



From: 07/01/2010
To: 06/30/2011
Total Awards To Date: 186

Research Awards

Academic Affairs

Patrick V. Farrell

NSF-Directorate for Education And Human Resources
Lehigh ADVANCE: Building Community Beyond Academic Departments
START_DATE: 10/1/2010 **END_DATE:** 9/30/2015

Advanced Tech For Large Stru Sys

John P. Coulter

PA Dept of Community & Economic Development
PITA XIV - Dynamic Melt Control for the Manufacture of Enhanced Polymer-Based Biomedical Devices
START_DATE: 1/1/2011 **END_DATE:** 6/30/2012

Tsai-An Hsu

PA Dept of Community & Economic Development
PITA XIV - Glycerol Recovery from Biodiesel Mixture and Conversion to High Value Products
START_DATE: 1/1/2011 **END_DATE:** 6/30/2012

Clay Joshua Naito

University of Hawaii
NEESR-CR: Impact Forces from Tsunami-Driven Debris
START_DATE: 9/15/2010 **END_DATE:** 8/31/2013

Clay Joshua Naito

PA State Association of Township Supervisors
Emergency Response Plan
START_DATE: 2/1/2011 **END_DATE:** 1/31/2014

Clay Joshua Naito

NSF-Directorate for Engineering
Supplement to 542375 - Collaborative Research: Development of a Blast and Ballistic Resistant Precast Concrete Armored Wall System
START_DATE: 4/7/2011 **END_DATE:** 7/31/2013

Clay Joshua Naito

University of Hawaii
Supplement to 542408: NEESR-CR: Impact Forces from Tsunami-Driven Debris
START_DATE: 6/1/2011 **END_DATE:** 8/31/2013

Clay Joshua Naito

NSF-Directorate for Engineering
Collaborative Research: Development of a Blast and Ballistic Resistant Precast Concrete Armored Wall System
START_DATE: 8/15/2010 **END_DATE:** 7/31/2013

Gary S. Novak

PA Dept of Community & Economic Development

PITA XIV - ATLSS Summer REU Program 2011

START_DATE: 1/1/2011 **END_DATE:** 6/30/2012

Gary S. Novak

University of Notre Dame

NEESR-CR: Post-Tensioned Coupled Shear Wall Systems

START_DATE: 11/1/2010 **END_DATE:** 10/31/2013

Henry U. Odi

PA Dept of Community & Economic Development

PITA XIV - Lehigh Valley NSF Stem Project:: Widening the Pathways for Students to Pursue Science, Technology, Engineering, and Mathematics Degrees, Middle School Through Ph.D.

START_DATE: 1/1/2011 **END_DATE:** 6/30/2012

Shamim N. Pakzad

PA Dept of Community & Economic Development

PITA XIV - Implementation and Instrumentation Strategies for In-Service Bridge Performance Evaluation Using Finite Element Models

START_DATE: 1/1/2011 **END_DATE:** 6/30/2012

Sibel Pamukcu

PA Dept of Community & Economic Development

PITA XIV - Electrically Assisted Multi-Phase Transport in Clayey Sands

START_DATE: 1/1/2011 **END_DATE:** 6/30/2012

Raymond A. Pearson

PA Dept of Community & Economic Development

PITA XIV - Improving the Fatigue Resistance of Epoxies Using Nanoscale Toughening Agents

START_DATE: 1/1/2011 **END_DATE:** 6/30/2012

Stephen P. Pessiki

Charles Pankow Foundation

Unbonded Post-Tensioned Cast-in-Place Concrete Walls for Seismic Resistance

START_DATE: 1/1/2011 **END_DATE:** 12/31/2012

James M. Ricles

PA Dept of Community & Economic Development

PITA XIV - Experimental Assessment of the Performance of a Second Generation Elastomeric Damper Under Seismic Loading Conditions

START_DATE: 1/1/2011 **END_DATE:** 6/30/2012

James M. Ricles

Purdue University

NEES Consortium Operations: FY 2011

START_DATE: 10/1/2010 **END_DATE:** 9/30/2011

Sougata Roy

PA Dept of Community & Economic Development

PITA XIV - Application of Phased Array Ultrasonic Testing for Steel Bridge Inspection

START_DATE: 1/1/2011 **END_DATE:** 6/30/2012

Richard Sause

Professional Service Industries, Inc.

