



October 20, 2023

Hello Nanofab Users and PIs:

Here are the ASRC Nanofabrication Facility updates for this week:

## New Nanofab Research Scientist!

Welcome to Emma Anquillare, our Nanofab Research Scientist! Emma will be supporting our work making the ASRC Nanofab even better, working closely with users, PIs, tools, and data.

Emma holds a PhD in Materials Science and Engineering with an emphasis in Electronic and Photonic materials from Boston University. While in graduate school she was a dual fellowship recipient and residential researcher at the Lawrence Berkeley National Laboratory Advanced Light Source shared user facility, where she also served on the Users' Executive Committee. Prior to graduate school she worked as a research assistant in the MIT Physics department. She holds a bachelor's degree in Chemistry from Smith College and brings over ten years of experience and interdisciplinary expertise in the synthesis, fabrication, and characterization of nanomaterials.

Emma is excited to help to grow and contribute to the ASRC and NYC Nanofabrication community. In her free time, she enjoys art, fashion, dessert, and exploring all that New York City has to offer.

## URGENT Badger Update Required

Effective the week of October 23rd, computers running the Badger Lab management software will need a modification to run. Please refer to the attached PDF file for the instructions on how to access the "Java Cache Viewer" (or the "Configure Java" App) to add <http://cuny1.badgerlms.com/> to the "Exception Site List".

This **MUST** be done by next week else you will not be able to make or modify your reservations.

## Oxford RIE-80 Etcher

The RIE Etcher is still down awaiting a replacement AMU (Automatic Matching Network). This is on backorder from Oxford Instruments in the UK. The current tentative ship date is listed as the third week in November.

In the meantime, it is possible to operate the Oxford ICP-Fluorine etcher in RIE mode (by setting the ICP power to zero). Current users have had success with this. If you need training to access the ICP-FL during this period please contact Salam Elhalabi for training.

## AJA Metal Evaporator

The upper cryo pump on the metal evaporator is scheduled to be replaced on Wednesday, October 25th. The tool will pump down on Thursday and again be available to use by Friday, October 27th. Please plan accordingly.

Meanwhile, the tool is available for use with all standard materials in it, including Platinum. Please refer to our [material list in google sheets](#) to find the current targets and materials for all of our deposition tools.

## AJA Organic Evaporator

The organic evaporator is back online and available for use. The e-beam gun and high voltage feedthroughs have been replaced resolving the high voltage errors and shutdowns. The tool has been tested for both high powers and long deposition times for a variety of materials, and all are behaving as expected. Please report any issues or concerns to Nanofab staff.

## Nanoscribe 3-D Lithography

The Nanoscribe is experiencing some stage issues. The service engineer has been called and they are available to do the repair in 2-3 weeks. The tool is currently online and operational if your features are within a single write field. However, if you have large patterns that cross field boundaries, you will experience stitching errors.

## Wire Bonder

The wire bonder is back online and available to use. The wire spool has been changed and is currently feeding well. Preventative maintenance with the tool engineer has been scheduled for Thursday, October 26th to further optimize the tool.

## Dicing Saw

The spindle lock is not functioning so the blade changes are much more complex. If requesting a blade change from staff, please be prepared to give it 2-3 days to be changed as much more time needs to be allotted for this.

## Hood usage

Just a reminder that users need to disable their slots in Badger for the hoods when they're done using them. Usage rates for the hoods have gone into effect, so users will be charged for the time they have those slots enabled.

## Acknowledgements

Please remember to acknowledge the ASRC Nanofabrication Facility in your publication and let us know about exciting and new publications that utilize devices made in the facility.

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This concludes the ASRC Nanofab updates for October 20th. Have a great weekend!

Nanofab Staff