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THE UNIVERSITY of TENNESSEE UT KNOXVILLE

Awards and Recognitions

http://research.utk.edu JUNE 15, 2011

AWARDS FOR MAY 11–31, 2011

INVESTIGATOR	TITLE	SPONSOR	AWARD
COLLEGE OF ARCHITECTURE & DESIGN			
Stach, Edgar; Miller, William; Rose, James	EPRI-UT Proposal for Collaboration in Solar Decathlon 2011	Electric Power Research Institute	$50,000
COLLEGE OF ARTS & SCIENCES			
Baker, Gregory	Multiscale Investigations on the Rates and Mechanisms of Targeted Immobilization	UT-Battelle - ORNL	$15,000
Binder, Brad	Studies on ETRI Ethylene Receptor Structure, Function and Output	National Science Foundation	$134,222
Cooper, Matthew	Neural Mechanisms Underlying Stress-Induced Changes in Behavior	Department of Health and Human Services	$12,858
Dessel, J.P.	Acting Locally: Rethinking the Late Bronze Age and Iron Age 1 From a Village	National Endowment for the Humanities	$50,400
Fedo, Christopher	Geochemical and Iron Isotopic Investigation of Precambrian Banded Iron Formation (3.8-1.9 Ga)	NASA - Headquarters	$28,160
Guiochon, Georges	Fundamental Studies in Nonlinear Chromatography	National Science Foundation	$175,000
Guo, Hong; Smith, Jeremy	QM, QM/MM MD and Free Energy Simulations of MERB and Hg(II) Binding	UT-Battelle - ORNL	$12,000
Hinde, Robert	Collaborative Research: Spectroscopy and Chemistry of Open-Shell Atoms in Solid Hydrogen Matrices	National Science Foundation	$100,000
Hollenbach, Kandace	Paleoethnobotanical Analysis of 41HY165, Hays County, Texas	Texas State University	$4,501
Mays, Jimmy	Travel Support for Participants in ACS Division of Polymer Chemistry Symposium	Department of the Army	$4,774
McCracken, Gary	Fall migration of Tadarida brasiliensis and their agricultural insect pest prey	Bat Conservation International	$3,200
Musfeldt, Janice	Spectroscopic Investigations of Complex Magnetic and Electronic Materials	U.S. Dept. of Energy	$135,000
Roberts, Daniel	Nodulin Intrinsic Proteins at the Plant-microbe Symbiotic Interface	National Science Foundation	$270,928
Seal, Katyayani	Experimental and Theoretical Studies of Metallic Nano-Plasmonic Material	UT-Battelle - ORNL	$14,527
Singh, David	Control of Lattice Instabilities in Ferroelectric Perovskites by Cation	Department of the Navy	$19,500
Thompson, James	Formation and Properties of Materials for Advanced Energy Technologies	UT-Battelle - ORNL	$13,362
Vonarnim, Albrecht	Analysis Software and Algorithm Development - Manesh Shah	UT-Battelle - ORNL	$14,260
Weitering, Hanno	Ultrathin Oxide Growth and Characterization	UT-Battelle - ORNL	$26,604
Weitering, Hanno	Experimental Studies of Organic Spintronics	UT-Battelle - ORNL	$16,178
Weitering, Hanno	Exploration of quantum size effects in ultrathin magnesium films for hydrogen	UT-Battelle - ORNL	$13,262
Weitering, Hanno	Exploration of quantum size effects in ultrathin ruthenium films for surface	UT-Battelle - ORNL	$13,262
Wilhelm, Steven	Collaborative Research: Decoding Virus Leviathans	National Science Foundation	$6,950
COLLEGE OF BUSINESS ADMINISTRATION			
Hutchison, Joan	Developing Shared Understanding through Knowledge Management: C-MAP	Department of the Navy	$65,000
COLLEGE OF EDUCATION, HEALTH & HUMAN SCIENCES			
Brewer, Ernest	Upward Bound USDA Summer Food Service Program--Math and Science Center	Tennessee Department of Human Services	$3,745
Brewer, Ernest	Upward Bound USDA Summer Food Service Program--Academic Enrichment Upward Bound	Tennessee Department of Human Services	$3,404
Brewer, Ernest	Upward Bound USDA Summer Food Service Program-Pre-College	Tennessee Department of Human Services	$3,830
Kim, Youn-Kyung; Fairhurst, Ann; Runyan, Rodney	International Retail Management Curriculum and Instructional Module Development	U.S. Dept. of Education	$43,743
Spence, Marsha	Clinton City Schools Child Nutrition Consultation	Clinton City Schools	$540
COLLEGE OF ENGINEERING			
Clarke, David	Provide Technology Transfer, Tech Assistance and Training for Local Transp. Agencies in TN	Tennessee Department of Transportation	$2,600,000
Dmowski, Wojciech	Atomistic Study of Bulk Metallic Glasses	UT-Battelle - ORNL	$30,000
Dodds, Harold	Nuclear Safety Research and Development	UT-Battelle - ORNL	$3,715
Duscher, Gerd	Atomic-scale Investigation of Energy Materials	UT-Battelle - ORNL	$41,500
He, Wei; Liaw, Peter	Surface Science and Engineering towards Bioactive Bulk Metallic Glasses	National Science Foundation	$296,536
Li, Husheng	Collaborative Research: Quickest Detection in Ad Hoc Networks with Application in Cognitive Radio	National Science Foundation	$6,250
Maldonado, Guillermo	Curriculum Development for Consortium for Advanced Simulation of Light Water	UT-Battelle - ORNL	$80,000
Mandrus, David	Correlated and Complex Materials	UT-Battelle - ORNL	$18,144

AWARDS FOR MAY 11–31, 2011 (CONT.)

