NANOFABRICATION FACILITY

ADVANCED SCIENCE RESEARCH CENTER

January 2, 2023

Hello Nanofab Users: Welcome to 2023 - We hope you had a good holiday! Below are the news items for the ASRC Nanofab for this week.

AJA Ebeam Evaporator Systems:

Effective February 1st, all users of the AJA Ebeam Evaporator Systems will be required to enter additional run data when using the system. The pop-up window in Badger will include fields to enter the thickness of gold, platinum and palladium deposited. Users should also list other materials and the thickness deposited in the comments section. This change is being implemented to better track the usage of materials so staff can keep all the crucibles filled to an optimal level for evaporation. Due to changes in the market value of precious metals, we will also be changing the fees for the following metals used in these systems: gold will cost \$0.85/nm; platinum will cost \$0.45/nm; palladium will cost \$0.95/nm. These prices better reflect the current market prices that we are paying for these materials.

There has been a significant increase in waste of materials in the system due to misuse. Several crucible liners have been broken due to users applying too much power to the pockets, resulting in loss of the materials. The system must be used within parameters prescribed by staff. Dr. Samantha Roberts has taken over responsibilities for maintenance and training associated with the evaporators. All users should consult with her to ensure that they are using the system properly, especially when they encounter unexpected issues with the deposition rate. There will be additional training sessions on the Ebeam systems for all current users to learn how to control the beam position in the crucible.

Oxford Fluorine Etcher (ICP-FI):

The preventative maintenance for the ICP-FI will begin on January 9 and is expected to continue through the whole week. The tool will be unavailable for the duration of the preventative maintenance.

This concludes the ASRC Nanofab updates for this week. Have a great week.

Nanofab Staff