of Bridge Substructures Across Waterways, Mississippi Department of Transportation, 10/01/2009-9/30/2011, PI, Wei Zheng Amount: \$150,000.
- Phase I Project for Integrating Intelligent Structure Technology for Refining Bridge Inspection in Mississippi, the Institute for Multimodal Transportation, 07/01/2009-06/30/2010, PI: Wei Zheng, Amount: \$32,000.
- Novel Development of Lab and Course Modules: Integrate Intelligent Structure Technology and Self-Regulated Learning to Inspire Motivated and Strategic Learners in STEM,NSF, 03/01/2009-02/29/2011, PI: Wei Zheng, Co-PIs: Gordon Skelton, Tzusheng Pei, Evelyn Leggette, and Hui-Ru Shih (Dept. of Technology,JSU)Amount: \$149,999
- New Vision for Built Environment-Integration of Nanotechnology into Civil Engineering Undergraduate Curriculum, NSF, 03/01/2009-02/29/2011, PI: Wei Zheng, Co-PIs: Y.L. Mo , Karen Lozano, and Xinqing Ma, Amount: \$199,962

**Dr. Robert Whalin (Partial List)**

Coastal Hazards Center of Excellence; Department of Homeland Security;2008-2014; PI: Robert Whalin; Amount: \$ 900,000 to 1,000,00 per Year.

Hurricane Forecasting for the Mississippi Coast Using Artificial Neural Network Models and Fully Implicit Domain Decomposition Methods”, Department of Homeland Security (DHS), January 2009-December 2011, PI: Robert W. Whalin, CO-PI(s): Himangshu Das and S. Aliabadi, Amount \$298,587

Advancing the Ike Dike Concept; Texas A&M Univ. at Galveston; 2/11/2013-1/31/2015; PI: Robert W. Whalin, Co-PI: Thomas W. Richardson, \$165,000

Vertical Integration; Army; 2009-2010; PI: Robert W. Whalin; \$ 2,000,000.0

**Prior Years Grants**

2003-2004 (Approximate Expenditures)

| <b>Project Title</b>  | <b>PI</b> | <b>Agency</b> | <b>Amount</b> | <b>Date s</b>     |
|---|-----------|---------------|---------------|-------------------|
| Long-Term Field Studies and Monitoring of Paving Fabric Systems to Reduce Reflective Cracking | F. Amini  | MDOT          | 45,000.00     | 2004              |
| CSEM Enhancement Program  | F. Amini  | NSF           | 80,000.00     | 2003<br>-<br>2004 |
| ESEM for Soil Liquefaction Research   | F. Amini  | NSF           | 110,00.00     | 2003<br>-<br>2004 |

|  |          |                                  |            |                   |
|--|----------|----------------------------------|------------|-------------------|
| Protective Technology Research   | F. Amini | DOD                              | 90,000.00  | 2003<br>-<br>2004 |
| Scientific Visualization of Soil Liquefaction for the Design and Maintenance of Seismic Dams                             | F. Amini | Navy                             | 30,000.00  | 2003<br>-<br>2004 |
| Research on Potential Applications of the Static and Dynamic Cone Penetrometers in MDOT Pavement Design and Construction | F. Amini | MDOT                             | 35,700.00  | 2003<br>-<br>2004 |
| Research on Applications of Paving Fabrics to Reduce Reflective Cracking   | F. Amini | MDOT                             | 37,000.00  | 2003              |
| Acquisition of Super pave for CE Program Enhancement at JSU  | F. Amini | MDOT                             | 125,000.00 | 2003              |
| Liquefaction at Depth  | F. Amini | Stennis Space Center, DOD – Navy | 100,000.00 | 2003              |
| Study of E-Waste Environmental Hazards and Treatment   | Y. Li    | NSF                              | 80,000.00  | 2003<br>-<br>2004 |

2004-2005(Approximate Expenditures)

| <b>Project Title</b>  | <b>PI</b> | <b>Agency</b> | <b>Amount</b> | <b>Date s</b>     |
|---|-----------|---------------|---------------|-------------------|
| Long-Term Field Studies and Monitoring of Paving Fabric Systems to Reduce Reflective Cracking | F. Amini  | MDOT          | 45,000.00     | 2004<br>-<br>2005 |
| CSEM Enhancement Program  | F. Amini  | NSF           | 80,000.00     | 2004<br>-<br>2005 |
| ESEM for Soil Liquefaction Research   | F. Amini  | NSF           | 80,000.00     | 2004<br>-<br>2005 |
| Protective Technology Research  | F. Amini  | DOD           | 45,000.00     | 2004<br>-<br>2005 |
| Scientific Visualization of Soil Liquefaction for the Design and Maintenance of Seismic Dams  | F. Amini  | Navy          | 9,700.00      | 2004<br>-<br>2005 |

|  |          |      |           |                   |
|--|----------|------|-----------|-------------------|
| Research on Applications of Paving Fabrics to Reduce Reflective Cracking | F. Amini | MDOT | 8,000.00  | 2004<br>-<br>2005 |
| Study of E-Waste Environmental Hazards and Treatment                     | Y. Li    | NSF  | 80,000.00 | 2004<br>-<br>2005 |
| <b>Total</b>   |          |      |           |                   |

