

Cleanroom Instructions and Tour Protocol

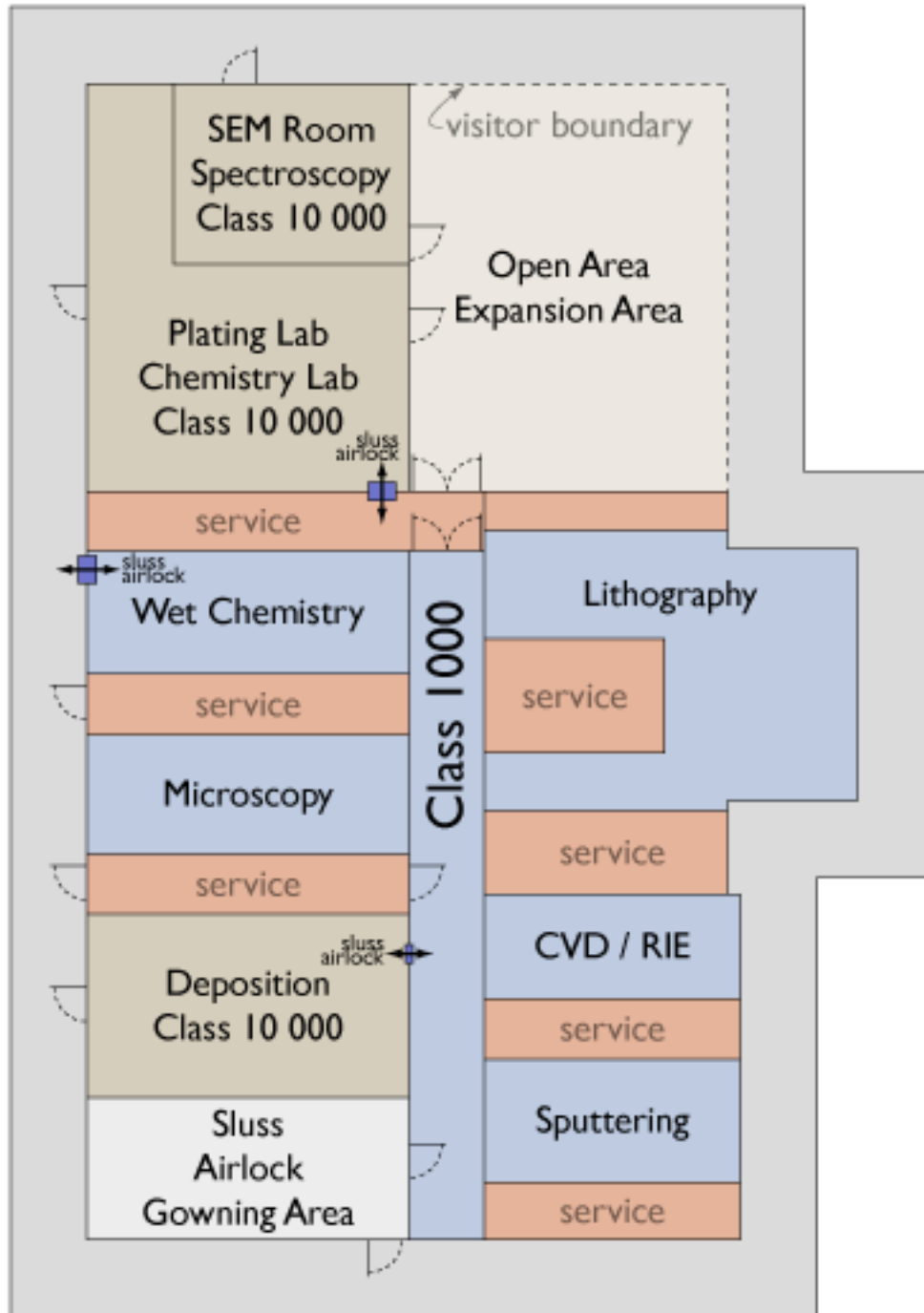
Abdellah Malti
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Cleanroom Instructions and Tour Protocol

Brief introduction to the cleanroom



The cleanroom on the third floor of the Tappan building consists of three areas (in order of "cleanliness"):

- The open area
- A Class 10000 clean area (also known as the Plating Lab)
- A Class 1000 clean area

In addition, there are airlocks (svenska: slussar), storage areas, and WCs. Use of each of these areas requires different precautions, but a basic understanding of the **boundaries** of each area is most important before beginning to use the

Main - Cleanroom Instructions and Tour Protocol

cleanroom facilities. Please consult the map of the cleanroom to the right and the tour guide below to learn more about each of the the areas and how to use them properly.

