

Dear cleanroom user,

This is the 26th edition of **Kavli Nanolab News**. In this issue you can find news on plans, new procedures and investments.

Summer period

Like last year we will make a cleanroom access schedule covering the whole summer period from July 15th till September 1st. Please fill out your group schedule before July 12th.

Reserving day suits and few day suits via LDB is of course possible during the summer period.

Up to now it looks like we will have enough BHV people available during the summer period, so we will not have weekend regime during normal working hours. As you know, the cleanroom is accessible on working days from 07:00-22:00. Normal working hours are from 8:00-17:00. Of course the availability of staff members will be limited during the summer period. We wish you all a relaxing summer period!

Cleanroom 3D map

Due to limited availability of cleanroom suits we can't allow visitors in the cleanroom, unless there are very urgent reasons. Also visitors in the atrium of building 104 are not allowed without written permission of a staff member. To accommodate you with this limitation, we now have the option to enjoy a virtual tour through the cleanroom! This work is done by TUDelft360, a start-up company from the TUDelft. The virtual tour will be accessible via our website, but there's already a preview available via:

<https://tourmake.nl/nl/tour/bb1fedd363ad6ff5d6210054666967a1>

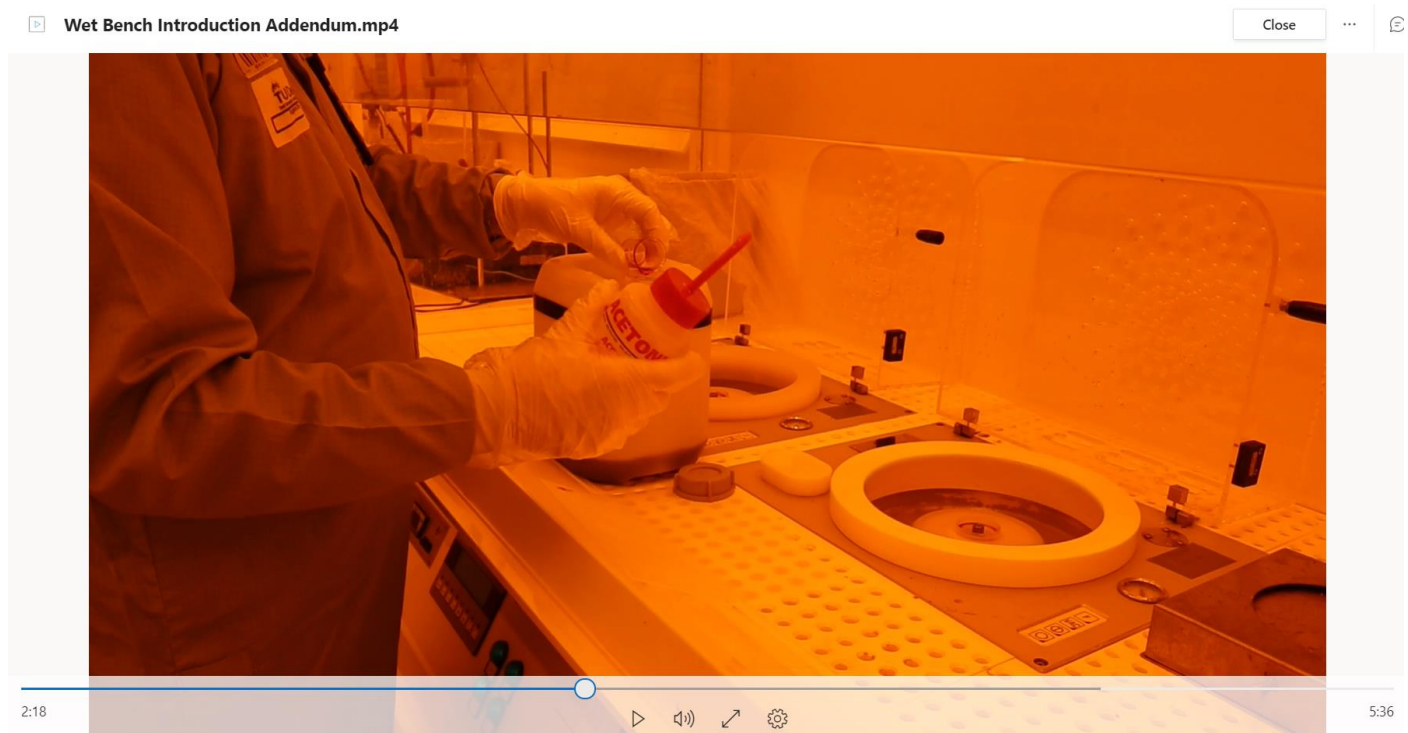


Maintenance week

The maintenance week went smoothly. Most prominent changes are the LED lighting and the removal of the emergency buttons. Since a lot of users were afraid to use the emergency button we decided to replace them by the well-known evacuation button. To simplify the alarming, we only have evacuation buttons left now.