Optimized Welds for HPS 100W Steels

START_DATE: 4/1/2011 **END_DATE:** 10/1/2011

Richard Sause

PA Dept of Community & Economic Development

PITA XIV: Core Fund

START_DATE: 7/1/2010 **END_DATE:** 6/30/2013

Lawrence V Snyder

PA Dept of Community & Economic Development

PITA XIV - Computational Models and Algorithms for Enterprise-Wide Optimization of Process Industries

START_DATE: 1/1/2011 **END_DATE:** 6/30/2012

Bioengineering Program**Yaling Liu**

NSF-Directorate for Engineering

CAREER: Predicting Nanoparticle Targeted Delivery Efficacy in Vascular Environment through Multiscale Modeling

START_DATE: 3/1/2011 **END_DATE:** 12/31/2014

Biological Sciences**Mary Kathryn Iovine**

PA-Department of Health

Effects of Cx43 Over-Expression on Cell Proliferation and Skeletal Patterning During Fin Regeneration

START_DATE: 1/1/2011 **END_DATE:** 12/31/2012

Linda J. Lowe-Krentz

U.S. Department of Health and Human Services

A Putative Heparin Receptor in Smooth Muscle Cells

START_DATE: 6/1/2011 **END_DATE:** 5/31/2014

Jennifer Swann

NSF-Directorate for Biological Sciences

ROA Supplement to 541602: Steroidal Regulation of Synaptic Input in the MPN mag

START_DATE: 6/1/2011 **END_DATE:** 7/31/2012

Centennial School**Michael P. George**

PA-Department of Education

IDEA-B Grant FY 2010-2011

START_DATE: 9/1/2010 **END_DATE:** 6/30/2011

Center for Optical Technologies**Thomas Lawson Koch**

University of California - Santa Barbara

Photonic Integration for Coherent Optics

START_DATE: 8/26/2010 **END_DATE:** 8/25/2012

Thomas Lawson Koch

Naval Air Warfare Center/Aircraft Division

Photonic Integration Foundry

START_DATE: 1/6/2011 **END_DATE:** 7/5/2012

Thomas Lawson Koch

PA Dept of Community & Economic Development

Nanophotonics III: Matching funds for DARPA PICO 542404

START_DATE: 9/1/2010 **END_DATE:** 6/30/2011

Chemical Engineering**Bryan W. Berger**

PA-Department of Health

Modular Design of Hybrid Nanoparticle-Peptide Systems as Novel, Stimuli-Responsive Cancer Therapeutics

START_DATE: 1/1/2011 **END_DATE:** 12/31/2012

James F. Gilchrist

NSF-Directorate for Engineering

Mixing, Migration, and Structure of Suspensions in Pressure-Driven Flows

START_DATE: 8/15/2010 **END_DATE:** 7/31/2013

James F. Gilchrist

Procter & Gamble

Procter & Gamble Summer Internship

START_DATE: 5/1/2011 **END_DATE:** 4/30/2012

Anand Jagota

NSF-Directorate for Engineering

IDR: Coupling Theory and Experiment to Quantify Biomolecule-Nanomaterial Interactions

START_DATE: 8/15/2010 **END_DATE:** 7/31/2013

Anand Jagota

Michelin

Controlling Friction Against a Rough Surface by Spatial Variation in Properties

START_DATE: 6/1/2011 **END_DATE:** 5/31/2012

Steven McIntosh

NSF-Directorate for Engineering

Enhanced Electrodes for Proton Conducting Solid Oxide Fuel Cells and Electrolyzers

START_DATE: 9/1/2010 **END_DATE:** 3/31/2013

Steven McIntosh

NSF-Directorate for Engineering

CAREER: A Novel Approach to Catalysis for Next Generation Direct-Hydrocarbon Solid Oxide Fuel Cells

START_DATE: 9/1/2010 **END_DATE:** 6/30/2012

Mark A Snyder

The Petroleum Research Fund

Fundamental Insight into the Hierarchical Engineering of Nanoparticulate and Templated Porous Films for Molecular Separations

START_DATE: 9/1/2010 **END_DATE:** 8/31/2012

Israel E. Wachs

NSF-Directorate for Engineering

*Travel Grant: Aqueous Oxidation of Methanol by V-Containing Biocatalysts***START_DATE:** 9/15/2010**END_DATE:** 8/31/2012**Chemistry****Jesus M. Gonzalez**

deTect Bioscience, LLC

*Development of a Peptidomic Rapid Point-of-Care TB Diagnostic***START_DATE:** 9/15/2010**END_DATE:** 9/14/2011**Kai Manfred Martin Landskron**

Carnegie Institute of Washington

*Center for Energy Frontier Research in Extreme Environments (EFree) - EFRC***START_DATE:** 6/1/2011**END_DATE:** 7/31/2014**Tianbo Liu**

NSF-Directorate for Mathematical and Physical Sciences

*International Collaboration in Chemistry: Nanoscaled Molybdenum-Oxide Clusters: Syntheses, Tuning Surface Properties and Counterion Effects***START_DATE:** 9/15/2010**END_DATE:** 8/31/2013**Civil & Environmental Engineering****Kristen Jellison**

Medentech

*Ceramic Filter Research***START_DATE:** 8/1/2010**END_DATE:** 7/31/2011**Kristen Jellison**

U.S. Environmental Protection Agency

*Optimizing the Biosand Filter for Drinking Water Treatment in Developing Countries***START_DATE:** 8/15/2010**END_DATE:** 8/14/2011**Kristen Jellison**

Department for International Development (DFID)

*Optimizing the Biosand Filter for Household Drinking Water Treatment in Developing Countries***START_DATE:** 1/1/2011**END_DATE:** 12/31/2011**Sibel Pamukcu**

NSF-Directorate for Engineering

*Supplement to 542143 - Engineering Soils with Thermally Controlled Wettability on Command***START_DATE:** 7/22/2010**END_DATE:** 8/31/2012**Sibel Pamukcu**

Electro-Petroleum, Inc.

