Leica EM ACE600 Coater Procedure

1. Enable the Leica EM coater in Badger system. Contact the facility staff if you don’t have access.
2. If the coater is off, press the switch button on the back to turn it on.
3. Click “Vent” to vent the chamber.

4. Wait until the pressure shows 1.0E+3 mbar, open the chamber door.
5. Load samples onto the stage (suggest mounting the samples onto SEM pin stubs).
6. Close the door and click “Pump”.
7. Select the desired deposition method “Sputtering” for Au or “Evaporation” for carbon.
8. Change the thinness to desired number for coating.
   Note: Please contact facility staff if you want to modify other deposition parameters (rotation speed, tilt angle, sample height, etc.)
9. Click “Start” to start the automatic deposition process.  
   Note: The chamber will automatically vent after the deposition, if you don’t want to vent, uncheck the box on the left side.
10. Wait until the deposition process finishes, check if the actual deposition thickness is correct or not. Click “Init” button on the pop-up window to initialize the stage to the original position. Then close the pop-up window.

![Image of a pop-up window showing Gold coating results.

11. Wait until the pressure shows 1.0E+3 mbar, open the chamber door and unload the samples.
12. Close the door and click “Pump”.
13. If you are using the coater in the off hours (evenings, weekends), wait 5 or more minutes for the chamber to pump down the vacuum, and then turn off the coater with the switch button on the back.
14. Disable the coater in Badger and logout.