



Reed College Reactor Compensated Ion Chamber Replacement

PI: Jerry Newhouse,
Reed College

Collaborators: N/A

Program: Scientific
Infrastructure Support for
Consolidated Innovative
Nuclear Research

ABSTRACT:

Reed College is requesting funding to improve reliability of the reactor program. This request is for a spare Compensated Ion Chamber (CIC) to monitor the reactor power.

The CIC allows the reactor operator to monitor and control the reactor power. Additionally, the CIC provides automatic safety functions to shut down the reactor if the power goes too high. Without a functioning CIC the Reed reactor cannot operate.

Although the current CIC is functional, it is several decades old. Experience has taught us that the long lead time to obtain a replacement may keep the reactor shutdown for months or years. We wish to have a spare detector ready if the current one fails.

The CIC is essential to reactor operation and safety, and to our educational mission. We are therefore requesting the funds to have a replacement ready.