

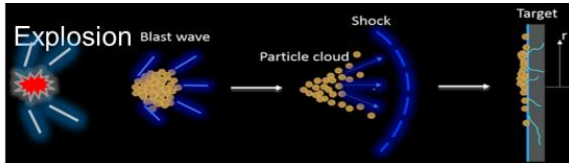
COLLEGE OF ENGINEERING
Dr. Morteza M. Mehrabadi, Dean

Office of the Dean

Dr. Morteza M. Mehrabadi **Total: \$395,000**
San Diego Gas and Electric Company: *"Innovate Academy - Mobile 3D Printer Experience,"* \$10,000
University of California Office of the President: *"2015-2016 MESA Engineering Program (MEP),"* \$10,000; *"Math, Engineering, Science Achievement (MESA) MESA Schools Program (MSP),"* \$195,000; *"Math, Engineering, Science Achievement (MESA) Mesa School Program (MSP)-Imperial Valley,"* \$180,000

Aerospace

Dr. Gustaaf Jacobs **Total: \$315,992**
U.S. Department of Defense Air Force Office of Scientific Research: *"Simulation of Particle-Laden Blast Waves with Inter-Scale Coupling and Uncertainty Quantification,"* \$315,992



Modeling of Blast Waves with Reactive Particles
Photo: Dr. Gustaaf Jacobs and HS Udaykumar
PI: G. Jacobs

Dr. Mauro Pierucci **Total: \$29,200**
University of Pisa Italy: *"University of Pisa Italy Students at SDSU,"* \$29,200

Dr. Satchi Venkataraman **Total: \$118,369**
N&R Engineering: *"Uncertainty Quantification of Test Model Parameters for Life Prediction of Composite Bolted Joints in an Integrated Computational Materials Engineering (ICME) Framework,"* \$44,688

Next Gen Aeronautics: *"Blade Stress Estimation Subjected to Multiple Simultaneous Vibratory Mode Responses, Ph2,"* \$5,000

University of California at San Diego: *"Baseline and Residual Strength Characterization of Composite Laminates Under Bearing and Bypass Loading,"* \$68,681

Civil & Environmental Engineering

Dr. Temesgen Garoma **Total: \$315,624**
California State Energy Commission: *"Energy-Efficient and Cost-Effective Microalgae Disruption for Extraction of Lipids for Biodiesel Production,"* \$305,624

Metropolitan Water District of Southern California: *"A Novel Water and Energy Saving Strategy - The Use of Secondary Effluent for Algal Biomass Cultivation,"* \$10,000

Dr. Alicia M. Kinoshita **Total: \$5,000**
Big Bear Valley Trails Foundation: *"Developing a Model to Predict the Hydrologic Impacts of Recreational Trails in the San Bernardino National Forest,"* \$5,000

Dr. Thomas A. Zink **Total: \$651,359**
U.S. Department of Defense Army Corps of Engineers: *"Dune Enhancement and Nesting Site Preparation to Support the California Least Tern and Western Snowy Plover at Naval Air Station North*

Awards Received July 1, 2015 - June 30, 2016

Island and the Silver Strand Training Complex, Naval Base Coronado, California," \$268,365;
"Reagentless Environmental Water Hazard Sensor Research," \$59,968; "Vegetation Mapping at Naval Auxiliary Landing Field (NALF) San Clemente Island, Naval Base Coronado, California," \$323,026

Dr. Thomas A. Zink, Dr. Natalie Mladenov, and Alicia M. Kinoshita **Total: \$720,463**

San Diego River Conservancy: *"Restoration of Alvarado Creek Upper Reach 1," \$543,500*

San Diego State University: *"Restoration of Alvarado Creek Upper Reach 1," \$112,402; "Baseline Monitoring for Restoration of Alvarado Creek Upper Reach 1," \$64,561*



Project Manager Julie Lambert and Mr. Tom Zink
Photo: Sandra Nordahl
PI: T. Zink

Electrical & Computer Engineering

Dr. frederick harris **Total: \$11,255**

U.S. Department of Defense Space and Naval Warfare Systems Command: *"Transceiver Architecture Design and Implementation for Commercial-Off-The-Shelf Software Defined Radio (COTS SDR)," \$11,255*

Dr. Ke Huang **Total: \$30,000**

Qualcomm Inc.: *"Qualcomm Support for Dr. Huang's Research," \$30,000*



Dr. Ke Huang

Dr. Sunil Kumar **Total: \$442,500**

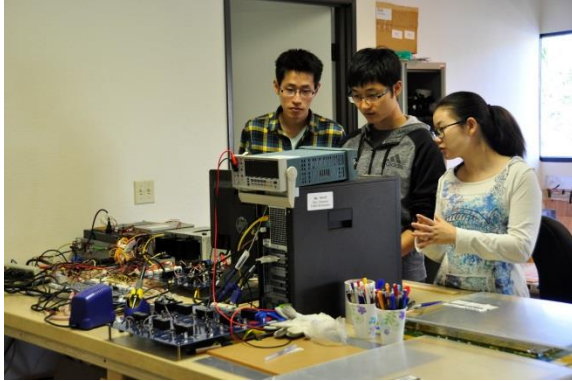
U.S. Department of Defense Air Force Research Laboratory: *"Prioritized, QoS-aware Information Transmission Over Congested/Contested Wireless Mesh," \$442,500*

