

Milestones:

1. 2010:

- a. Identify and characterize photo-emission properties of materials for photocathode development
- b. Upgrade existing vacuum transfer facility to match the 8"x8" square module assembly
- c. A design, including costing and interfacing with vendors of production sealed glass tubes, for a vacuum transfer/assembly facility for the 8" square module assembly.
- d. Demonstration of an 8"square operational PC

2. 2011:

- a. Design and costing of a photocathode characterization facility;
- b. Design and costing of an 8" glass tile assembly facility.

Focus Areas (questions to be answered):

1. 2010 a.) what materials

- i. What are the photo-cathode materials we want to work on and why? (materials & recipes)
- ii. What are the advantages of these materials and how they will contribute to the proposed detector
- iii. Which information is available or was measured (absorption coefficients, typical QE for given recipe)
- b. Upgrade existing vacuum transfer facility???????
- i. Perhaps Igers facility; plans for transport/cooperation between WASHU/ANL???????
- c. Same as 2b: What is timeline and approach at:
 - i. SSL
 - ii. ANL
 - iii. WASHU?
- d. Demonstration of 8" (for SSL/ANL)
 - i. What recipe and why
 - ii. What infrastructure measurements are necessary and what is the timeline
 - iii. Which questions (technological and scientific) have to be /should be addressed and are critical
 - iv. What will be the pathways to transfer and seal

2. 2011: only a.)

- i. plan of the chamber system
- ii. what should the system be able to test

- iii. what exsitu systems are necessary
- iv. timeline for installing and milestones within 2011
- v. How does it correlate with SSL/WASHU/ANL(tile facility)