

The Expanding World of Nanofabrication – *an update from NanoFabrication Kingston*

May 27, 2024

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.

Technical issues

Evaporator. The cryopump on the evaporator failed today. The evaporator will be out of service until further notice as I try to find the fastest replacement option for the pump.

Raith EBL/SEM. The turbomolecular pump on the Raith has failed. A replacement has been ordered and I hope to have it installed in the next couple of weeks. An update will be provided to when it's ready again.

Reactive ion etcher (RIE). The chamber vacuum pump has been repaired and our RIE system is once again fully operational, including use with chlorinated gases.

Construction

The building is still under major renovation, but we have been told that much of the general areas of the building should be completed in the next couple of months. The new ground-floor washrooms are already complete and available for use, and entrances at Door 3 and Door 5A should be restored soon.

Changes to support equipment operation

Renovations have been hard on the equipment in the service room, especially motors. At least for now, several pieces of support equipment in the service area are being shut off when not in use, including the water purification system and the chiller that services the plasma cleaner and evaporator. Remember to ensure that all the support equipment you will need is turned on before gowning up, and to shut it off again when finished. Instructions/reminders have been printed on sheets near the gowning room door to help.

Consumables for sale

NFK keeps a variety of consumables for the convenience of our users, which we sell at cost. Remember to sign the log sheet when you take one of these (signs on the rack indicate which items are for sale). The full list of consumables offered can be found on our website [here](#).

After some recent feedback, NFK is pleased to add two consumables to this list:

- 100 mm Silicon wafers with 1000 nm wet thermal oxide
- Large GelPak gel boxes (4" x 6")

These products will be added to the website once they have been delivered. We have also restocked the 100 mm silicon wafers with 300 nm wet thermal oxide, but the cost has risen since our last order. Pricing on this consumable will be increased accordingly, beginning July 1.

We want to hear from you

NFK is always interested in hearing about your research. Has your work at NFK led to a publication or conference presentation? If so, please let us know. We are constantly updating our [list](#) of peer-reviewed journal articles showcasing work done at NFK. We also welcome feedback about our tools and services. Feel free to forward your questions, concerns, complaints, or praise to [me](#), and I will do my best to respond.

See you at the lab!

Graham Gibson

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