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## <u>National Nuclear Security Administration Announces University Grants</u> Stewardship Science Academic Alliances program strengthens national security

WASHINGTON, D.C. – The National Nuclear Security Administration (NNSA), a semiautonomous agency of the U.S. Department of Energy, announced today almost \$27.5 million in award selections for its Stewardship Science Academic Alliances program. The 27 recipients, principally universities and colleges, received the funding from a field of 138 applications that included a large number of high-quality, scientifically relevant projects.

The proposals, submitted in response to a solicitation published late last year, were subjected to an intense and extensive peer review by subject matter experts with those of the highest technical merit and importance to NNSA receiving support. The result is a technical program incorporating a broad spectrum of universities from all regions of the U.S.

NNSA made the grants to

- grow the U.S. scientific community through university involvement in areas of fundamental science and technology relevant to stockpile stewardship;
- promote and sustain scientific interactions between the academic community and scientists at the NNSA laboratories including the use of unique NNSA experimental facilities;
- train scientists in specific areas of research relevant to stockpile stewardship; and
- complement the current NNSA Advanced Simulation and Computing Academic Strategic Alliances Program by emphasizing primarily experimental research in forefront scientific areas aligned with the NNSA mission needs.

NNSA Deputy Administrator for Defense Programs Dr. Everet Beckner, said, "Our grants to cooperative programs with universities are significant contributors to the science which underpins the NNSA stewardship of the nuclear weapons stockpile. These grants are also a key means of training the scientists needed to maintain the outstanding capabilities of our national laboratories."

The awards we are announcing at this time were selected for funding beginning in late calendar year 2002. Pending the resolution of the fiscal year 2003 NNSA budget, additional awards may be announced at a later date.

NNSA enhances U.S. national security through the military application of nuclear energy, maintains the U.S. nuclear weapons stockpile, promotes international nuclear non-proliferation and safety, reduces global danger from weapons of mass destruction, provides the U.S. Navy with safe and effective nuclear propulsion, and oversees national laboratories to maintain U.S. leadership in science and technology.

Attached is the list of the grants and their recipients.

Title	Principal University	Location
Center of Excellence		
Center for the Study of Pulsed-Power-Driven High Energy	Cornell University	Ithaca, NY
Density Plasmas		
Research Grants		
Electron Interactions in Actinides and Related Systems under	Florida State University	Tallahassee, FL
Extreme Conditions		D' 1 41
Development of Designer Diamond Anvil Technology for High	University of Alabama -	Birmingham, AL
Stocknile Stowardship Program	Birmingham	
Experimental Investigation of Magnetic Superconducting and	University of California -	La Jolla, CA
Other Phase Transitions in Novel f-Electron Materials at Ultra-	San Diego	La Jolia, CA
high pressures Using Designer Diamond Anvils	Sun Diego	
Micro- and Nano- Structure Development and Multiscale	The Ohio State	Columbus, OH
Physics at Sliding Metal Interfaces	University	
Microstructures and properties of materials under repeated laser	University of Illinois –	Urbana, IL
irradiation	Urbana/Champaign	
High-Pressure Thermodynamic Properties of f-Electron Metals,	University of California -	Davis, CA
Transition Metal Oxides, and Half-Metallic Magnets	Davis	
Determining the Mechanical Constitutive Properties of Metals	University of Illinois –	Urbana, IL
as a Function of Strain Rate and Temperature: A Combined	Urbana/Champaign	
Experimental and Modeling Approach		
Investigation of the Rayleigh-Taylor and Richtmyer-Meshkov	University of Wisconsin -	Madison, WI
Continuation of the Application of Parallel PIC Simulations to	Madison University of California	Los Angeles, CA
Lasar and Electron Transport Through Plasmas Under	Los Angeles	Los Aligeles, CA
Conditions Relevant to ICF and SBSS	Los Aligeles	
Coherent Imaging of Laser Plasma Interactions using XUV	University of Colorado -	Boulder, CO
High Harmonic Radiation	Boulder	
Studies of the Nonlinear Interactions between Optical-Mixing-	Polymath Research Inc.	Pleasanton, CA
Controlled Stimulated Scattering Instabilities in Laser-Produced		
Plasmas		
Detailed Measurements of Turbulent Rayleigh-Taylor Mixing at	Texas A&M University	College Station, TX
Large and Small Atwood Numbers		<u> </u>
Nuclear Probing of Dense Plasmas	Massachusetts Institute of	Cambridge, MA
Hydrodynamics and Padiative Hydrodynamics with	Liniversity of Michigan	Ann Arbor MI
Astrophysical Applications	Oniversity of Michigan	Allii Albol, Mi
Dense Plasma Studies with Ultra-bright soft X-Ray I aser	Colorado State	Ft Collins CO
Probes	University	rt. comis, co
Measurements of Neutron-induced Reaction Cross Sections	Duke University	Durham. NC
Studies in Low Energy Nuclear Science	Ohio University	Athens, OH
Neutron Capture Experiments on Unstable Nuclei	University of California -	Berkeley, CA
	Berkeley	-
Nuclear Level Densities and $\gamma$ -Ray Strength Functions	North Carolina State	Raleigh, NC
	University	
Proton Radiography: Cross Section Measurements and	University of Michigan	Ann Arbor, MI
Prototype Detector Development		
Nuclear Reaction Measurements with Radioactive Beams and	University of California -	Berkeley, CA
Targets	Berkeley	
Measurements of the Energy, Mass, Charge and Angular	Rensselaer Polytechic	Troy, NY
Using a Lead Slowing Down Spectrometer	Institute	
Measurement of Fission Neutron Multiplicities and Energy	Oregon State University	Corvallis OR
Spectra for Actinide Nuclei	Oregon State Oniversity	Corvains, OK
Nuclear Stewardship Research	Yale University	New Haven. CT
Nuclear Level Densities for Modeling Nuclear Reactions: An	San Diego State	San Diego, CA
efficient Approach Using Statistical Spectroscopy	University Foundation	
Theoretical Description of the Fission Process	University of Tennessee	Knoxville, TN