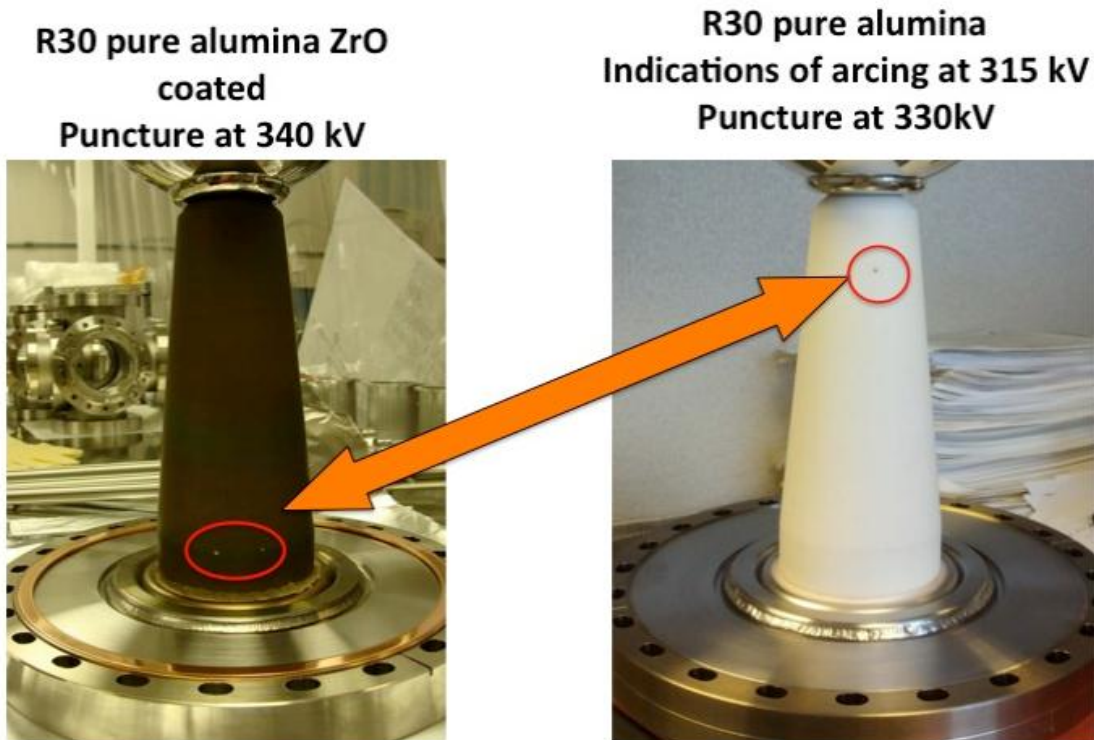


UITC meeting minutes

From 5/5/2014 and 5/12/2014

- 1) Carlos, John, Yan and Bubba finished the evaluation of insulator plan D – the ZrO coated R30 insulator. It failed dramatically at 340kV, punched through near the ground side, at two locations. Carlos informed JB and SCT, who will give us one of their coated insulators (for free). Carlos specifically asked for a coating on both the vacuum and cable sides of the insulator, although from a previous conversation, SCT claims it will be difficult to coat the cable side of the insulator.



- 2) Jim Henry and Walt Akers are happy to provide us their drawings, but we decided we will rely on John H. and the Solidworks CAD program, to layout the beamline, and even to provide drawings we can give to the machine shop for fabrication of parts.
- 3) Apparently, Facilities is making some headway on issuing a PR to pay an outside contractor to cut away the concrete kneewall, remove concrete blocks and provide us 6 penetrations in the ceiling. It will be nice to get this dirty job behind us.
- 4) Joe created an elegant model of the proposed beamline. Poelker waffles and we agree to use the 1497 MHz chopper system, which will obviously serve to restrict the temporal distribution of bunches going into the $\frac{1}{4}$ CM and ensure “tail-free” beam to HDIce, but it can also play a vital role in diagnosing important beam properties like temporal and longitudinal (slice?) emittance, bunchlength, energy spread and time resolved polarimetry.

- 5) Open question, do we need a spectrometer beamline upstream of the 1/4CM? Such a beamline can be used to make energy spread measurements, and it could be home to a low voltage mott. But space is tight, and I wonder if the chopper can be used to make energy spread assessment, and we are more interested in MeV mott polarimetry....
- 6) To do: what beam diagnostic measurements do we want to make and how do we plan to make them?
- 7) To do: prepare for the next phase of GTS, i.e., make beam from CsK₂Sb photocathode and deliver it to a dump.