NIST

National Institute of Standards and Technology
U.S. Department of Commerce

Extramural Fire Research Grants Program
Awarded Grants 2005-2011

AWARDS MADE IN THE FIRE GRANTS PROGRAM DURING FISCAL YEAR 2011

Institution	PI	Title	Total Award
Fire Protection Research Foundation	C. Grant	Performance Requirements for Compatible and Interoperable Electronic Equipment for Emergency Fire Responders	$62K
Texas Engineering Experiment Station	J. Grunlan	Flame Retardant and Damage-Resistant Nanocoatings for Fabric, Fibers and Fill from Environmentally Benign Materials	$461K
San Jose State University	C. Clements	Field Experiments of Fire-atmospheric Interactions during Head Fires on Slopes	$299K
Hughes Associates	J. Floyd	Evolutionary Development of Advanced Species Tracking and Combustion Modeling for Fire Dynamics Simulator	$300K
McNamara Consulting, Inc.	D. McNamara	Coupling Wildland-Urban Interface Fire Models to a Geographic Information System	$277K
American University	D. Fox	Lignocellulosic Materials as Intumescing Flame Retardants for Bio-based Polymer Composites	$410K

AWARDS MADE IN THE FIRE GRANTS PROGRAM DURING FISCAL YEAR 2010

Institution	PI	Title	Total Award
Marquette University	C. Wilkie	New Nano-Dimensional Materials for Fire Retardancy	$291K
University of Utah	S. Krueger	Multi-Scale Modeling of Wind & Wildfires	$264K
Fire Prot. Research Fdnt.	K. Almand	Mitigating Fire Losses from Home Cooking Fires	$74K
University of Maryland	S. Stoliarov	A Multiscale Approach to Parameterization of Burning Models for Charring Polymers	$308K
Worcester Polytechnic Inst.	B. Meacham	Quantification of Fire Risk, Performance Levels, Design Fires and Acceptance Criteria for Use in Performance-Based Codes and Fire Safety Design	$342K

AWARDS MADE IN THE FIRE GRANTS PROGRAM DURING FISCAL YEAR 2009

Institution	PI	Title	Total Award
University of Dayton	A. Morgan	Research and Development on New Flame Retardant Chemistries for Polyurethanes	$300K
University of Maryland	T. Kashiwagi	Reducing Flammability of Polymers by Enhancing Char Formation	$74K
Harvey Mudd College	Z. Duron	Development of a Wireless Fire-Sensor Technology for Monitoring Stability Loss in Burning Buildings	$150K
University of Maryland	J. Milke	Analysis of Observation of People Movement Characteristics During Evacuation of High-Rise Office Buildings	$275K

AWARDS MADE IN THE FIRE GRANTS PROGRAM DURING FISCALYEAR 2008

Institution	PI	Title	Total Award
National Fallen Firefighters Foundation	J. Whitestone	Firefighter Life Safety – Fire Research	$100K
Worcester Polytechnic Institute	N. Dembsey	Development of Guidelines for Obtaining Material Parameters for Input into Fire Models	$600K
Texas Engineering Exp.	J. Grunlan	Layer-by-Layer Assembly of Flame Retardant Coatings for Foam and Fabric	$$253
Hughes Associates, Inc.	J. Floyd	Multi-parameter Mixture Fraction with Multi-Step Combustion for Soot Formation and Destruction for Fire Dynamics Simulator	$300K
Coeur d'Alene Tribe	F. Roberts	WFDS GIS Integration	$318K
American University	D. Fox	Reduced Polymer Flammability Using POSS-Modified Cellulose	$272K

AWARDS MADE IN THE FIRE GRANTS PROGRAM DURING FISCAL YEAR 2007

Institution	PI	Title	Total Award
University of MD	A. Trouve	Modeling of Backdraft Phenomena in the Fire Dynamics Simulator	$ 67K

Institution	PI	Title	Total Award
Tennessee Technology Institute	H. Stretz	Determination of Montmorillonite Nanocomposite Aggregation Rates Using Real Time X-Ray Diffraction Techniques at High Temperatures	$ 67K
Hughes Associates, Inc.	S. Gwynne	Development of a Facility Enabling the Collection, Dissemination and Application of Data Relating To Human Behavior in Fire	$193K
University of MD	F. Mowrer	Effects of Thermal Environment on the Performance Of Thermal Imaging Cameras	$ 60K
University of Texas	O. Ezekoye	Positive Pressure Ventilation Induced Transport of Fire Products in a Residential Structure	$313K
Michigan State University	V. Kodur	Collaborative Research to Develop Guidelines for Fire Safety Design of Steel Beam-Columns	$124K
Princeton University	M. Garlock	Collaborative Research to Develop Guidelines for Fire Safety Design of Steel Beam-Columns	$ 84K
Michigan State University	V. Kodur	NSF Workshop on Structures and Fire: Research Needs and State-of-the-Art	$ 16K
RGR Consulting	R. Rehm	Landscape Model for WUI Fire Spread	$196K
University of Utah	S. Krueger	Multi-Scale Modeling of Wildfires	$289K
Case Western Reserve	C. Sung	Ignition Propensity of Hydrogen in the Presence of Metal Surfaces	$300K
Fire Cause Analysis	J. Zicherman	Southern California Urban/Wildland Interface Fires Dataset (SCUWI): Scoping and Resolution Study	$ 25K

AWARDS MADE IN THE FIRE GRANTS PROGRAM DURING FISCAL YEAR 2006

Institution	PI	Title	Total Award
Harvey Mudd College	Z. Duron	Real-Time Monitoring of Burning Structures	$287K
Univ. of Texas @ San Antonio	J. Clark	The Integration of Biometric Technologies with Fire Fighting Information Systems	$95K
Georgia Tech Res. Corp.	S. Kumar	Carbon Nanotube Based Fibers and Fabrics for Thermal Protection	$300K
Marquette Univ.	J. Hossenlopp	New Directions in Nanocomposite-Based Fire Retardant Additives for Polymers	$150K
Purdue Univ.	A. Varma	Realistic Fire Behavior and Stability of Steel Building Structures	$149K
Univ. of Massachusetts Amherst	E. Coughlin	Fire Safe Polymers and Polymer Composites	$286K

AWARDS MADE IN THE FIRE GRANTS PROGRAM DURING FISCAL YEAR 2005

Institution	PI	Title	Total Award
Univ. of North Texas	N. D'Souza	Layer Double Hydroxides for Flame Retardant Nanocomposites	$71K
Res. Fdnt. of CUNY	N. Groner	Transfer of Cognitive Engineering Theory and Practice to Building Protection Systems Design	$35K
Univ. of Maryland	T. Kashiwagi	Flame Retardant Mechanism of the Nanotubes-Based Nanocomposites	$105K
Society of Fire Protection Engineers	M. Hurley	Analysis of FDS Thermal Detector Response Predictive Capability	$23K
Univ. of Florida	A. Long	Fire Spread and Structural Ignitions from Horticultural Plantings in the Wildland-Urban Interface	$239K
Coeur d"Alene Tribe	J. Arnold	Enhancing the Fire Dynamics Simulator for Modeling Fire Behavior in the Wildland-Urban Interface	$233K
Hughes Associates	J. Floyd	Multi-Parameter, Multiple Fuel Mixture Fraction Combustion Model for the Fire Dynamics Simulator	$288K
Univ. of Maryland	P. Sunderland	Fire Safety Risks Associated with Leaks in Hydrogen Systems	$327K