

**TEMPLE UNIVERSITY**  
**FACULTY WITH FUNDED SUSTAINABILITY RESEARCH DURING FY2015 AND FY2016**  
**Prepared by Office of Sustainability**

School	School/Department	Investigator Name	Sponsor	Project Title
<b>Art (Tyler)</b>	Architecture	Harrison, Sally	The Village of Arts and Humanities	Digging Deeper
	Center for Sustainable Communities	Featherstone, Jeffrey	Environmental Protection Agency	An Integrated Strategy to Improve Green Infrastructure Approaches in Philadelphia
	Center for Sustainable Communities	Featherstone, Jeffrey	US Army Corp of Engineers	Rose Valley Creek Flood Hazard Analysis
	Center for Sustainable Communities	Featherstone, Jeffrey	William Penn Foundation	Target Sub-Watershed Cluster Implementation
	Center for Sustainable Communities	Featherstone, Jeffrey	William Penn Foundation	Project Oversight, Modeling, Monitoring And Assessment
	Center for Sustainable Communities	Flamm, Bradley J.	Pennsylvania Department of Transportation	TDM (Travel Demand Management) Best Practices for Southeast Pennsylvania's US 422 Corridor
	Center for Sustainable Communities	Meenar, Mahbubur	Environmental Protection Agency	Visioning Green Stormwater Infrastructure Projects Through a Community-Driven Geodesign Process
	Center for Sustainable Communities	Meenar, Mahbubur	Environmental Protection Agency	Brownfields Area Wide Planning For Philadelphia North Of Lehigh Neighborhood
	Community and Regional Planning	Mandarano, Lynn A.	National Fish and Wildlife Foundation	Green Neighborhood Tool Kit (PA)
	Landscape Architecture & Horticulture	Eisenman, Sasha	Villanova University	Volume Reduction GI Stormwater Control Measures
	Landscape Architecture & Horticulture	Olszewski, Michael	Herb Society of America	Growth of Herbs on a Green Roof; Effect of Media Components on Physical Characteristics, Moisture Retention and Nutrient Uptake and Growth of Basil, Rosemary, Oregano, Mint and Sage
<b>Business (Fox)</b>	MIS	Yoo, Youngjin	Economic Development Administration	Building a Sustainable Ecosystem for Urban Economic Development: Urban & Maps Studio
	Marketing	Mittal, Neha	Rutgers The State University Of New Jersey	Next Generation Sustainable Freight Transportation (NEX-GIFT)
	Marketing	Reeck, Crystal	Environmental Defense Fund	Building a Sustainable Ecosystem for Urban Economic Development: Urban & Maps Studio
<b>Engineering</b>	Civil Engineering	Abboud, Bechara E.	Pennsylvania Department of Transportation	Environmental and Cost Effectiveness of Partially Grouted Riprap for Scour Countermeasure
	Civil Engineering	Fatin Faheem Mahmoud, Ahmed	University of Wisconsin - Milwaukee	The Effective Use of Different Types of Fly Ash in Green ASHphalt Pavements
	Civil Engineering	Suri, Rominder	William Penn Foundation	Assessment Of Non-Point Source Pollutants