*Electrically Induced Fractionation of Oil in Clay Bearing Formations***START_DATE:** 4/1/2011**END_DATE:** 12/31/2011

Arup K. Sengupta

NSF-Directorate for Engineering

*Supplement to 541991: Investigating a New Energy-Efficient Hybrid Ion Exchange-Nanofiltration (HIX-NF) Desalination Process***START_DATE:** 3/1/2011 **END_DATE:** 4/30/2012**Arup K. Sengupta**

NSF-Directorate for Engineering

*Energy Recovery from Acid-Base Neutralization Through pH-Sensitive Polymers: Novel Application of Donnan Osmosis***START_DATE:** 5/1/2011 **END_DATE:** 4/30/2012**Arup K. Sengupta**

U.S. Environmental Protection Agency

*Arsenic Removal and Containment of Waste in Cambodia***START_DATE:** 8/15/2010 **END_DATE:** 12/31/2011**Muhannad T. Suleiman**

Lafayette College

*RUI: Pervious Concrete Piles: An Innovative Ground Improvement Alternative***START_DATE:** 9/1/2010 **END_DATE:** 8/31/2012**Computer Science & Engineering****Mooi Choo Chuah**

NSF-Directorate for Computer and Info. Sci. & Engr.

*CSR: Small: Collaborative Research: SEMOIS: Secure Mobile Information Sharing System***START_DATE:** 8/1/2010 **END_DATE:** 7/31/2013**Mooi Choo Chuah**

NSF-Directorate for Computer and Info. Sci. & Engr.

*EAGER: Secure Efficient Content Centric Mobile Network (SECON) Design***START_DATE:** 9/1/2010 **END_DATE:** 8/31/2012**Jeffrey D. Heflin**

University of Maryland College Park

*ADEN: Anomaly Detection Engine for Networks***START_DATE:** 6/5/2011 **END_DATE:** 6/4/2013**Xiaolei Huang**

DHHS-NIH-National Library of Medicine

*Web-based Image Annotation and Retrieval: Computer-assisted Technologies for Medical Image Segmentation and Pattern Recognition***START_DATE:** 9/1/2010 **END_DATE:** 8/31/2012**Michael F. Spear**

NSF-Directorate for Computer and Info. Sci. & Engr.

*Student Travel Support for the 16th ACM SIGPLAN Annual Symposium on Principles and Practice of Parallel Programming (PPoPP 2011)***START_DATE:** 7/1/2010 **END_DATE:** 6/30/2011

Michael F. Spear

NSF-Directorate for Computer and Info. Sci. & Engr.

CSR: Small: Adaptive Synchronization for Multicore Systems

START_DATE: 8/1/2010 **END_DATE:** 7/31/2013

John R. Spletzer

NSF-Directorate for Computer and Info. Sci. & Engr.

RI: Medium: Collaborative Research: Towards Perpetual Flight of a Gliding Unmanned Aerial Vehicle in the Jet Stream

START_DATE: 3/1/2011 **END_DATE:** 2/28/2014

Ctr for Advanced Mat Nanotechnology

Dan M. Frangopol

National Aeronautics and Space Administration (NASA)

NASA III - Advanced Materials Partnership: Technology for Aerospace and Defense

START_DATE: 9/1/2010 **END_DATE:** 8/31/2012

Sharon M. Friedman

University of California - Santa Barbara

NSEC Center for Nanotechnology in Society at the University of California at Santa Barbara

START_DATE: 1/1/2011 **END_DATE:** 12/31/2014

Martin P. Harmer

National Aeronautics and Space Administration (NASA)

NASA III - Advanced Materials Partnership: Technology for Aerospace and Defense

START_DATE: 9/1/2010 **END_DATE:** 8/31/2012

Martin P. Harmer

DOD-Navy-Chicago

Tailoring of Atomic-Scale Interphase Complexions for Mechanism-Informed Material Design