2005-2006(Approximate Expenditures)

| <b>Project Title</b>              | <b>Agency</b> | <b>Total Amount</b> | <b>PI/Faculty</b> | <b>Dates</b> |
|-----------------------------------|---------------|---------------------|-------------------|--------------|
| Long Term Monitoring of Pavements | MDOT          | 9000                | F. Amini          | 2005-2006    |
| CSEM Enhancement Program          | NSF           | 80,000              | F. Amini          | 2005-2006    |
| Protective Technology             | DOD           | 75,000              | F. Amini          | 2005-2006    |
| Study of E-Waste                  | NSF           | 80000               | Y. Li             | 2005-2006    |
| DOD IPET                          | Army          | 27308               | R. Whalin         | 2005-2006    |
| Advanced Distance Education       | DOD           | 3370                | R. Whalin         | 2005-2006    |

|                              |      |           |            |           |
|------------------------------|------|-----------|------------|-----------|
| Vertical Integration         | Army | 132,795   | R. Whalin  | 2005-2006 |
| Vertical Integration         | Army | 1,275,000 | R. Whalin  | 2005-2006 |
| Investigation of Metal Spray | NG   | 45,000    | W. Walters | 2005-2006 |
| <b>Total</b>                 |      | 1,738,473 |            |           |

2006-2007(Approximate Expenditures)

| <b>Project Title</b>              | <b>Agency</b> | <b>Total Amount</b> | <b>PI/Faculty</b> | <b>Dates</b> |
|-----------------------------------|---------------|---------------------|-------------------|--------------|
| Long Term Monitoring of Pavements | MDOT          | 27,000              | F. Amini          | 2006-2007    |
| CSEM Enhancement Program          | NSF           | 23,000              | F. Amini          | 2006-2007    |
| Protective Technology             | DOD           | 255,000             | F. Amini          | 2006-2007    |
| Study of E-Waste                  | NSF           | 80,000              | Y. Li             | 2006-2007    |



|  |          |           |                |           |
|--|----------|-----------|----------------|-----------|
| Imtrans  | DOT      | 650,000   | M. Qureshi     | 2006-2007 |
| High Performance and Development of predictive (DOD/DOE) and Characteristics of Structure (LLNL) | DOE/ERDC | 609,238   | D. Leszczynska | 2006-2008 |
| Force Protection   | ERDC     | 60,078    | R. Whalin      | 2006-2007 |
| Vertical Integration   | Army     | 1,275,000 | R. Whalin      | 2006-2007 |
| Investigation of POSS-based Paint  | NG       | 50,000    | W. Walters     | 2006-2007 |
| <b>Total</b>   |          | 3,029,316 |                |           |

2007-2008(Approximate Expenditures)

| <b>Project Title</b>                    | <b>Agency</b> | <b>Total Amount</b> | <b>PI/Faculty</b> | <b>Dates</b> |
|---|---------------|---------------------|-------------------|--------------|
| Long Term Monitoring of Pavements       | MDOT          | 25000               | F. Amini          | 2007-2008    |
| Lake Chico Visitor Center Video Display | USAE          | 12425               | F. Amini          | 2007         |
| Comparative Slope Stability             | BCD           | 19119               | F. Amini          | 2008         |

|  |           |          |                             |           |
|--|-----------|----------|-----------------------------|-----------|
| CSEM Enhancement Program                       | NSF       | 500      | F. Amini                    | 2007-2008 |
| Transportation Research                        | DOT       | 16349    | F. Amini                    | 2007-2008 |
| Enhancement of JSU Transportation              | DOT       | 25800    | F. Amini                    | 2007-2008 |
| Enhanced K-12 Outreach                         | DOT       | 10159    | Li. Li<br>(Co-PI: F. Amini) | 2007-2008 |
| Study of E-Waste                               | NSF       | 80000    | Y. Li                       | 2007-2008 |
| Experience for Teachers                        | NSF       | 20000    | Y. Li                       | 2007-2008 |
| Shake Table Acquisition                        | NSF       | 10000    | W. Zheng                    | 2007-2008 |
| NUE: New Vision                                | NSF       | 199,962  | W. Zheng                    | 2007-2008 |
| Imtrans  | DOT       | 650,000  | D. Smith                    | 2007-2008 |
| Northrop Grumman (NG) Summer Inst.             | NG        | 30,000   | R. Whalin                   | 2007-2008 |
| High Performance and Development of predictive | DOE/ERD C | 429,238  | D. Leszczynska              | 2007-2009 |
| Investigation of Environmentally Safe          | NG        | 45,000   | W. Walters                  | 2007-2008 |
| <b>Total</b>                                   |           | 1,503244 |                             |           |