INVESTIGATOR	TITLE	SPONSOR	AWARD
McHargue, Carl	Mechanical Properties of Nuclear Materials	UT-Battelle - ORNL	$27,527
McHargue, Carl; Barabash, Rozaliya	X-Ray Diffuse Scattering- 2	UT-Battelle - ORNL	$12,020
McHargue, Carl; Meisner, Roberta	Materials Characterization	UT-Battelle - ORNL	$16,145
Mench, Matthew	CAREER: Sensors for Quantification of Degradation in Polymer Electrolyte Fuel Cells	National Science Foundation	$204,680
Pharr, George	ARCAM Electron Beam Melting Technology	UT-Battelle - ORNL	$8,097
Rack, Philip	Center for Nanophase Materials Science (CNMS)	UT-Battelle - ORNL	$50,000
Ruggles, Arthur	HFIR Target Assessments	UT-Battelle - ORNL	$3,195
Ruggles, Arthur	HFIR Safety Analysis For LEU Fuel	UT-Battelle - ORNL	$14,000
Tootle, Glenn	Reconstruction of Upper Colorado River Basin Snowpack Using Tree-Rings and Climate	National Science Foundation	$19,500
Wang, Shanfeng	Phenotypic Modulation of Smooth Muscle Cells on Biodegradable Elastomeric	National Science Foundation	$245,600
Zhang, Zhili	Rydberg State Spectroscopy for Complex Chemical Detection	UT-Battelle - ORNL	$25,000
COLLEGE OF SOCIAL WORK			
Campbell, Paul; Cunningham, Maryanne	21st Century Afterschool Program Evaluation	University of Tennessee - Institute of Public Service	$290,000
Patterson, David	Knoxville KMIS	Housing & Urban Development	$132,282
Patterson, David	ARRA: KnoxHMIS HPRP Evaluation	Knoxville/Knox County - Community Action Committee	$3,410
CAMPUS CENTERS & INSTITUTES			
Bell, Larry	Sigma Space - NASA/LBA	Sigma Space Corporation	$12,023
Burman, Elizabeth	Ready for the World: The University of Tennessee, Knoxville. Application	Kellogg (W K) Foundation	$7,000
Corda, Stephen	Provide Integration and flight Test, NASA Marshall Airborne Polarimetric Imaging Radiometer (MAPIR)	NASA - Marshall Space Flight Center	$53,125
Harrison, Robert	Slavici Summer Internship	UT-Battelle - ORNL	$9,580
Harrison, Robert	Miller Single Mode Fibers	UT-Battelle - ORNL	$22,226
Harrison, Robert	Kevin Stock Summer Internship	UT-Battelle - ORNL	$10,973
Loeffler, Frank; Ritalahti, Kirsti	BioRed: Biomakers and Tools for Reductive Dechlorination Site Assessment	U.S. Department of Defense	$100,000
Moeller, Trevor Michael	Cryotank Reliability Study	Gloyer-Taylor Laboratories	$3,554
Sayler, Gary; Cox, Chris; Jouline, Igor; Smith, Jeremy; Stewart, Charles	Cellulosic Biomass Deconstruction, Characterization and Modeling	UT-Battelle - ORNL	$529,000

UT KNOXVILLE INVENTION DISCLOSURES

February 2011

Novel electronic, chemical, and biological sensors with composite hybrid nanomaterials by **Ramki Kalyanaraman**

Deformable articulating template by **Mohamed R. Mahfouz**

Doping a low-dimensional semiconductor by carrier transfer from a doped three-dimensional semiconductor by **Gong Gu**

Rapid response microsensor for hydrogen detection by **Michael T. Sepaniak, James F. Patton, David B. Smith, Panagiotis Datskos, Scott R. Hunter,** and **Nickolay V. Lavnik**

Catalysts for alkene aziridination and click chemistry by **Ramez A. Elgammal, Shane Foister, Ashleigh Price, Belinda Lady,** and **Ashesh S. Belapure**

Implant design analysis suite (IDAS) by **Mohamed R. Mahfouz**

March 2011

Calibration process and associated algorithm for predicting surface heat flux via in-depth temperature sensors by **Jay I. Frankel** and **Majid Keyhani**

Science, technology, engineering, and math Storycenter by **Olga D. Ebert** and **Richard Audet**

Lipids microplate assay-chemi by **Michael D. Best**

Mobile biometrics information collection and identification by **J. Doug Birdwell, N. Quentin Haas,** and **Scott F. Hansen**

Conversion of biomass to value-added products by **Ramez A. Elgammal** and **Shane Foister**

Development of novel surfaces, electrodes, and catalysts for PEM fuel cells by **Ramez A. Elgammal** and **Shane Foister**

Assessment of reading instructional knowledge-adults by **Mary F. Ziegler, Steve McCallum,** and **Sherry M. Bell**

April, 2011

Electrical spectrum database by **J. Doug Birdwell, Scott F. Hansen, Carl Sapp, Tse-Wei Wang, Roger D. Horn,** and **Mark S. Rader**

Method for efficient sensing of MeV photons in non-scintillating glasses by **Jason P. Hayward**

A technique that utilizes metblown fibers to improve the mechanical filtration efficiency of fabric without a significant increase of the pressure drop by **Peter P. Tsai, Clifton Woods, III,** and **Jack L. Wyrick**

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