START_DATE: 6/1/2011 **END_DATE:** 6/30/2014

Martin P. Harmer

PA Dept of Community & Economic Development

MRSEC V: Industry Access to R&D Capabilities and Support

START_DATE: 3/16/2011 **END_DATE:** 6/30/2012

Martin P. Harmer

DOD-Navy-Arlington

Development of Attribute Maps for Grain-Boundary Transport in Doped Alumina

START_DATE: 6/29/2011 **END_DATE:** 7/31/2014

Martin P. Harmer

PA Dept of Community & Economic Development

MRSEC V: Fast-Track Technology Development / Output to Industry

START_DATE: 3/16/2011 **END_DATE:** 6/30/2012

Martin P. Harmer

PA Dept of Community & Economic Development

MRSEC V: Develop Research Base Through Equipment Upgrades

START_DATE: 3/16/2011 **END_DATE:** 6/30/2012

Raymond A. Pearson

Intel

Fracture Resistance of Model Underfill Resins

START_DATE: 1/1/2011 **END_DATE:** 7/31/2011

Ctr-Devel Urban Ed Leaders

George P. White

U.S. Department of Education

School Leadership Grant Program

START_DATE: 10/1/2010 **END_DATE:** 9/30/2015

Ctr-Promotg Rsrch to Practice

Edward S. Shapiro

U.S. Department of Education

Leadership Training in Pediatric School Psychology: Developing Leaders for Systematic Change in High Poverty, Low Performing Schools with High Need Students with or At Risk for Emotional/Behavior Disorders

START_DATE: 9/1/2010 **END_DATE:** 8/31/2014

Earth & Environmental Sciences

Gray E. Bebout

NSF-Directorate for Geosciences

Subduction Zone Metamorphic Pathway in Deep-Earth Carbon Cycling

START_DATE: 6/15/2011 **END_DATE:** 5/31/2014

Anne S. Meltzer

NSF-Directorate for Geosciences

Collaborative Research - Intracontinental Deformation and Surface Uplift: Geodynamic Evolution of the Hangay Dome, Mongolia, Central Asia

START_DATE: 8/15/2010 **END_DATE:** 8/31/2012

Anne S. Meltzer

NSF-Directorate for Geosciences

Collaborative Research: Analysis of Seismicity Associated with the Mw=8.8 2010 Maule Earthquake and Implications for Subduction Processes

START_DATE: 2/15/2011 **END_DATE:** 1/31/2013

Joan Miriam Ramage Macdonald

National Aeronautics and Space Administration (NASA)

Fellowship Kathryn Semmens: Using AMSR-E and MODIS to Observe Snow and Ice Melt Dynamics in High Latitude Freshwater Systems

START_DATE: 9/1/2010 **END_DATE:** 8/31/2013

Zicheng Yu

NSF-Directorate for Biological Sciences

Dissertation Research: Impacts of Temperature and Precipitation on Peat-Carbon Dynamics in Alaska and Patagonia

START_DATE: 6/1/2011 **END_DATE:** 11/30/2012

Peter K. Zeitler

NSF-Directorate for Geosciences

Upgrade of the Noble-Gas Geochronology Laboratory at Lehigh University

START_DATE: 9/1/2010 **END_DATE:** 8/31/2012

Peter K. Zeitler

NSF-Directorate for Geosciences

Collaborative Research: Little Devils Postpile Revisited: Intercalibration of ThermoChronometer Kinetics in a Contact Aureole

START_DATE: 3/1/2011 **END_DATE:** 2/28/2013

Economics

Shin-Yi Chou

PA-Department of Health

Competition, Health Outcomes, and Resource Use in Hospitals

START_DATE: 1/1/2011 **END_DATE:** 12/31/2012

Arthur E. King

Trustees of Boston University, BUMC

21st-23rd Annual Health Economics Conferences

START_DATE: 8/1/2010 **END_DATE:** 7/31/2013

Education & Human Services

Alec M. Bodzin

PA-Department of Environmental Protection

Investigating Energy

START_DATE: 7/1/2010 **END_DATE:** 6/30/2011

Patricia H. Manz

U.S. Department of Health and Human Services

Examining the Impact of EHS Home Visiting

START_DATE: 9/30/2010 **END_DATE:** 9/29/2011

Elec & Comp Engr

Filbert J. Bartoli

NSF-Directorate for Engineering

IDR: Nanoplasmonic Sensing for Dynamic Cell-Based Biomolecular Assays

START_DATE: 9/15/2010 **END_DATE:** 8/31/2013

Yujie Ding

ArkLight, Inc.

SBIR Phase I: Cloud Discrimination for ASCENDS Mission Based on Optical Phase Conjugation as a Novel Approach

START_DATE: 2/18/2011 **END_DATE:** 8/17/2011

Yujie Ding

NSF-Directorate for Engineering

Transforming Conventional PPLN-based Frequency Converters to Cover 13-30 Microns: Bridging Gap between Mid-Infrared and THz Regions

START_DATE: 9/1/2010 **END_DATE:** 8/31/2013

Yujie Ding

ArkLight, Inc.

SBIR Phase 2: Implementation of Frequency Up-Conversion Detection System Based in Periodically-Poled Lithium Niobate for Approaching Single-Photon Sensitivity within 1-1.8 um and 3-4 um: A Novel Approach

START_DATE: 6/1/2011 **END_DATE:** 5/31/2013

Yujie Ding

DOD-Air Force-Office of Scientific Research

Imaging through Turbulent Media Based on Phase Conjugation in Resonantly-Enhanced Second-Order Nonlinear Materials: A Novel Scheme

START_DATE: 8/1/2010 **END_DATE:** 7/31/2013

Miltiadis K. Hatalis

The Technology Collaborative

AMOLED Display Drivers

START_DATE: 4/1/2011 **END_DATE:** 3/31/2012

James C.M. Hwang

University of California, San Diego

Fundamental Research and Design of High Power and Nano-Scale RF MEMS Devices

START_DATE: 8/24/2010 **END_DATE:** 8/31/2011

James C.M. Hwang

MEMtronics, Inc.