2008-2009(Approximate Expenditures)

| <b>Project Title</b>   | <b>Agency</b> | <b>Total Amount</b> | <b>PI/Faculty</b>            | <b>Dates</b> |
|--|---------------|---------------------|------------------------------|--------------|
| Innovative Levee Strengthening and Testing under Full Scale Overtopping Conditions | DHS           | \$ 981,000          | PI: F. Amini<br>Co-PI: L. Li | 2009-2011    |
| Long Term Monitoring of Pavements  | MDOT          | 24000               | F. Amini                     | 2009         |

|   |                              |           |                                  |           |
|---|------------------------------|-----------|----------------------------------|-----------|
| Using WiscLEACH to Estimate Groundwater Impacts from Coal Combustion Products in Highway Construction   | FHWA –<br>U. of<br>Wisconsin | \$ 29,533 | L. Li                            | 2009-2010 |
| Emergency Evacuation Study for the Greater Jackson Area   | MDOT                         | \$ 59,544 | W. Feng                          | 2009-2010 |
| NUE-Nanotechnology in Undergraduate Education and Student Research at Jackson State University  | NSF                          | 200,000   | W. Walters                       | 2009-2011 |
| Novel Development of Lab and Course Modules   | NSF                          | 149,999   | W. Zheng                         | 2009-2011 |
| Center of Excellence for Natural Hazards  | DHS                          | 1,000,000 | R. Whalin                        | 2009-2010 |
| Hurricane Forecasting for the Mississippi Coast Using Artificial Neural Network Models and Fully Implicit Domain Decomposition Methods. Department of Homeland Security | DHS                          | \$298,587 | R. Whalin<br>(Co-PI: H. Das)     | 2009-2010 |
| Imtrans   | DOT                          | 650,000   | F. Wang                          | 2009-2010 |
| Vertical Integration  | Army                         | 40,868    | R. Whalin                        | 2009-2010 |
| Vertical Integration  | Army                         | 1,933614  | R. Whalin                        | 2009-2010 |
| Vertical Integration  | Army                         | 1,959000  | R. Whalin                        | 2009-2010 |
| CREST   | NSF                          | 250,000   | D.<br>Leszczynska<br><br>(Co-PI) | 2009-2010 |
| Investigation of CNT-based Paint  | Northrop<br>Grumman          | 50,000    | W. Walters                       | 2009-2010 |
| <b>Total</b>  |                              | 7,626145  |                                  |           |

2009-2010(Approximate Expenditures)

| <b>Project Title</b>   | <b>PI</b>              | <b>Agency</b> | <b>Amount</b> | <b>Dates</b> |
|--|------------------------|---------------|---------------|--------------|
| “Assessment of Pavement Infrastructure”, PI, US Dept of Transportation (USDOT) | F. Wang/F. Amini/L. Li | USDOT         | 712.5K        | 201-2012     |
| Evaluation of MDOT’s Distress  | F Wang/F.              | MDOT          | 120.4K        | 10/1/09      |

|   |  |                                |        |                           |
|---|--|--------------------------------|--------|---------------------------|
| Thersholds for Maintained Pavement Projects   | Amini  |                                |        | to<br>12/31/11            |
| Imtrans   | F. Wang  | USDOT                          | 650K   | 2010-2011                 |
| Hybrid Nanocomposite Coatings   | W. Walters                                     | NSF                            | 100K   | 7/1/09<br>to<br>6/30/12   |
| Instrumentation Computational Modeling for Evaluation of Bridge Substructures Across Waterways                          | W. Zheng                                       | MDOT                           | 150K   | 10/1/09<br>to<br>12/31/11 |
| Development of High Resolution Storm Surge Models for Guam, Northern Mariana Islands, US Virgin Islands and Puerto Rico | H. Das   | ERDC                           | 65K    | 9/09 to<br>9/12           |
| Investigation of POSS based Paint Systems for Marine Applications,, Pascagoula, MS                                      | W. Walters                                     | Northrop Grumman Ship Systems  | \$5K   | 06/09-<br>11/09           |
| Piezoelectric Actuators with an Inversion Based Approach  | H.R.Shih and<br>W.L.Walters,                   | JSU<br>University<br>Scholars  | \$10K  | 04/10 –<br>07/10          |
| Hybrid Nanocomposite coatings for improved impact resistance and bond Durability  | W.L.<br>Walters, Q.L.<br>Williams, J.<br>Iroh, | Office of<br>Naval<br>Research | \$900K | 07/09-<br>06/12           |