Mounting a photocathode on Mo puck

1. Collect items
   1. Mo puck, photocathode removed
   2. Tantalum cup, choose ID
   3. Photocathode (nominal 600um thick)
   4. Ta cup recessed pressing tool
   5. Ta cup crimping tool
   6. Indium foil
   7. Indium tools (only touch indium foil)
   8. Non-indium tools (only touch photocathode or moly puck)
2. Dry fit tests
   1. Place photocathode on puck recess, ensure it fits, then remove
   2. Place Ta cup on puck, test fit; additionally use Ta cup pressing tool to form on puck
3. Mount photocathode under GN2 hood
   1. Cut indium square, place on puck center
   2. Place puck on heater, start heater, indium will melt 156 C
   3. Place photocathode on indium, press flat on edges
   4. Check that puck is well seated, flat; excess indium OK, remove later
   5. Remove puck from heater, to cooling plate
4. Mount Ta cup
   1. If indium ‘ball’ remove w/ vertical force, don’t push photocathode
   2. Place Ta cup on puck
   3. Place crimping screws on puck, thumb screw until uniform circle
   4. Place crimping cylinder over puck/screw
   5. Test Ta cup well seated (add/remove crimping cylinder)
   6. Turn pairs of thumb screws 1 turn tight; go around and around (let’s learn how many turns is best : too few – nothing, too many – hard to remove, some fixed number of thread turns is….just right)
   7. Remove Ta crimping tool
   8. IF you’re like Joe, may use Ta cup recessed pressing tool if desired
5. Rejoice