MDA/NRL SBIR Phase II - High-Power X-Band MEMS Phase Shifters

START_DATE: 9/13/2010 **END_DATE:** 11/30/2012

Jing Li

NSF-Office of Cyberinfrastructure

EAGER: Advanced Erasure Coding Technology for Storage Networks

START_DATE: 6/1/2011 **END_DATE:** 5/31/2013

Nelson Tansu

NSF-Directorate for Engineering

Novel Approaches for High Efficiency Droop-Free III-Nitride Light-Emitting Diodes in Solid State Lighting

START_DATE: 9/1/2010 **END_DATE:** 8/31/2013

Nelson Tansu

Kyma Technologies, Inc.

III-Nitride Quantum Cascade Laser Development at $\lambda \sim 1.55 \mu\text{m}$ Based on Native GaN Substrates and Strain-Compensation Heterostructure Engineering

START_DATE: 1/5/2011 **END_DATE:** 1/4/2013

Nelson Tansu

Avantor Performance Materials (Mallinckrodt Group Inc.)

Silicon-Based Solar Cells

START_DATE: 6/8/2011 **END_DATE:** 10/31/2011

Zhiyuan Yan

NSF-Directorate for Engineering

CAREER: An Integrated Framework of Algebraic Universal Error Control for Network Coding: Algorithms, Complexities, and Hardware Implementations

START_DATE: 2/1/2011 **END_DATE:** 1/31/2016

Emulsion Polymers Institute**Andrew Klein**

Dynalene Heat Transfer Fluids

Hybrid Nanoparticle-based Coolant Technology Development and Manufacturing

START_DATE: 5/16/2011 **END_DATE:** 5/15/2012

Energy Research Center

Harun Bilirgen

Odyssey Land Development Group, LLC

Photo-Reactor for Growing Algae from Municipal Waste Water for CO2 Capture

START_DATE: 11/4/2010 **END_DATE:** 10/31/2011

John N. DuPont

PPL Generation LLC

Development and Evaluation of Coextruded Coatings for Mitigation of Corrosion and Corrosion-Fatigue Cracking in Boilers with Low NOx Burners

START_DATE: 8/24/2010 **END_DATE:** 8/25/2013

John N. DuPont

Huntington Alloys

Center for Integrative Materials Joining Science for Energy Applications (IMJSEA)

START_DATE: 6/9/2011 **END_DATE:** 6/8/2014

Edward K. Levy

Electric Power Research Institute, Inc.

Assessment of Emerging Techniques to Reduce Water Consumption in Coal-Fired Power Plants

START_DATE: 11/1/2010 **END_DATE:** 10/31/2011

Carlos E. Romero

Energy Research Company

On-Line, Real Time Coal Measurement and Data Processing to Optimize Boiler Operations

START_DATE: 8/15/2010 **END_DATE:** 8/14/2011

Carlos E. Romero

Electric Power Research Institute, Inc.

Feasibility of Laser-Induced Breakdown Spectroscopy for Fuel Analysis in Gasification Applications

START_DATE: 9/1/2010 **END_DATE:** 12/31/2011

Carlos E. Romero

Energy Research Company

Improving the Use of Biomass at Coal-Fired Electric Generating Power Stations

START_DATE: 1/4/2011 **END_DATE:** 1/31/2012

Energy Systems Engineering Program

John P. Coulter

U.S. Department of Energy

Energy Systems Engineering Institute at Lehigh University

START_DATE: 9/15/2010 **END_DATE:** 9/14/2012

Enterprise Systems Center

Emory W. Zimmers

Strong Industries Inc

Strong Industries, Inc.

START_DATE: 11/18/2010 **END_DATE:** 6/30/2011

Emory W. Zimmers

PA Dept of Community & Economic Development

Gas & Air Systems, Inc: Agile Manufacturing FY 2009-2012

START_DATE: 2/15/2011 **END_DATE:** 6/30/2012

Emory W. Zimmers

PA Dept of Community & Economic Development

Vacubraze: Agile Manufacturing FY 2009-2012

START_DATE: 3/28/2011 **END_DATE:** 6/30/2012

Emory W. Zimmers

PA Dept of Community & Economic Development

PA Agile Manufacturing 2010-2012

START_DATE: 7/1/2010 **END_DATE:** 6/30/2012

Emory W. Zimmers

B. Braun Medical Inc.

B. Braun Medical, Inc.

START_DATE: 7/1/2010 **END_DATE:** 1/31/2011

Emory W. Zimmers

PA Dept of Community & Economic Development

Bimbo Water Conservation: Agile Manufacturing FY 2009-2012

START_DATE: 6/1/2011 **END_DATE:** 6/30/2012

Emory W. Zimmers

Ben Franklin Technology Partners

Demco Enterprises, Inc. (d/b/a) Demco Automation

START_DATE: 4/21/2011 **END_DATE:** 11/30/2011

Emory W. Zimmers

PA Dept of Community & Economic Development

Structural Services, Inc: Agile Manufacturing FY 2009-2012

START_DATE: 3/28/2011 **END_DATE:** 6/30/2012

Emory W. Zimmers

Ben Franklin Technology Partners

Ateeco, Inc.

