

Price list NTNU NanoLab

From 01.07.2015 NTNU NanoLab introduces a new price system. This price system follows the Norwegian Research Infrastructure Resource (RIR) model¹ implemented at NTNU in the beginning of this year. The following document describes the new price system and introduces the payment policy for all user groups.

User categories

The price system distinguishes between academic and industry activities that use the infrastructure:

Academic users are defined as:

- Bachelor and master students
- All research projects where NTNU is a partner (“bidragsprosjekt”)

Industrial users are defined as:

- All research projects where NTNU is not a partner (“oppdragsprosjekt”)
- All commercial companies/users (including start-up companies)

Academic activities are considered as knowledge building with a pronounced aim to contribute to the general scientific knowledge base. It is, thus, a strong ambition that processes developed during the course of academic activities are documented and to a large extent, made available to all users of the NorFab infrastructure.

The definition of the user groups is subject to change and this document will be updated accordingly. If you have questions, please contact the NanoLab administration.

Price system

NTNU NanoLab charges two categories of hourly prices for working in the cleanroom:

1. **Basic Infrastructure rate** (charged for access time in the cleanroom)
This fee covers the use of the basic cleanroom infrastructure. It includes more than 60 smaller instruments, standard chemicals and targets. The fee is charged for the time *the user* is accessing the cleanroom.
2. **Advanced Infrastructure rate** (charged per booked instrument hour)
This fee covers the running costs for advanced tools. The tools are divided into two groups. The fee is charged for booked instrument time.

A user working in the cleanroom, using an instrument of the advanced infrastructure pays both the basic and the advanced infrastructure rate.

¹ http://www.uhr.no/documents/A_Norwegian_Research_Infrastructure_Resource_Model_270214.pdf

Industrial users: Figure 1 gives an overview of NTNU NanoLab’s price system for industrial users. For this user group only hourly prices apply.

