

Neutron Irradiation Station



Goal: measurement of neutron induced reactions for astrophysical applications, as well as for energy and nuclear stockpile stewardship applications.

- Monoenergetic neutron flux produced using ${}^7\text{Li}(p,n){}^7\text{Be}$ reaction on pure metallic ${}^7\text{Li}$ targets.
- High intensity proton beam from the 5U accelerator allows for production of neutron fluxes of the order of 10^8 - 10^9 neutrons/sec/cm 2 .
- Available neutron energy from thermal up to about 3.3 MeV.
- Neutron flux characteristics match very well with model predictions.

