# Richard Jones

**UV Laser Refurbishment for Milling Research-Grade Diamonds**

A major nuclear physics experiment planned at the Jefferson Laboratory would benefit from thinner slices of diamond than are commercially available. Laser ablation is a potential technique for producing such slices, as has already been demonstrated at the Brookhaven National Laboratory. The PI, a nuclear physicist, has realized that other faculty members at UConn have both the infrastructure and a long-unused laser available for the ablation work, and asks for the funds to put the laser back in operation. The PI hopes that this would occasion a strong request for funds from DOE, and turn his group into the supplier of the diamond slices for the experiment that is to be commissioned in 2013.

The request of $13.5k is for minor pieces of equipment and supplies, and the PI commits $5k more in hourly salary from his present DOE grant. The recycling and pooling of the existing resources would leverage the UCRF funding by a factor of well over five, and there is potential for much benefit to both the PI and to UConn. We recommend funding in full.

Panel Recommendation: fund at **$13,500**