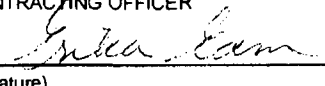


**U.S. NUCLEAR REGULATORY COMMISSION
NOTICE OF GRANT/ASSISTANCE AWARD**

1. GRANT/AGREEMENT NO. NRC-04-10-156		2. MODIFICATION NO. M004		3. PERIOD OF PERFORMANCE FROM: 9/30/2010 TO: 9/30/2013		4. AUTHORITY Pursuant to Section 31b and 141b of the Atomic Energy Act of 1954, as amended	
5. TYPE OF AWARD <input checked="" type="checkbox"/> GRANT <input type="checkbox"/> COOPERATIVE AGREEMENT		6. ORGANIZATION TYPE State Related Higher EDU DUNS: 003403953 NAICS: 611310		7. RECIPIENT NAME, ADDRESS, and EMAIL ADDRESS PENNSYLVANIA STATE UNIVERSITY, THE PENN STATE 408 OLD MAIN UNIVERSITY PARK, PA 16802-1505 Email: almas@psu.edu			
8. PROJECT TITLE: In-Situ Study of Hydride Reorientation and Fracture Behavior of Zirconium Alloys							
9. PROJECT WILL BE CONDUCTED PER GOVERNMENT'S/RECIPIENT'S AND APPENDIX A-PROJECT GRANT PROVISIONS		10. TECHNICAL REPORTS ARE REQUIRED <input checked="" type="checkbox"/> PROGRESS AND FINAL <input type="checkbox"/> FINAL ONLY <input type="checkbox"/> OTHER (Conference Proceedings)		11. PRINCIPAL INVESTIGATOR(S) NAME, ADDRESS and EMAIL ADDRESS ATTN: Dr. Arthur T. Motta 227 Reber Bldg., University Park, PA 16802; E-mail: atm2@psu.edu			
12. NRC PROGRAM OFFICE (NAME and ADDRESS) NRC ATTN: Robin Barnes, Robin.Barnes1@nrc.gov 21 Church Street MS: C6D20 Rockville, MD 20850 (301) 251-7401 TA: Harold Scott, Harold.scott@nrc.gov		13. ACCOUNTING and APPROPRIATION DATA APPN. NO: 31X0200 B&R NO: 2013-60-11-6-174 JOB CODE: G6006 BOC NO: 4110 OFFICE ID NO: RES-13-069 FAIMIS: GR0276		14. METHOD OF PAYMENT <input type="checkbox"/> ADVANCE BY TREASURY CHECK <input type="checkbox"/> REIMBURSEMENT BY TREASURY CHECK <input type="checkbox"/> LETTER OF CREDIT <input checked="" type="checkbox"/> OTHER (SPECIFY) Electronic ASAP.gov (See Remarks in Item #20 "Payment Information")			
15. NRC OBLIGATION FUNDS THIS ACTION \$132,634.00 PREVIOUS OBLIGATION \$0.00 TOTAL \$435,519.00		16. TOTAL FUNDING AGREEMENT NRC \$435,519.00 RECIPIENT _____ TOTAL \$435,519.00 This action provides funds for Fiscal Year 13 in the amount of \$0.00					
17. NRC ISSUING OFFICE (NAME, ADDRESS and EMAIL ADDRESS) U.S. Nuclear Regulatory Commission Div. of Contracts Attn: M'Lita Carr Mail Stop: TWB-01-B10M Washington, DC 20555; E-mail: mlita.car@nrc.gov							
18. Signature not Required				19. NRC CONTRACTING OFFICER  (Signature) _____ (Date) 12/4/2012 NAME (TYPED) <u>Erika Eam</u> TITLE <u>Grant Officer</u> TELEPHONE NO. <u>301-492-3492</u>			
20. PAYMENT INFORMATION Payment will be made through the Automated Standard Application for Payment (ASAP.gov) unless the recipient has failed to comply with the program objectives, award conditions, Federal reporting requirements or other conditions specified in 2 CFR 215 (OMB Circular A110).							
21. Attached is a copy of the "NRC General Provisions for Grants and Cooperative Agreements Awarded to Non-Government Recipients. Acceptance of these terms and conditions is acknowledged when Federal funds are used on this project.							
22. ORDER OF PRECEDENCE In the event of a conflict between the recipient's proposal and this award, the terms of the Award shall prevail.							
23. By this award, the Recipient certifies that payment of any audit-related debt will not reduce the level of performance of any Federal Program.							

SUNSI REVIEW COMPLETE

TEMPLATE - ADM001

ADM002

DESCRIPTION OF MODIFICATION:

The purpose of this modification M004 is:

1. Correct Block 15, "NRC Obligation Funds".
M003 dated 12/4/12, incorrectly identified the grant as being fully funded. Please correct Block 15 as reflected on this modification, M004.
2. Provide incremental funding in the amount of \$132,634.00;

As a result of this modification:

1. The obligated amount has increased by \$132,634.00 from \$302,885.00 to \$435,519.00;

Base Period: September 30, 2010 – September 30, 2013 (unchanged)

Total Agreement Amount: \$435,519.00 (unchanged)

Total Obligated Amount: \$435,519.00 (changed)

All terms and conditions remain the same.