Dr. Chunting C. Mi **Total: \$748,684**

Awards Received July 1, 2015 - June 30, 2016

Nanjing Golden Dragon Bus Manufacturing Company Ltd: *"Joint Laboratory Development and Training,"* \$200,000

University of Michigan: *"GATE Center for Electric Drive Transportation,"* \$444,325; *"Uncertainty Management and Proactive Maintenance for Lithium-Ion Batteries in Electrified Vehicles,"* \$104,359



Experiment on the battery management system. (Left to right: Jufeng Yang, Bing Xia, Chenwen You)
Photo: Dr. Xianzhi Gong
PI: Dr. Chunting C. Mi

Dr. Yusuf Ozturk

Total: \$25,000

University of California at San Diego: *"A Real-Time Closed Loop Brain Computer Interface for Recording Visually Evoked Neural Activity,"* \$25,000

Dr. Satish Sharma

Total: \$686,555

Broadcom Corporation: *"Multi-Band Global Navigation Satellite System (GNSS) Antenna Research Proposal,"* \$30,000

Space Micro, Inc.: *"Innovative Antenna Arrays Enabling Continuous Interceptor Communications,"* \$42,000

U.S. Department of Defense Office of Naval Research: *"Development of W-Band Millimeter-Wave Links for Nanosat Applications,"* \$145,000; *"Quasi-Far-Field System Upgrade for Millimeter Wave (mmw) Frequency Expansion,"* \$469,555

Dr. Sridhar Seshagiri and Dr. Yusuf Ozturk

Total: \$16,887

University of Central Florida: *"Solar Training and Education for Professionals (STEP),"* \$16,887

Dr. Lal Tummala

Total: \$204,200

Department of California Highway Patrol: *"Testing Services for Police Traffic Radar and Laser Speed Measuring Devices,"* \$204,200

Mechanical Engineering

Dr. Ilenia Battiato

Total: \$583,536

Battelle Memorial Institute: *"Hydro-Biogeochemical Process Dynamics in the Groundwater-Surface Water Interaction Zone,"* \$118,750

National Science Foundation: *"Designing Materials to Revolutionize and Engineer our Future (DMREF): An Integrated Multiscale Modeling and Experimental Approach to Design Fouling Resistant Membranes,"* \$271,506

U.S. Department of Energy Office of Science: *"Multiscale Dynamics of Reactive Fronts in the Subsurface,"* \$193,280

2015-2016 SDSU Awards Listing



Dr. Ilenia Battiato (second from left) and Ph.D. students Bowen Ling, Farzaneh Rajabi and Mehrdad Yousefzadeh

Dr. Asfaw Beyene **Total: \$235,000**
U.S. Department of Energy: "*Industrial Assessment Center*," \$235,000

Dr. Subrata Bhattacharjee **Total: \$130,000**
National Aeronautics and Space Administration: "*Residence Time Driven Flame Spread Over Solid Fuels*," \$130,000

Dr. Randall German and Dr. Eugene Olevsky **Total: \$150,000**
National Aeronautics and Space Administration: "*Multi-Scale Modeling and Experimentation on Liquid Phase Sintering in Gravity and Microgravity Environments*," \$150,000

Dr. Samuel Kassegne **Total: \$923,793**
University of Washington: "*Engineering Research Center for Sensorimotor Neural Engineering*," \$923,793

Dr. Karen May-Newman and Dr. George Youssef **Total: \$75,000**
The San Diego Foundation: "*Bioengineering: A Pathway to Interdisciplinary STEM at SDSU*," \$75,000

Dr. Fletcher Miller **Total: \$383,947**
University of San Diego: "*Hybrid Solar Converter with Integrated Thermal Storage*," \$383,947

Dr. Kee Moon **Total: \$74,000**
Kagoshima University: "*International Academic Cooperation Program*," \$12,000
Sejong University South Korea: "*Winter Program in SDSU*," \$62,000

Dr. Kee Moon and Dr. Yusuf Ozturk **Total: \$135,078**
ETRI Electronic and Telecommunications Research Institute: "*Sustainable Power Module for Implantable Medical Devices Based on Wireless Power Transfer*," \$135,078

Dr. Eugene Olevsky **Total: \$527,824**
General Atomics Corporation: "*Optimization of Ceramic Fuel Pellets Fabrication and Functionality*," \$65,000

Matsys, Inc.: "*Modeling and Simulation for Manufacturing Powder Metallurgy Structural Components*," \$337,824

U.S. Department of Energy: "*Fundamentals of Spark-Plasma Sintering: Rapid and Ultra-Rapid Materials Consolidation and Joining*," \$125,000

Dr. George Youssef **Total: \$10,000**
NASA Jet Propulsion Laboratory: "*Multifunctional Space Structures*," \$10,000