

Individual Research Grants and Contracts
Received August 31 – November 21, 2007
Accepted by the Board of Trustees December 7, 2007

Asmussen, Jes; \$21,503; Fraunhofer Research Center for Coating and Laser Applications; Fraunhofer USA

Asmussen, Jes; \$40,575; Fraunhofer Research Center for Coating and Laser Applications; Fraunhofer USA

Aviyente, Sara Selin; \$155,473; Signal Processing for Quantifying the Functional Integration in the Brain; NSF

Ayres, Virginia M; \$30,000; Radiation Resiliency in Reduced Dimensionality Systems; NASA

Balasubramaniam, Shanker; \$205,180; Collaborative Research, Pace-Parallel Accelerated Cartesian Expansions with Application to Molecular Dynamics; NSF

Biswas, Subir Kumar; Rajendra, Kunwar; \$40,805; Evaluation of the Economic Impact of the Vehicle Infrastructure Integration Program in Michigan; MI Transportation

Chakrabarty, Shantanu; Radha, Hayder; \$250,000; Investigation into Non-Conventional Analog Decoders for Low-Density Parity Check Codes; NSF

Khalil, Hassan; \$36,929; Nonlinear Output Feedback Control: Performance and Robustness; NSF

Mahapatra, Nihar Ranjan; \$75,000; Robust, Compiler-Based Reverse Engineering Protection of Sensitive Code and Data; Lockheed-Martin Corp

Mason, Andrew J; \$72,375; Au-Thiolate Nanoparticles as Interfacial Layers on Microsensor Arrays for Trace Explosive Vapor Detection; University of Michigan

McGough, Robert J; \$13,607; Hyperthermia and Perfusion Effects in Cancer Therapy; Duke University

Peng, Fang Zheng; \$35,000; Collaborative Research: CT-T: a Resilient Real-Time System for a Secure and Reconfigurable Power Grid; NSF

Radha, Hayder; \$79,000; Reliable Packet Video Transmission and Cross Layer QOS over Mobile Wireless Networks; Electronic Tech Res Inst of Korea

Radha, Hayder; \$83,924; Network Channel Coding for Packet Video; NSF

Ramuhalli, Pradeep; \$42,435; Identification and Reduction of Turbomachinery Noise; Comet Technology Corp

Schock, Harold; Mechanical Engineering; **Hogan, Tim**; Electrical & Computer Engineering; **Peng, Fang Zheng**; Electrical & Computer Engineering; **Case, Eldon D**; **Kanatzidis, Mercouri**; \$100,000; Thermoelectric Conversion of Waste Heat to Electricity in an IC Engine Powered Vehicle; US Dept of Energy

Tan, Xiaobo; \$6,000; Career: Dexterous Biomimetic Micromanipulation Using Artificial Muscles: Modeling, Sensing, and Control; NSF

Tan, Xiaobo; \$37,256; Career: Dexterous Biomimetic Micromanipulation Using Artificial Muscles: Modeling, Sensing, and Control; NSF

Udpa, Lalita; **Udpa, Satish**; \$21,383; Development of System for Evaluation of Case Hardening Depth; SKF

Xi, Ning; \$50,000; Research and Development on Robot Calibration; ABB Automation Inc

Xi, Ning; \$10,000; General Research Gift; PPG Industries Inc