START_DATE: 6/16/2011 **END_DATE:** 3/31/2012

Emory W. Zimmers

Ben Franklin Technology Partners

B. Braun Medical, Inc.

START_DATE: 7/1/2010 **END_DATE:** 1/31/2011

Emory W. Zimmers

Ben Franklin Technology Partners

Strong Industries, Inc.

START_DATE: 11/18/2010 **END_DATE:** 6/30/2011

Emory W. Zimmers

PA Dept of Community & Economic Development

*Micro-Clean II: Agile Manufacturing FY 2009-2012***START_DATE:** 11/10/2010 **END_DATE:** 6/30/2012**Emory W. Zimmers**

PA Dept of Community & Economic Development

*Bimbo Bakeries USA: Agile Manufacturing FY 2009-2012***START_DATE:** 2/15/2011 **END_DATE:** 6/30/2012**Emory W. Zimmers**

PA Dept of Community & Economic Development

*Bimbo Cake II: Agile Manufacturing FY 2009-2012***START_DATE:** 6/28/2011 **END_DATE:** 6/30/2012**Iacocca Institute****Richard M. Brandt**

US-Department of State

*FLEX Alumni Participation in Global Village 2011***START_DATE:** 6/8/2011 **END_DATE:** 5/31/2012**Industrial & Systems Engr****Frank E. Curtis**

NSF-Directorate for Mathematical and Physical Sciences

*Nonlinear Optimization Algorithms for Large-Scale and Nonsmooth Applications***START_DATE:** 7/1/2010 **END_DATE:** 6/30/2013**Tamas Terlaky**

DOD-Air Force-Office of Scientific Research

*Mixed-Integer Conic Linear Programming: Challenges and Perspectives***START_DATE:** 8/1/2010 **END_DATE:** 7/31/2013**Aurelie Thiele**

NSF-Directorate for Engineering

*Supplement to 541801 - Robust Portfolio Management with Uncertain Compounded Rates of Return***START_DATE:** 3/18/2011 **END_DATE:** 6/30/2012**Gregory L. Tonkay**

Ben Franklin Technology Partners

*Bazzini Holdings, LLC***START_DATE:** 4/21/2011 **END_DATE:** 11/30/2011**Institute for Metal Forming****Wojciech Z. Misiolek**

United States Council for Automotive Research

*Metallurgical Evaluation of a Selected High Performance High Ductility Magnesium Alloy***START_DATE:** 11/15/2010 **END_DATE:** 9/30/2011**Wojciech Z. Misiolek**

Zenergy Power Inc.

*Evaluation of Microstructure Development in Aluminum Billets Heated Under Various Conditions***START_DATE:** 7/29/2010 **END_DATE:** 12/31/2011

IPD Program

John B. Ochs

The Lemelson Foundation

Development of Social Entrepreneurship Capstone Project Course at Lehigh University

START_DATE: 4/1/2011 **END_DATE:** 8/31/2013

Library and Technology Services

Bruce Taggart

National Science Foundation

ARI-R2: Advanced Networking for the Iacocca Hall C-Wing Research Facility

START_DATE: 8/15/2010 **END_DATE:** 7/31/2012

Material Science & Engr

Helen M. Chan

Advanced Cooling Technologies, Inc.

SBIR: High Temperature Radiators for Electric Propulsion Systems

START_DATE: 4/8/2011 **END_DATE:** 8/17/2011

John N. DuPont

NSF-Directorate for Engineering

Collaborative Research: Center for Integrative Materials Joining Science for Energy Applications

START_DATE: 9/1/2010 **END_DATE:** 8/31/2014

John N. DuPont

Thermo-Calc Software Inc.

Center for Integrative Materials Joining Science for Energy Applications (IMJSEA) - Thermo-Calc

START_DATE: 9/21/2010 **END_DATE:** 9/20/2011

John N. DuPont

NSF-Directorate for Engineering

Supplement to 542372: I/UCRC Forward Funding Year 1-4: Collaborative Research: Center for Integrative Materials Joining Science for Energy Applications

START_DATE: 3/30/2011 **END_DATE:** 8/31/2014

Himanshu Jain

Nanotechnology Institute

Assessment and Optimization of Fabrication Process Parameters for the Control of Nanoscale Porosity in Novel Bioactive Glass Scaffolds for Biomedical Applications