Before a new user is allowed to use the facility, a detailed tour must be taken, led by their research group's designated cleanroom guide. In addition, new users should consult Acreo's [guidelines on chemical usage \(the Chemistry Course\)](#) and (updated) [guidelines on waste treatment](#) **before** using the cleanroom.

The Acreo cleanroom protocol can be found here in [English](#) and [Swedish](#).

General considerations

All the clean room work benches and fume hoods should be kept clean. Remove all your stuff when you are finished. Remember that the clean room is a shared facility. Try to leave the work space cleaner than you found it. When working take into consideration that you, the user, are the largest contaminant of dust particles. Work gently and conscientiously.

Be sure to keep fumehoods as closed as possible. The estimate is 500 SEK/year for every centimeter that a fumehood is left open.

Finally . . . label everything! There is a very nice label printer in the plating lab (ask someone for instructions) and there is also a handheld label printer for simpler labels. You should assume that if it's not labeled, it will get thrown out immediately.

Entering the cleanroom

The cleanroom is generally entered from the sluss/airlock in main hallway of the third floor of Tappan. When entering:

1. Only open one door of the sluss/airlock at a time. Wait for the other door to close before entering.
2. Immediately take off your shoes and put on the shelf just inside the entrance. Do not cross the "shoe line" with your outside shoes on.
3. Sit down on the bench and put on inside shoes. Make sure that the inside shoes only touch the floor on the cleanroom side of the bench.
4. Put on safety glasses.
5. Enter the cleanroom hallway, again making sure that both sluss/airlock doors are not open at the same time.
6. If you intend to work in the open area or plating/chemistry lab, put on a hairnet **and then** a labcoat.

Note that there is another entry from "Post och Gods" which can be used for cleaning and bringing in large pieces of equipment. The outer door is inside the garage in Post och Gods, which is located in the main third-floor hallway of Tappan. The inner door is located just opposite from the sluss into the Class 1000 cleanroom. You can find isopropanol and wipers in this sluss.

The open area

How to dress

When working in the open area, a hairnet and labcoat are required. Gloves are **not** required. If you are only accessing the cabinets on the perimeter of the open area (outside of the tape-line for visitors) you do not need the hairnet or labcoat.

Bringing material in and out

Generally, a quick wipe of materials going in and out of the open area is sufficient.

The Class 10000 cleanroom (Plating Lab / Chemistry Lab)

How to dress

When working in the plating/chemistry lab, a hairnet, labcoat, and gloves **all required**. Latex gloves are available next to the hand washing sink. Nitrile gloves are available in the storage cabinets.

Bringing material in and out

Generally, a quick wipe of materials going in and out of the plating lab is sufficient.

The Class 1000 cleanroom

How to dress

When working in the Class 1000 cleanroom, a full clean room suit is required. After entering the Class 1000, remove your inside shoes and cross the two benches into the dressing area. Then:

1. Put on a face mask.
2. Put on a cleanroom hood.
3. Put on a cleanroom suit **making sure** that the suit never touches the floor. This can be done by holding the suit in such a way that you "walk into it". Ask an expert for advice (it can be done). Zip up the suit.
4. Put on cleanroom boots **without sitting down** on the bench.
5. Put on gloves, trying to cover the cuffs of the cleanroom suit as best as you can.
6. Put safety glasses back on.
7. Look at yourself in the mirror before entering to see if you forgot anything.

Bringing material in and out

Material entering the Class 1000 should be as clean as possible. The material airlocks/slusser should be used. The airlocks can be found at the deposition room, plating lab, and in the wall between the main hallway and the wet chemistry room . For large equipments ask clean room staff for help. Wipe off equipment or materials with wipers and isopropanol. Try not to bring things in and out too frequently.

Using the storage rooms

If you have any large materials or chemicals that are not frequently used, they **should not** be stored in the open area or plating/chemistry lab. The storage rooms around the cleanroom outer hallway are for this purpose. If you cannot find an appropriate place to store your larger/older materials in the storage rooms, ask the cleanroom expert in your research group for advice.