Information about the P02.1 chemistry laboratory (room L016)

**How to get access to the chemistry laboratory**

*Please note that the following steps must be done at least 4 weeks before your arrival at the DESY campus.*

1. Register in the DESY DOOR portal (https://door.desy.de). Under "General User" you will find the "Online Safety Training". Do the following safety trainings:
   1. Basic instructions
   2. PETRA III with all submodules
   3. Chemistry lab

After you have done the safety training, print/save the certificate and mail it or hand it in to the DESY Photon Science User Office ([door@desy.de](mailto:door@desy.de) or room L106 in building 47c).

1. In the DESY DOOR portal under "General User", you will find a point "Access to chemistry laboratory". It is possible to book the chemistry laboratory with and without scheduled beamtime. If you have beamtime, click on "Register" next to your scheduled beamtime. If you want to book the chemistry laboratory without beamtime, then click on "here" in the sentence "If you want to use the chemistry laboratory without having scheduled beamtime, please click here." (Usually, users of beamline P02.1 are automatically put in the P02.1 chemistry laboratory. If you want to use the general chemistry laboratory in room L031, please note that you want to use it. See also 8.)
2. Select then the chemicals/samples/materials which you want to use in the chemistry laboratory from the list of favorites or click on "Proceed with registration" if you have nothing or not the correct chemicals in your favorite list.
3. Fill out the form, giving a start and an end date (if you are a permanent user and want to make a long-term declaration, e.g. give a timespan of 1 year).
4. Choose the correct chemistry laboratory from the drop-down menu: "PETRA III (47c)".
5. Add all of the substances which you want to handle in the chemistry laboratory. This includes all kinds of solid, liquid and gaseous chemicals (e.g. educts, products, minerals, biological samples, solvents, etc.).
6. Upload your safety concept. You should describe how you want to work with your materials in the safety concept, including the description of how you want to protect yourself (e.g. lab-coat, glasses, gloves, etc.) and your environment (e.g. shielding, fume hood, etc.). You should also give some information on how you plan to dispose your chemical waste. Please note that DESY usually is not able to dispose your chemical waste!!!
7. In the field "List of apparatus and planned activities in the chemistry laboratory", you should state that you want to work in the "P02.1 chemistry lab, room L016". Or, if you intend to use another chemistry laboratory, you should also state it here (for instance, chemistry laboratory in L031). Please add in this field also a list of things which you will need during your work in the chemistry laboratory (e.g. solvents, glovebox, etc.).
8. Finally, "Submit" your declaration.
9. There will be an additional on-site safety training given to you by the staff. You have to confirm this on-site training by signing on a special form. Furthermore, you will be introduced to all the equipment which you need during your stay in the chemistry laboratory.

**How to behave in the chemistry laboratory**

You have to obey the following rules in the chemistry laboratory. Due to safety reasons, misbehaving will lead to the permanent loss of access to the chemistry laboratory!!!

1. In the chemistry laboratory, there is a "Laboratory logbook” (gray folder). It is mandatory to fill in the date, name, used devices, and samples/chemicals you have used (template is presented on the first page).
2. Always wear the necessary protective clothing like lab coats, glasses, gloves, etc.
3. On the tables and in the fume hood, use a large piece of paper (A1 size) as underlay. Please write your name and your phone number on it, so it is clear that someone is working in that place.
4. All chemicals and samples must be labeled. Name of chemical/sample, chemical formula and name of owner should be provided.
5. If you want to store chemicals/samples over a longer period in the laboratory, please contact the staff. Usually, it is not possible to store something. During your stay, chemcials must be stored in the fume hood if they are currently not in use.
6. If contamination happens or a device is broken, inform the staff and/or the Shift Service immediatly!!!
7. Glove-box:
   1. It is only allowed to work in the glovebox after an introduction by the staff
   2. If you work with the glovebox, you should wear long-sleeve clothes (lab coat) and an additional pair of gloves (one on your hands and one inside the glove box) to save the glovebox's gloves.
   3. It is not allowed to store something in the glovebox. After finishing your work all chemicals and samples have to be removed.
8. Muffle furnace (Nabertherm):
   1. It is only allowed to work with the muffle furnace after an introduction by the staff
   2. The maximum temperature of the oven is 1300°C. However, the small base plate inside the furnace is only usable up to temperatures of 1200°C.
   3. Please make sure that nothing is placed on top or near the furnace while it is running.
9. Planetary ball mill (Fritsch):
   1. It is only allowed to work with the planetary ball mill after an introduction by the staff
10. Fume hood:
    1. It is only allowed to work with the fume hood after an introduction by the staff
    2. In order to push up the glass in front of the fume hood, the electronic button must be used! A manual push-up is not allowed!
    3. It is not allowed to switch the fume hood off! Of course, it is allowed to switch on and off the light of the fume hood.
11. Used glassware as well as ceramic and metal tools must be cleaned and/or put in the box for used glassware.
12. There are different waste bins: A regular waste bin for non-contaminated waste (round metal bin), a waste bin for contaminated waste (large plastic bin), and a small container for glass waste.
13. After using the chemistry laboratory, everything you have used or contaminated must be cleaned and put back in its original place.
14. Please always respect your neighbor in the laboratory (e.g., do not move or touch things of other people without their permission)