START_DATE: 1/1/2011 **END_DATE:** 12/31/2011

Raymond A. Pearson

Ben Franklin Technology Partners

MATAAC and Electro Chemical

START_DATE: 5/18/2011 **END_DATE:** 11/30/2011

Raymond A. Pearson

Electro Chemical Eng. & Mfg. Company

MATAAC and Electro Chemical

START_DATE: 5/18/2011 **END_DATE:** 11/30/2011

Raymond A. Pearson

MATAAC

*MATAAC and Electro Chemical***START_DATE:** 5/18/2011 **END_DATE:** 11/30/2011**Raymond A. Pearson**

Ben Franklin Technology Partners

*Electro Chemical Engineering & Manufacturing Co.***START_DATE:** 11/18/2010 **END_DATE:** 11/30/2011**Richard P. Vinci**

University of California, San Diego

*Fundamental Research and Design of High Power and Nano-Scale RF MEMS Devices***START_DATE:** 8/24/2010 **END_DATE:** 8/31/2012**Richard P. Vinci**

DOC-National Institute of Standards and Technology

*2011 NIST Summer Undergraduate Research Fellowships***START_DATE:** 5/1/2011 **END_DATE:** 9/30/2011**Masashi Watanabe**

NSF-Directorate for Mathematical and Physical Sciences

*MRI: Acquisition of a State-of-the-Art Aberration-Corrected Analytical Electron Microscope with Enhanced Atomic-Level Spectrometry and Low-Voltage Performance***START_DATE:** 10/1/2010 **END_DATE:** 9/30/2013**Mathematics****Mark Skandera**

National Security Agency

*Nonnegativity Problems Related to the Dual Canonical Basis and Symmetric Functions***START_DATE:** 2/23/2011 **END_DATE:** 2/22/2012**Xiaofeng Sun**

NSF-Directorate for Mathematical and Physical Sciences

*Geometry of the Moduli Spaces of Complex Manifolds***START_DATE:** 7/1/2010 **END_DATE:** 6/30/2013**Mechanical Engr & Mechanics****John P. Coulter**

NSF-Directorate for Engineering

*RET Supplement to 542354: GOALI: Intelligent Melt Rotation for Enhanced Injection Molding of Polymer and Nanocomposite Products***START_DATE:** 4/28/2011 **END_DATE:** 8/31/2013**John P. Coulter**

NSF-Directorate for Engineering

*IDR: Mesenchymal Stem Cells and Mechanotransduction: An Investigation of Nano-Structured Injection Molded Polymeric Biointerfaces***START_DATE:** 8/15/2010 **END_DATE:** 7/31/2013

John P. Coulter

NSF-Directorate for Engineering

GOAL: Intelligent Melt Rotation for Enhanced Injection Molding of Polymer and Nanocomposite Products

START_DATE: 9/1/2010 **END_DATE:** 8/31/2013

Joachim L. Grenestedt

The Pennsylvania State University

The Pennsylvania Space Grant Consortium

START_DATE: 4/1/2011 **END_DATE:** 3/31/2012

Joachim L. Grenestedt

DOD-Navy-Chicago

Slamming Load Test Facility Upgrade for DOD Supported Research on Marine Vehicles

START_DATE: 6/15/2011 **END_DATE:** 6/14/2012

Donald O. Rockwell

DOD-Air Force-Office of Scientific Research

Flow Structure and Loading on Revolving-Pitching Wings

START_DATE: 6/1/2011 **END_DATE:** 5/31/2014

Edmund B. Webb

DOE Sandia National Laboratory

Anisotropic Grain Boundary Diffusion Models in Sn Whisker Growth

START_DATE: 1/27/2011 **END_DATE:** 9/30/2011

Physics**Ivan Biaggio**

Azimuth Corporation

Research on Dynamic Holographic Characterization of Donor/Acceptor Distribution in KNbO₃ and of Charge Carrier Mobility in Sn₂P₂S₆

START_DATE: 5/1/2011 **END_DATE:** 4/30/2012

Volkmar R. Dierolf

NSF-Directorate for Mathematical and Physical Sciences

Materials World Network: Novel Material Platforms with Reduced Dimensionality for Next Generation Ferroelectric Photonics

START_DATE: 7/1/2010 **END_DATE:** 6/30/2013

Volkmar R. Dierolf

U.S. Department of Education

USDE-GAANN: Fellowship Program in Physics at Lehigh University

START_DATE: 8/16/2010 **END_DATE:** 8/15/2013

John P. Huennekens

NSF-Directorate for Mathematical and Physical Sciences

High-Resolution Spectroscopy of Heteronuclear Alkali Molecules: Structure and Dynamics

START_DATE: 8/1/2010 **END_DATE:** 7/31/2013

Arnold H. Kritz

Princeton Plasma Physics Laboratory

Fusion Simulation Project (FSP)

START_DATE: 4/7/2011 **END_DATE:** 9/30/2011

Psychology

Almut Hubbach

University of Arizona

Reconsolidation in Human Episodic Memory

START_DATE: 7/1/2010 **END_DATE:** 5/31/2012

Gordon B. Moskowitz

University of Arizona

Strategies for Reducing the Impact of Implicit Stereotyping of Hispanics in Recommendations for Smoking Cessation

