## g2p/gep Target Meeting Minutes

Date: 10/23/2010

**Attendees** : J. P Chen, D. Crabb, C. Keith, J. Pierce, D. Higinbotham, K. Allada, J. Zhang, T. Michalski et al.

- 1. C. Keith gave an update on the current work in the target lab : cryostat modifications, redesign of rotatory systems etc..
- 2. There was a question of where to put the target electronics. C. Keith and J. Pierce thinks that beam right side would be ideal.
  - 1. Possibility of having second platform was also discussed (no conclusion yet)

## 3. Target ladder:

- 1. List/number of targets will be provided by JP.
- 2. J. Pierce mentioned that we can have as many targets as SANE expt had. Limitations is on the movement of the ladder vertically , there is not enough space.
- 4. **Compton runing with hight current** (~30uA):
  - 1. JP mentioned about feasibility study to look into whether we can use a third arm to monitor combined target and beam polarization using elastic asymmetry.
  - 2. If it can be done, then there is no need to do Compton run, hence we will be limited to 130uA running only.
  - 3. This study is still undergoing (K. Allada)
- 5. Estimate for replacing one of the pump is \$30 \$40K ( C. Keith)
- 6. JP mentioned that K. Slifer (from UNH) has \$20 \$30K money for buying items for this expt.
- 7. Magnet status (D. Crabb):
  - 1. Talked to Oxford company they will ship the magnet sometime in December 2010.
  - 2. Cone drawing etc. can be obtained from Oxford, but noted that they are old and are archived (not all details may be present)
  - 3. In any case it was desired to obtain the drawings to use them in our TOSCA model.

## 8. Irradiation at NIST (D. Crabb):

- 1. NIST fixed the machine and they are running again.
- 2. Previously they had problems with high chlorine production.
- 3. Now they will do some measurements of how much chlorine can be pumped out expect some results by October end.
- 4. It is relatively cheap to do irradiation at NIST compared to FEL.

- 5. g2p student Pengjia Zhu worked on energy loss for the irradiation setup. We can get quick numbers if needed (JP)
- 9. For the dilution studies, JP mentioned that we will use nitrogen-14.

## 10. Field direction measurements:

- 1. A tech-note exists ( from UVA)
- 2. The measuring device was last seen at UVA (D. Crabb)
- 3. Do we need a detailed field mapping ?
- 11. C. Keith mentioned about cost of He-4 for target commissioning. JP said it falls under operational costs.
  - 1. Requires 100 liters/day = \$1000/day