

# CLOUD CHAMBER AND PARTICLE DETECTOR

## IMPLEMENTATION OF THE PROJECT :

- 1).we will complete the cloud chamber in first 4 weeks
- 2).we will try to get particle behaviour firstly charged particles in our next week.

## MATERIALS REQUIRED:

sr.no. materials

- 1` glass container of base about 20 cm X 30 cm and height 20 cm.
- 2 Aluminium sheet (about 1 mm thick, same thickness as the base of the fish tank)
- 3 shallow tray somewhat larger than base area of fish tank.
- 4 two lamps one of them strong
- 5 strip of felt about 3 cm wide able to wrap up the fish tank (someehat more than 1 cm long )
- 6 glue (not alcohol-soluble)
- 7 Black insulating tape
- 8 isopropyl alcohol
- 9 coolant mostly liquid nitrogen

Estimated Cost:Rs.7000

## REFERENCES:

[http://www-outreach.phy.cam.ac.uk/camphy/cloudchamber/cloudchamber1\\_1.htm](http://www-outreach.phy.cam.ac.uk/camphy/cloudchamber/cloudchamber1_1.htm)  
<http://www.scienceinschool.org/2010/issue14/cloud>

what do we want to study through the project?

We will study the properties of elementary particles.

We will study the properties of radioactive elements.

Note: this is basically a very rough estimate of our plan