START_DATE: 6/1/2011 **END_DATE:** 5/31/2014

Religion Studies

Taieb Berrada

The Andrew W. Mellon Foundation

Berrada SDG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Taieb Berrada

The Andrew W. Mellon Foundation

Berrada SRG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Nandini Deo

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Deo SDG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

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Deo SRG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Elizabeth Fifer

The Andrew W. Mellon Foundation

Fifer SDG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

David Michael Kramp

The Andrew W. Mellon Foundation

Kramp SDG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Ziad Wael Munson

The Andrew W. Mellon Foundation

Munson SRG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Ziad Wael Munson

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Munson SDG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Robert Thomas Rozehnal

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Rozehnal SDG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Robert Thomas Rozehnal

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Hussain SRG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Robert Thomas Rozehnal

The Andrew W. Mellon Foundation

Ambar SRG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

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The Andrew W. Mellon Foundation

Rozehnal SRG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Robert Thomas Rozehnal

The Andrew W. Mellon Foundation

Ambar SDG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Timothy J. Schwarz

The Andrew W. Mellon Foundation

Schwarz SRG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Timothy J. Schwarz

The Andrew W. Mellon Foundation

Schwarz SDG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Vera S. Stegmann

The Andrew W. Mellon Foundation

Stegmann SDG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Bruce Whitehouse

The Andrew W. Mellon Foundation

Whitehouse SRG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Alexander Wayne Wiseman

The Andrew W. Mellon Foundation

Wiseman SRG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Alexander Wayne Wiseman

The Andrew W. Mellon Foundation

Wiseman SDG - 2011

START_DATE: 5/1/2011 **END_DATE:** 3/31/2012

Research**Ricky S. Blum**

PA Dept of Community & Economic Development

Smart Grid Security and Failure Detection

START_DATE: 6/1/2011 **END_DATE:** 6/1/2012

James F. Gilchrist

PA Dept of Community & Economic Development

Toward Commercialization of Nanostructured Anodes for Enhanced Photon/Electron Transport in Dye Sensitized Solar Cells

START_DATE: 6/1/2011 **END_DATE:** 6/1/2012

Martin P. Harmer

PA Dept of Community & Economic Development

Lehigh Valley Li-ION Battery Project

START_DATE: 6/1/2011 **END_DATE:** 6/1/2012

Yatin Surendra Karpe

PA Dept of Community & Economic Development

Developing Entrepreneurial and Commercialization Resources for Effective Technology Transfer at Lehigh University

START_DATE: 1/1/2011 **END_DATE:** 3/31/2012

Steven McIntosh

PA Dept of Community & Economic Development

Structure-Function Relationships to Enable Commercialization of Direct Hydrocarbon Solid Oxide Fuel Cells

START_DATE: 6/1/2011 **END_DATE:** 6/1/2012

Sudhakar Neti

PA Dept of Community & Economic Development

Optimization of Surface Finish and Bonding Choices for Cost effective Concentrated Solar Power (CSP) Dish

START_DATE: 6/1/2011 **END_DATE:** 6/1/2012

Raymond A. Pearson

PA Dept of Community & Economic Development

Evaluating Cost-Reliability Relationships in Novel Wind Turbine Blades

START_DATE: 6/1/2011 **END_DATE:** 6/1/2012

Arup K. Sengupta

PA Dept of Community & Economic Development

Development of a Hybrid Ion Exchange (HIX) Technology for Selective Removal of Radium from Marcellus Produced Wastewater

START_DATE: 6/1/2011 **END_DATE:** 6/1/2012

Alan J. Snyder

PA Dept of Community & Economic Development

Lehigh University Energy and Environmental Research/Commercialization Initiative

START_DATE: 1/1/2011

END_DATE: 6/30/2013

Sherman Fair Ctr For Solid State

Miltiadis K. Hatalis

Versatilis LLC

STTR Phase I

START_DATE: 10/1/2010

END_DATE: 1/31/2011

Miltiadis K. Hatalis

ERC, Incorporated

A Nanosensor Device for Cell Phone Integration and Chemical Sensing Network

START_DATE: 12/1/2010

END_DATE: 5/31/2012

Miltiadis K. Hatalis

Versatilis LLC

SBIR Phase II - Electret Enhanced Organic Solar Cells

START_DATE: 1/1/2011

END_DATE: 6/30/2011

Small Business Development Center

Sandra F. Holsonback

University of Pennsylvania

2011 Small Business Administration

START_DATE: 1/1/2011

END_DATE: 12/31/2011

Sandra F. Holsonback

University of Pennsylvania

2011 Small Business Administration - Additional Funding

START_DATE: 1/1/2011

END_DATE: 12/31/2011

Sandra F. Holsonback

University of Pennsylvania

DLA Procurement 2011

START_DATE: 8/1/2010

END_DATE: 7/31/2011