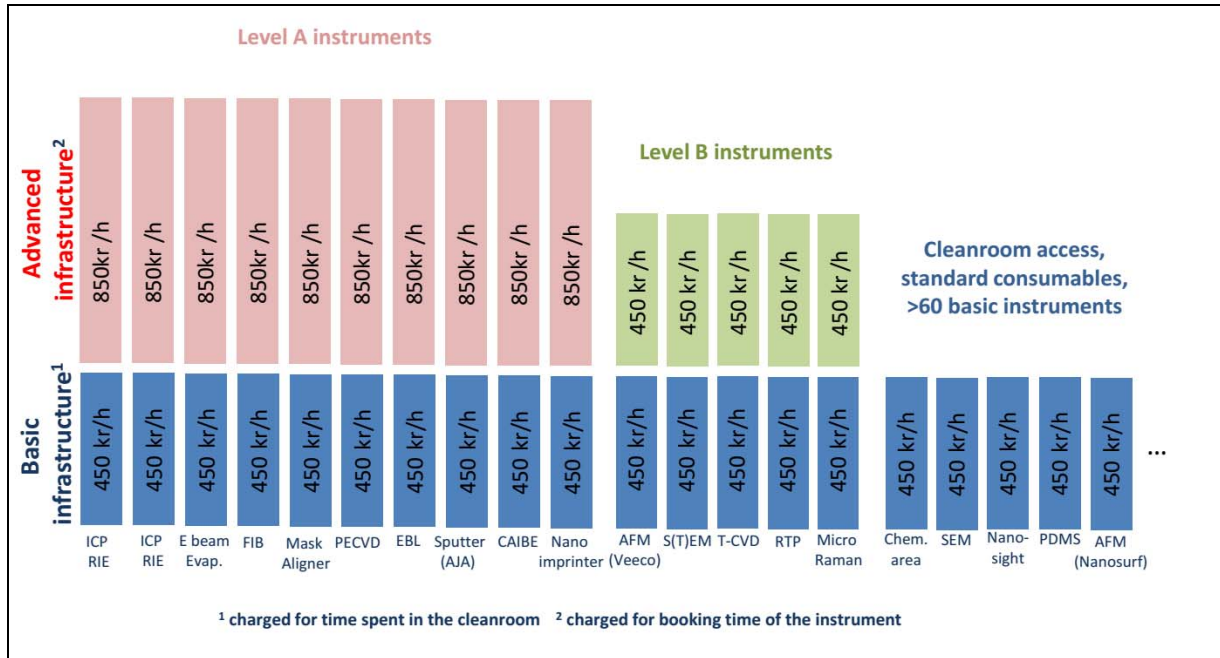


Figure 1 Price system industrial users

Academic users: Figure 2 shows the price system for academic users. Academic users can either choose to pay per hour, or buy one of our flat rate arrangements.

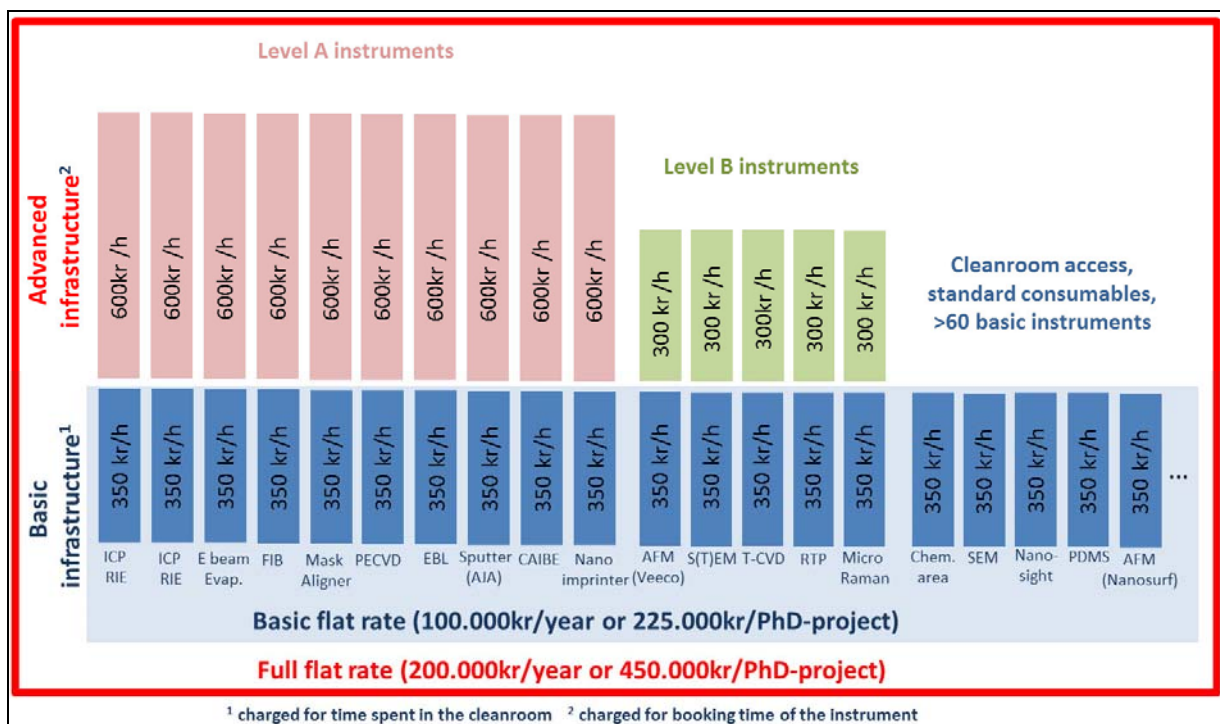


Figure 2 Price system academic users

Norges teknisk-naturvitenskapelige universitet

| Level A | Level B |
|----------------------------|--------------------------------|
| AJA Sputter and Evaporator | AFM, Veeco |
| E-Beam Evaporator | T-CVD |
| Electron Beam Lithography | Micro Raman |
| FIB | Rapid Thermal Processing (RTP) |
| ICP-RIE Chiller | S(T)EM |
| ICP-RIE Cryo | |
| Maskaligner MA6/EVG620 | |
| Nanoimprinter SCIL/EVG620 | |
| PECVD | |
| CAIBE | |

Figure 3 Instruments in the 2 different price levels

An overview of all instruments can be found on LIMS (ntnu.norfab.no) and the NorFab homepage (www.norfab.no).