Wetbench introduction videos

The staff members made some instruction videos with respect to the behaviour/ work procedures in the wet bench area. Also the operation of some wetbench equipment is being demonstrated in this videos. New users will get access to this instruction video in Teams, in case you also want access, contact Pauline Stevic or Eugene Straver.



Our video instruction content is growing. The Temescal instruction video is available and the AMS Bosch introduction is almost ready. Some additional video instructions regarding the EBPg's are available as well.

Wirebonder maintenance, Wesbond 4KE

During the last maintenance week, Micronnect engineers have overhauled our wirebonder meticulously. They verified, aligned and calibrated many machine settings.

In particular the engineers noticed quite an offset in force and bond settings from advised settings.

All issues are now fixed and the recommended settings are stored on Device 11. Quick start manual will be available soon.

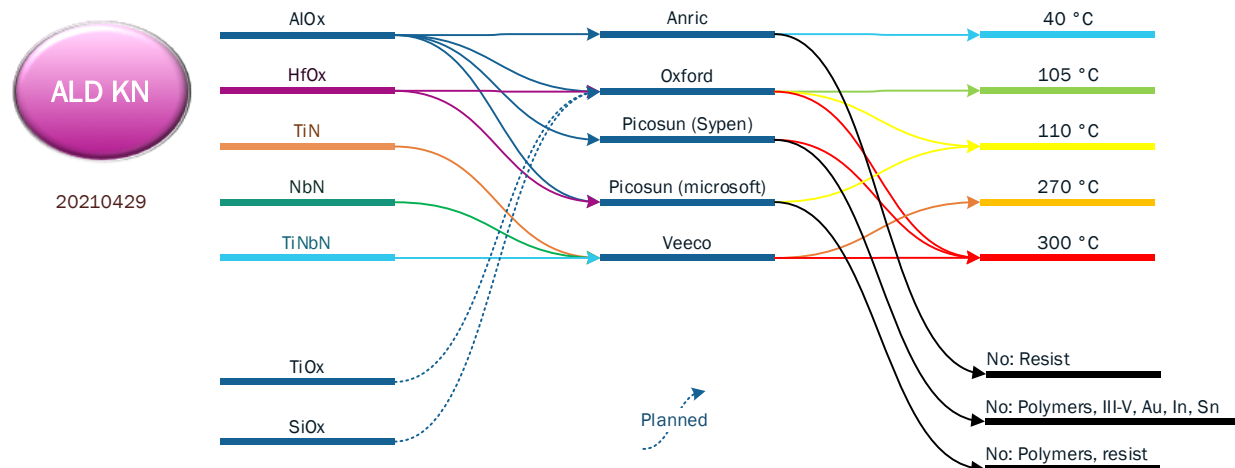
Please do not try to adjust anything without owner's consent. Please contact the machine owner for more details, questions or suggestions.



Close up of wedge bonding tool, with excess wire, mirrored in a (contaminated) wafer

Kavli Nanolab ALD flowchart

We have tried to make an overview of materials, machines and temperatures available, to use as a guideline to choose between our ALD machines, which resulted in this flowchart as a first attempt. Please note, it is subject to changes. It will also be shared digitally, for future reference. The exact location will be communicated soon.



New Equipment

In September we will receive the new ICP chlorine etcher and the new ICP PECVD system. Also somewhere in the autumn we will start hosting the Mantis evaporator. To make room for the new equipment, we will remove the old Fluor 3 and the EVA 300 evaporator and will transfer the EVA 450 and First Nano to a new location.

During the summer we will install a laser cutting tool (mainly for silicon). We will test this system to see if this will be a better solution to prevent ESD damage of our devices. The company offers us the possibility to test it during one month to decide if we want to buy it or not. Please contact Sergei Amitonov or Pauline Stevic in case you want to test the system with your own devices. [Try & Like \(vac-machines.be\)](https://vac-machines.be)

Thin film, wet bench and ALD whatsapp groups

You can find QR codes to join our whatsapp communities on different locations in the cleanroom.