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<b>Engineering</b>	Civil Engineering	Suri, Rominder	National Science Foundation	AIR:Water Technology Innovation Ecosystem
	Civil Engineering	Suri, Rominder	National Science Foundation	I-Corps: Novel Absorbents for Water Treatment
	Civil Engineering	Suri, Rominder	National Science Foundation	I/UCRC: Water and Environmental Technology Center
	Civil Engineering	Suri, Rominder	Amriton LLC	Adsorbent Filter Technology Research
	Civil Engineering	Suri, Rominder	Carnegie Mellon University	Development Of A Novel, Low Cost, And Reusable Water Filter
	Civil Engineering	Suri, Rominder	Philadelphia Water Department	Tracers of Human Wastewater for the PWD
	Civil Engineering	Suri, Rominder	Pfizer Inc	Enhancement Project-API Removal Using Ozonation (460078 23030)
	Civil Engineering	Van Aken, Benoit	US Department Of Agriculture	Growing Energy Crops on Contaminated Land for the Combined Benefits of Phytoremediation and Sustainable Energy
	Civil Engineering	Van Aken, Benoit	West Virginia University	Assessing the Vulnerability of Sensitive Karst Habitats Containing RTE Species in Chesapeake and Ohio Canal National Historical Park
	Civil Engineering	Van Aken, Benoit	University of Iowa	Semi-volatile PCB's: Sources, Exposures, Toxicities
	Civil Engineering	Van Aken, Benoit	Pennsylvania State University	Development of a Real-time PCR Method for the Early Detection of Aquatic Invasive Species in PA Watersheds
	Civil Engineering	Van Aken, Benoit	Pennsylvania State University	Development Of A Molecular Biomarker For The Prediction Of Toxic Algal Blooms
	Civil Engineering	Zhang, Huichun	National Science Foundation	Impact of Interactions between Metal Oxides to Redox Reactivity of Manganese and Iron Oxides
	Civil Engineering	Zhang, Huichun	National Science Foundation	Reduction Of Nitrogen-Oxygen Containing Contaminants (Nocs) In Aquatic Environments
	Civil Engineering	Mckenzie, Erica R.	Pennsylvania Department of Transportation	Assessment of Deicing Performance and Potential Environmental Impacts of Winter Roadway Maintenance Materials Enhancers
	Electrical Engineering	Biswas, Saroj	National Science Foundation	A Realistic Intelligent Multimedia Virtual Laboratory for Power Application
	Mechanical Engineering	Neretina, Svetlana	National Science Foundation	CAREER: II-VI Semiconductor Vapor Phase Epitaxy Guided by Kinetically Active Surface Agents
	Mechanical Engineering	Neretina, Svetlana	National Science Foundation	Nanostructure Synthesis At The Liquid-Substrate Interface

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<b>Engineering</b>	Mechanical Engineering	Neretina, Svetlana	National Science Foundation	New Nanomanufacturing Techniques For The Fabrication Of Plasmonic Surfaces For Photovoltaic, Catalytic And Sensing
	Mechanical Engineering	Qiu, Songgang	US Department Of Energy	Advanced Stirling Power Generation System For Combined Heat And Power
	Mechanical Engineering	Ren, Shenqiang	National Science Foundation	Bottom-Up Manufacturing Of Sustainable Magnetic Nanocrystal Assembly
	Mechanical Engineering	Vainchtein, Dmitri	National Science Foundation	Mixing by Resonances in Multi-Scale Systems
<b>Liberal Arts</b>	Economics	Maclean, Johanna C.	University of Pennsylvania	Evaluation of a Workplace Wellness Program Implementation
	Geography & Urban Studies	Hayes-Conroy, Allison	National Science Foundation	Nrt-Ige Innovating Graduate Stem Education Through Body-Centered Partnerships
	Geography & Urban Studies	Masucci, Michele M.	Knight Foundation	Urban Apps and Maps Studio
	Geography & Urban Studies	Pearsall, Charlyn	Tookany/Tacony-Frankford Watershed	Tookany/Tacony-Frankford Trash Task Force Monitoring Study
	Geography & Urban Studies	Rosan, Christina	Swarthmore College	Performance And Effectiveness Of Urban Green Infrastructure: Maximizing Benefits At The Subwatershed Scale Through
	Institute for Survey Research	Grunwald, Heidi E.	City Of Philadelphia	Seeking Creative Research On Philadelphians' Traffic Knowledge And Behavior
	Sociology	Waidzunas, Thomas J.	American Society For Engineering Education	Eager: Promoting LGBTQ Equality In Engineering Through Virtual Communities Of Practice
<b>Science &amp; Technology</b>	Center for Materials Theory	Perdew, John P.	US Department Of Energy	Center for the Computational Design of Functional Layered Materials
	Biology	Cordes, Erik	National Science Foundation	Ocean Acidification: Physiological and genetic responses of the deep-water coral, <i>Lophelia pertusa</i> , to ongoing ocean acidification in the Gulf of Mexico
	Biology	Cordes, Erik	University of Georgia	Ecosystem Impacts Of Oil And Gas Input To The Gulf - 2
	Biology	Freestone, Amy	National Science Foundation	Community Effects of Competition and Predation Across Latitude and Implications for Species Invasions
	Biology	Sewall, Brent	US Fish and Wildlife Service	Effects Of Age And Colony Experience On Bat Responses To White Nose Syndrome And Consequences For Population Dynamics
	Biology	Sewall, Brent	Pennsylvania Game Commission	White-Nose Syndrome and Pennsylvania's Bat Populations: Statewide Statistical Analysis to Understand Disease Impacts and Inform Management of Hibernating Bat Species

