Introduction to activities in the micro and nanotechnology platform

V8 december 2020

Open your computer speakers and increase the sound

LAAS-CNRS
/ Laboratoire d'analyse et d'architecture des systèmes du CNRS

RENATECH
réseau national
des grandes centrales de technologies

Laboratoire conventionné
avec l'Université Fédérale
de Toulouse Midi-Pyrénées

> Micro fabrication in LAAS is more than 50 years of expertise

Since 2006

Renatech platform

1600 m²

1978

The first clean room

1968

The first dedicated room

Skills on equipment
Skills on processes

RENATECH
french national network
of large technological facilities

> https://www.renatech.org/
> Since 2003

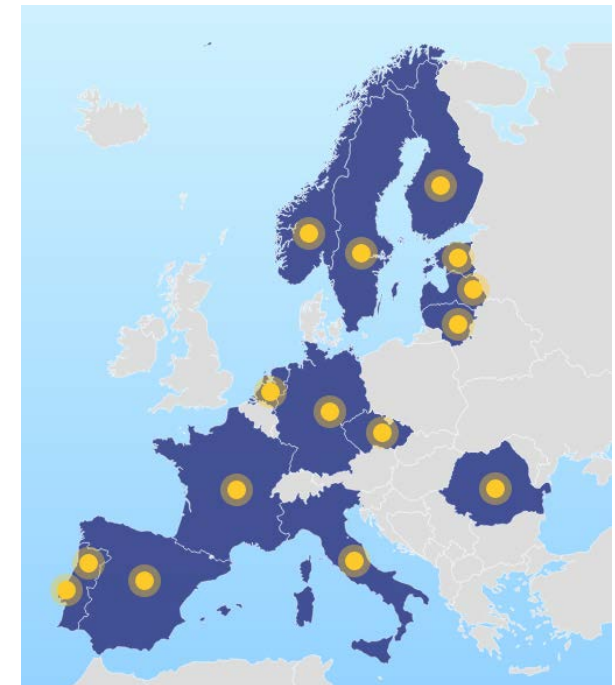EUROnanoLAB

> http://euronanolab.eu/about-enl/
> Under construction since 2016
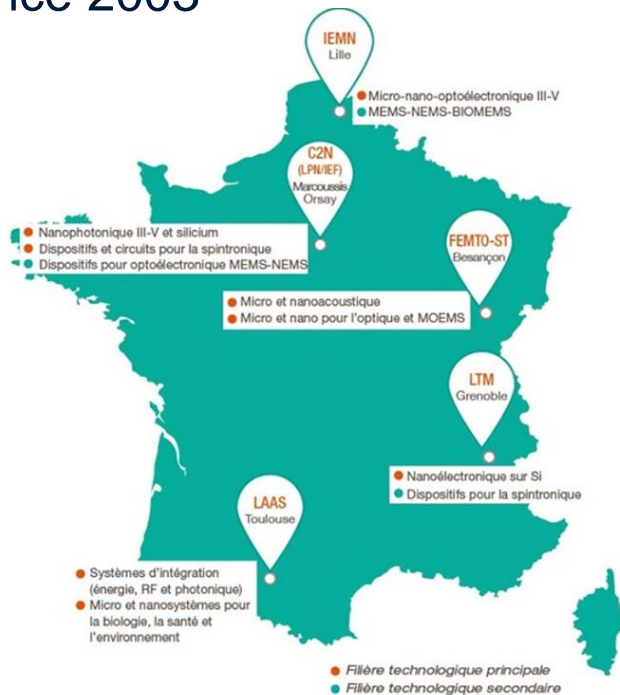
> **Networks strength**
>   - Widen available techniques
>   - Second source in case of process or equipment problem

> **We can connect you to others process capabilities**

The needs for the infrastructure

> To keep it optimized

> For the success of your processes

> Every one implication is essential.

