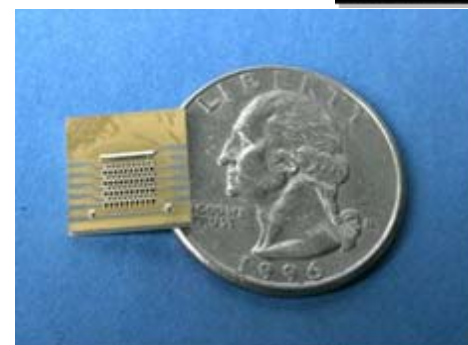
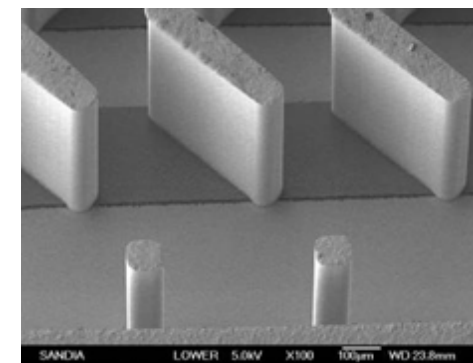


# Sandia's R&D is focused on the next generation of detectors

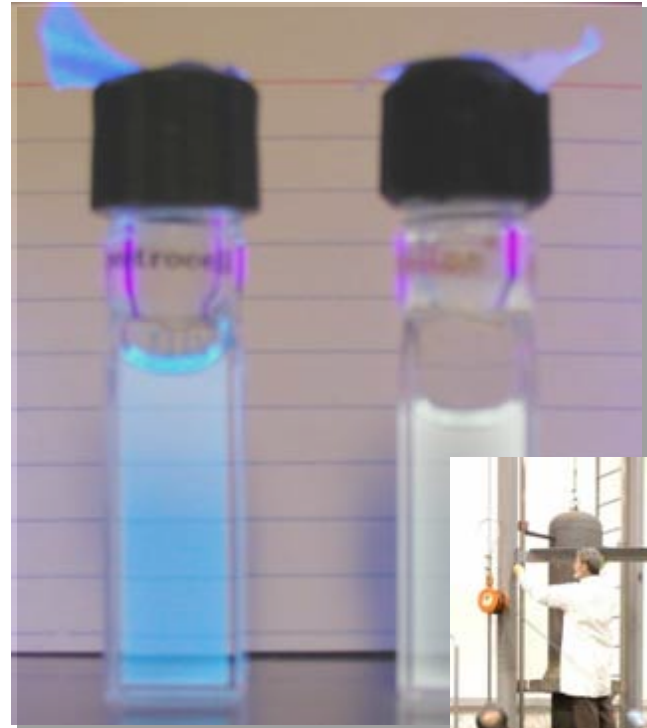
- Micro photomultiplier tubes using LIGA technology
- Lithium/trans-stilbene crystal for neutron spectroscopy

Miniature components  
for small detection  
devices



# Advanced materials research to enhance detection

- Lanthanum bromide
- Nano-sized custom scintillator composites
- Robust, affordable plastic sensors
- Large, optical-quality polycrystalline lanthanum halide scintillators
- Heteroepitaxial single crystal diamonds



Advanced  
scintillator materials





# Placing detectors on ships at sea will examine detection probabilities and false alarm rates

