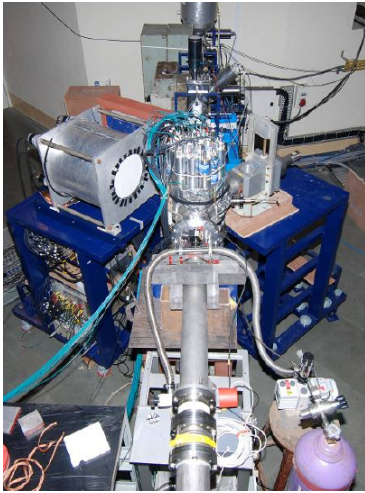
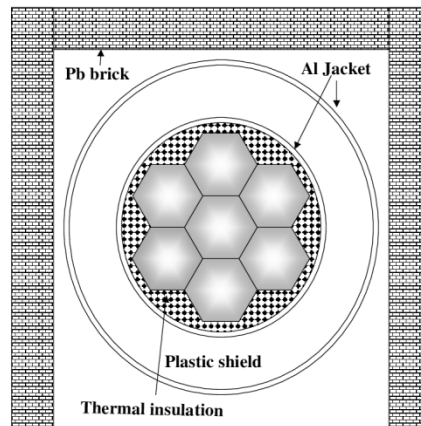


BaF2 array for the study of Giant Dipole Resonance (GDR) at PLF

A compact array of seven hexagonal BaF2 detectors with cosmic ray background suppression has been setup for the measurement of high energy photon up to $\sim 30\text{MeV}$. Each BaF2 detector is having a length of 20 cm and a hexagonal cross-section with a face-to-face distance of 6 cm. The scintillator is viewed by a 50 mm diameter fast PMT with quartz window. The array is surrounded by an annular plastic cylinder of thickness 5 cm and length 40 cm which is used to reject the cosmic ray background. The array has been used to measure the GDR photons in low energy heavy-ion reactions.



BaF2 array along with BGO array at beam line array



Schematic cross-sectional view of BaF2