The Expanding World of Nanofabrication – an update from NanoFabrication Kingston

July 11, 2025

Good day,

You are receiving this important update as a user of NFK, as a supervisor of a user, or as someone who requested to receive these updates.

# **Plasma Cleaner**

The reactor chamber on the plasma cleaner has been replaced. Testing has shown that etch rates for the main resists (AZ nLOF 2020, S1813, PMMA, and ZEP 520A) are similar to what they were on the old system, so you should be able to use the same processes for cleaning and descum that you used in the past. The procedure for using the system is the same, but the buttons may look a little different.

# **Evaporator**

The recent power outage across the city seems to have fried the motor on the bell jar hoist. While we look into replacing it, we need to manually lift the bell jar. Staff can help with this if anyone is uncomfortable lifting the jar.

## **Raith EBL and SEM**

The Pioneer software is becoming unstable, leading to Windows dll errors that require restarting the computer. While we look into a permanent solution, users are advised to restart the computer before using the system.

## Zeiss optical microscope

The measurement tool in the microscope software was recently recalibrated. The measurement error was found to be no greater than 0.31% at any magnification, so you will not notice a difference in your measurements. You may notice, however, that the scalings now have different names.

## **MicroFAB Access support**

Users are encouraged to apply for funding for their NFK fabrication projects via this program offered by CMC Microsystems through FABrIC. The application deadline is the 10<sup>th</sup> of each month and the success rate is usually very good. See the <u>website</u> for more details about the program, and talk to your supervisor about getting a <u>subscription</u>.

See you at the lab!

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