

**U.S. DEPARTMENT OF ENERGY
SMALL BUSINESS INNOVATION RESEARCH PROGRAM
AND
SMALL BUSINESS TECHNOLOGY TRANSFER PROGRAM
FY 2006 PHASE I AWARDS**

**TOPIC: NUCLEAR PHYSICS PARTICLE AND RADIATION DETECTION SYSTEMS,
INSTRUMENTATION AND TECHNIQUES**

Fairfield Crystal Technology, LLC
8 South End Plaza
New Milford, CT 06776-4200

Large Diameter Zinc Selenide (ZnSe) Single
Crystals for Radiation Detectors

This project will develop crystal growth technology for ZnSe-based devices used in radiation detectors and nuclear imaging. Applications include security screening, as well as medical, dental, and industrial imaging. Additional usage may be found in the formation of blue and white LEDs and blue laser diodes for optical storage