Flat rate

Flat rates give academic users the possibility to cover cleanroom costs using an easy-to-plan and easy-to-use approach. A flat rate agreement can be signed *per year* or *for a whole PhD-project*.

Two categories of flat rates are available:

1. **Basic flat rate** covers use of the basic infrastructure, including cleanroom access, standard chemicals and small instruments. Instruments defined as advanced infrastructure have to be booked and paid separately by the hour.
2. **Full flat rate** covers use of both basic and advanced infrastructure. A full flat rate agreement is valid in the entire NorFab infrastructure.

Payment policy

Figure 2 shows the payment policy for the different user groups at NTNU NanoLab.

| Master students | Student/ PhD Courses | Internal financed PhD students/ Post.docs (SO/RD) | External financed PhD students/ Post.docs (i.e. NFR, EU) | External financed PhD students/ Post.docs without funding* | External academic users* | Industry users |
|-----------------|----------------------|---|--|--|--------------------------|----------------------|
| NTNU 100% | NTNU 100% | NTNU/ NorFab 90% | Project funding 100% | NorFab 90% | NorFab 100% | Project funding 100% |
| | | Own contribution 10% | | Own contribution 10% | | |

* application for NorFab support need to be submitted and approved

Figure 2 Payment policy for NTNU NanoLab users

NTNU NanoLab **MUST** be acknowledged in all publications based on the work in the facility and the publications are to be sent to nanolab@ntnu.no. All academic users receiving support from NorFab **MUST** acknowledge this support in all publications (the following phrase should be used for this purpose: "The Research Council of Norway is acknowledged for the support to the Norwegian Micro- and Nano-Fabrication Facility, NorFab")

Users with NTNU affiliation

For NTNU-affiliated users some local regulations apply for the use of NTNU NanoLab:

- *Project / Master students*
Project and master students may use the infrastructure for free within the scope of their study program. The cost for their use is covered by NTNU.
- *PhD-students /post docs financed by external funding sources*
These users are expected to apply for external funding of the cleanroom fees. If the external funding is rejected, these users can apply for NorFab support. With NorFab support, an own contribution of 10% of the standard rates will be charged. This rule applies also for flat rates.
- *PhD-students/post docs financed by NTNU*
The fee for these users is covered by NTNU and the Research Council of Norway through NorFab. The users pay an own contribution of 10% of the standard rates. This rule applies also for flat rates.
- *Projects with call deadline before 01.04.2015*
These projects can use the infrastructure at the appointed flat rates valid at the moment of application. The price difference is covered by NorFab. Please contact the NanoLab administration for more information.
- *Supervisors/co-advisors*
Supervisors/co-advisors of students (PhD or master) can enter the cleanroom for free together with the student. However, the status as supervisor/co-advisor must be made clear in the activity document and he/she is not allowed to carry out other work in the cleanroom.
- *Pre-project activities*
Short pre-investigations in NTNU NanoLab (up to 4 hours in total) can be carried out by NTNU NanoLabs staff or by an appointed user of the infrastructure free of charge. Please contact the NanoLab administration for this.

If you have any questions regarding the price system or problems to finance your cleanroom work, please contact NTNU NanoLab (nanolab@ntnu.no) to resolve how your activity should be charged.

External academic users

External academic users will be charged as industrial users if they are not part of a project with NTNU as partner. However, these users can apply NorFab (NorFab support²) for covering the full cleanroom fees. Unfortunately, we are not able to pay travel and accommodation costs for these users.

Operator services

NTNU NanoLab has limited capacity for operator services. Please contact the NanoLab administration nanolab@ntnu.no to inquire about availability and prices. Operator services are charged by hourly rates and come in addition to the instrument and basic fees.

The price system including the prices given in this document will be enforced from 01.07.2015 and subjected to annual revision. All prices are given exclusive VAT.

² <http://www.norfab.no/access-and-support/>