

Expanding the reach of Research React	or's nuclear education capabilities at the Ohio State University
<b>PI:</b> Dr. Raymond Cao, The Ohio State University	<b>Collaborators</b> : Dr. Supathorn Phongikaroon, Virginia Commonwealth University
	Dr. Brendan M. Kochunas, University of Michigan
Program: Reactor Sharing	Dr. Xiaodong Sun, University of Michigan
	Dr. Igor Jovanovic, University of Michigan

## **ABSTRACT:**

With funding from this proposal, The Ohio State University (OSU) would expand its nuclear education capabilities, while exposing more students beyond the state of Ohio to the research and testing at the Nuclear Reactor Laboratory (NRL), as well as the field of nuclear science and engineering.

This proposal's goals and objectives leverage the capabilities of The Ohio State University Research Reactor, the knowledge of the NRL staff, and the strength of the OSU nuclear engineering program by exposing students from other universities to reactor experiments and providing education and outreach to a local stem pipeline high school. The project's objectives include:

- (Objective #1) Hands-on, in-person reactor labs will be scheduled/executed with the named user institutions/subawardees.
- **(Objective #2)** Ensure the participation of students from user institutions without regard to their financial means by providing a subaward to user institutions.
- (Objective #3) Digital learning materials will be created for an online, non-credit course to prepare user institution students for the hands-on lab sessions at NRL.
- **(Objective #4)** Create an opportunity for additional participants to access the online, non-credit course, Reactor Science.
- (Objective #5) Reactor tours will be scheduled for a STEM pipeline.
- (Objective #6) Create one electronic mini course called "Nuclear Basics at NRL".
- **(Objective #7)** Encourage student projects to utilize the NRL through a streamlined application and training process.

Importantly, this growth is focused on groups where there is potential for the largest impact and will not detract from existing research and service at NRL. The foundation laid through these programs has the ability to lead to other collaboration opportunities without additional funding from DOE. Finally, it is important to emphasize that the proposal contains components that are sustainable past the end of the grant's end date.