DTU Nanolab	Always check on-line for validity. **Rules for working with Chemistry at Nanolab building 346/347**				Level: **SI-II** Approved by: **flje** **12.09.2019**
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If you are Pregnant:
It is highly recommended that pregnant women, avoid working with all processes involving resists and solvents.
It is your immediate manager /supervisor /course manager's responsibility to initiate a risk assessment of your work. It can be done by yourself in conjunction with your manager, your safety representative or DTU Work Environment (ABB). There are several types of risks for you as pregnant / nursing, and every aspects must be taken into account in the assessment.
For more information see "Pregnancy and Nursing Women – Work Environment " which is available at portalen on the ABB page.

Working with HF/BHF:
Outside normal working hours (mon-friday 8am-4pm) You are not allowed to handle (this means all work in fume hoods) chemicals containing HF or BHF. (You are allowed to use the dedicated HF/BHF bath in wet benches, in the cleanroom, but then the rules from "working with problematic chemistry" are followed.

Working with problematic chemicals*:
Outside normal working hours (mon-friday 8am-4pm) you are not allowed to work with any problematic wet chemistry or to enter the service areas in the cleanroom if you are alone. If you mix, move or pour problematic chemicals* there has to be a person in the same room as you. For work involving HF/BHF, there are special rules, see section "working with HF/BHF above.

If a User does not comply with Nanolab's regulations, Nanolab can deny access to the labs and cleanroom for a shorter or a longer period and in some cases Nanolab can require the user to follow the Safety introduction course again before the right to access is re-established.

For Nanolab staff only:
When working with hazardous gases, high current and problematic chemicals, there always has to be 2 persons present.

*** Problematic chemicals =**

Personal safety:

•***While working at the wet benches in the cleanroom:***
(dipping wafers into the bath) you should always wear a barrier glove on at least one hand, and safety glasses (ordinary glasses are not sufficient) or a faceshield!

•***Working by the fume hoods:***

When working with problematic chemicals in the fumehood, always wear faceshield or safety glasses (ordinary glasses are not sufficent), apron and barrier gloves on both hands

•Follow the signs in the fumehood, and always work with the sash at chest level (lowest level possible)

•All chemicals must be approved and marked with Danish labels. You can ask for approval and order labels from Majken Becker or Claus Højgård Nielsen
•Only one setup at a time in the fumehood. If you need to make a setup while another person is already working there, ask for permission by wet chemistry or a laboratory technicians. And never Work with solvents and *oxidizers at the same time!!


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Always remember to examine the barrier gloves for defects before and after use

•Discard barrier gloves and apron if you get chemicals on them or if you find defects (holes etc).

•Leave the fumehood with the sash down
•It is not allowed to leave hotplates or chemical bath heating switched on during the night

•Before you make a setup in the fume hoods, always make a note with your name, date and the contents on the laminated sheets which you find by the fume hoods. Tick the appropriate hazard classes.

•Empty and rinse the beakers after use and put them back in place

•Always wipe up drops of water or chemicals

•Rinse empty chemical bottles with water (if the chemical is water soluble) in the fume hood. After that you put it on the bottle rinse in the Gowning room and cross out the hazard warnings before you throw it out.

•If the chemical are C waste not soluble in water, please throw the empty bottle out in the solid C waste bin in CX1

•Whilst transporting chemicals, always use a trolley.

•Only Nanolab staff are allowed to pour problematic chemicals outside the fumehood

•Inside the fume hoods it is permitted to pour chemicals manually. For more information read APV and manuals for fume hoods in the cleanroom

•Never sit in front of a fume hood when you or someone else close by is working with wet chemistry

•Never leave setups containing chemicals, outside the fume hood without ventilation

At all times, when you see the sign with pictograms, follow the instruction on it!!!!!!!!!

In the workshops
•Nitrile gloves can be used when working with oils, glues, grease, lubrication etc. to avoid direct skin contact

In case of an accident:
Eye rinse bottles can be found hanging on the walls, in clearly marked positions close to where you are working with chemicals. In the gowning there is a eye shower by the rinse bench.

• Emergency showers are placed near by where you work with chemicals (please notice their position when you enter the cleanroom or lab), in the labs on 2nd floor of building 346 and also by the toilet in room 043.

•In case of chemical spillages larger than 10 x 10 cm and any HF spillages outside of the fume hood please inform a Nanolab employee immediately. If this is not possible activate the evacuation alarm.

•First aid boxes can be found at 15m intervals in the corridors outside of the cleanroom. They are easily identifiable and are labelled with a green background with a cross. They can also be seen clearly marked on the emergency plan.

•A defibrilator is placed outside at the back entrence between seminar room and building 346

Chemical disposal

•Hot acid/bases must be cooled below 40°C before you suck it up with the acid aspirator device or dump ed.

If the solvent is a C-waste (look on the list or in the SDS in kemibrug), it is ok to dispose it in the dedicated bottle. Otherwise, it must be collected and placed in a separate bottle in the chemical waste cupboard in the basement, clearly marked with your initials, phone number along with contents and concentration.

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3. Sikkerhed
SI 3.01.11.15 III-V electrochemical CV-profiler Work Place Assessment (APV)
SI3.03.07 Tillæg til kemikaliebrugsanvisning (KBA)