SECTION A. Project Title: Research and teaching equipment for nuclear materials characterization

SECTION B. Project Description

The proposal to upgrade the UC Berkeley teaching and research laboratory's to enhance the understanding of mechanical and physical properties of nuclear materials on all length scales. Purchasing state-of-the-art equipment dedicate to be used on active materials allows to investigate reactor and ion beam irradiated materials to enhance accelerated materials testing and development. The action includes procuring a commercial grade Hand foot monitor and ultrasonic inspection device and upgrading the university's high temperature nanoindenter.

SECTION C. Environmental Aspects / Potential Sources of Impact

The University of California Berkeley has procedures in place to handle radiological materials and any waste that will be generated through this project. The action would not create additional environmental impacts above those already permitted at the university.

SECTION D. Determine the Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

Note: For Categorical Exclusions (CXs) the proposed action must not: 1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not "connected" nor "related" (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: B1.31 Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

Justification: The proposed action is to procure equipment, instrumentation, modification or service to improve or expand the research and training capabilities.

Approved by Jason Sturm, DOE-ID Acting NEPA Compliance Officer on 7/07/2016