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Science & Technology	Chemistry	Matsika, Spiridoula	US Department Of Energy	Combining High Level Ab Initio Calculations with Laser Control of Molecular Dynamics
	Chemistry	Rao, Yi	Honda Research Institute USA Inc.	Studies of Carrier Generation for High Efficient Photovoltaic Applications
	Computer & Information Science	Shi, Yuan	National Science Foundation	I-Corps: Growshare.net - An Urban Revitalization Civic Service
	Computer & Information Science	Wu, Jie	National Science Foundation	Eager: A Meso-Scale GENI WiMAX Project
	Earth & Environmental Science	Davatzes, Alexandra	National Science Foundation	CAREER: Field Studies of Precambrian Impacts and Implications for the Early Crust and Environment
	Earth & Environmental Science	Davatzes, Nicholas	United States Geological Survey	USGS-Temple University Co-operative Research on Geothermal Systems
	Earth & Environmental Science	Davatzes, Nicholas	Ormat Nevada Inc.	Bradys Geothermal Field EGS Project Geomechanical Analysis
	Earth & Environmental Science	Davatzes, Nicholas	University Of Oklahoma	Development of a Geological and Geomechanical Framework for the Analysis of MEW in EGS Experiments
	Earth & Environmental Science	Davatzes, Nicholas	Washington State Department of Natural Resources, Geology	Geothermal Play-Fairway Analysis Of Washington State Prospects
	Earth & Environmental Science	Davatzes, Nicholas	State of Utah	Enhanced Geothermal System Concept Testing and Development at Milford City Utah Forge Site
	Earth & Environmental Science	Davatzes, Nicholas	Washington State Department of Natural Resources, Geology	Geothermal Play-Fairway Analysis Of Washington State Prospects
	Earth & Environmental Science	Laboso, Roselyne C.	University of California	Influence Of Fault Slip Mechanical Interaction On The Evolution Of Permeability At Brady'S Geothermal Field
	Earth & Environmental Science	Muto, Atsuhiro	National Science Foundation	Revealing Late Holocene Climate Variability In Antarctica From Borehole Paleothermometry
	Mathematics	Seibold, Benjamin	National Science Foundation	CPS: Synergy: Collaborative Research: Control of Vehicular Traffic Flow via Low Density Autonomous Vehicles
	Physics	Iavarone, Maria	US Department Of Energy	Vortex Matter in Confined Superconductors and Mesoscopic Hybrid Heterostructures
	Physics	Martoff, Charles J.	National Science Foundation	Collaborative Research: R & D Towards DarkSide-G2, a Second-Generation Direct Search for Dark Matter
	Physics	Martoff, Charles J.	National Science Foundation	Collaborative Research: Direct Search for Dark Matter with Underground Argon at LNGS
Physics	Meziani, Zein-Eddine	US Department Of Energy	Nuclear Research Using the Electromagnetic Probe	

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<b>Science &amp; Technology</b>	Physics	Tao, Rongjia	Naval Research Laboratory	Mo Material Characterization
	Physics	Tao, Rongjia	Save The World Air, Inc.	Research on Crude Oil Viscosity Reduction and Diesel Fuel Injection
	IGEM	Hedges, Stephen B.	Conservation International Foundation	Ecosystem Threat Assessment and Protected Area Strategy for the Massif de la Hotte Key Biodiversity Area, Haiti
	IGEM	Hedges, Stephen B.	National Science Foundation	Integrating Genetic, Taxonomic, and Functional Diversity of Tetrapods Across the Americas and Through Extinction Risk
<b>TOTAL FUNDED FACULTY</b>		<b>45</b>		