> We rely on you to come up with improvements

The needs for safety

> For people

> For infrastructure

> For environment

> **Safety is our individual and collective responsibility**
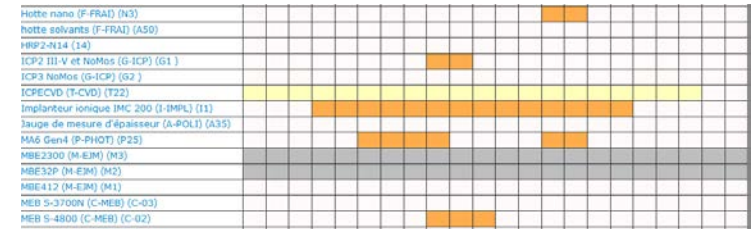
> **Report any risky situation, make proposals**

The needs for organization

> **For everyone to achieve their goals as best they can**

- **2003 : 50-70 equipment (10 M€)**   **Today : more than 200 (> 35 M€)**

- **Myfab online application to manage the activity**
  https://lims.laas.fr/Default.aspx

- **2003 : 50 users**   **Today : nearly 300 users**

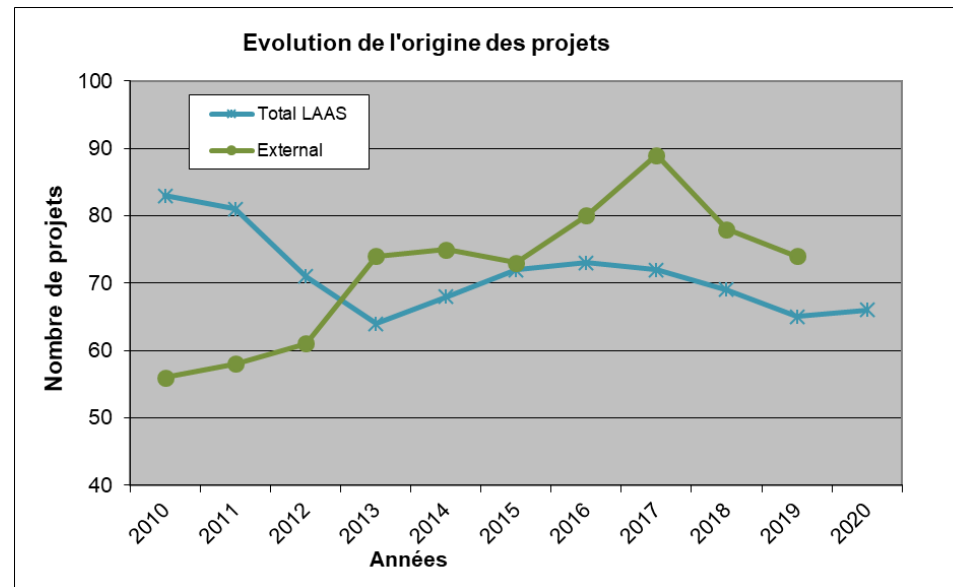> **Our individual rigour guarantee of collective success**

The needs of belonging to a collective

> Your project is supported with the utmost attention………… like 149 others

- **2003 : 15-20 internal projects**   **today : 150 internal/ external projects**

Evolution de l'origine des projets

> **Everyone's spirit of responsibility allows to answer everyone at the best**

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> Numerous applications areas

- Can create cross contaminations, sources of failure.
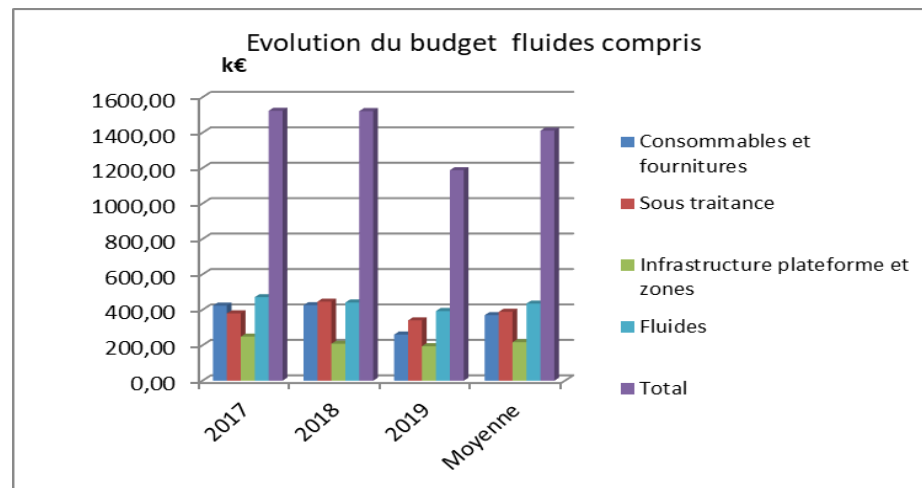- **2003 : 2 applications areas** **today : 4 mains applications areas and subareas**
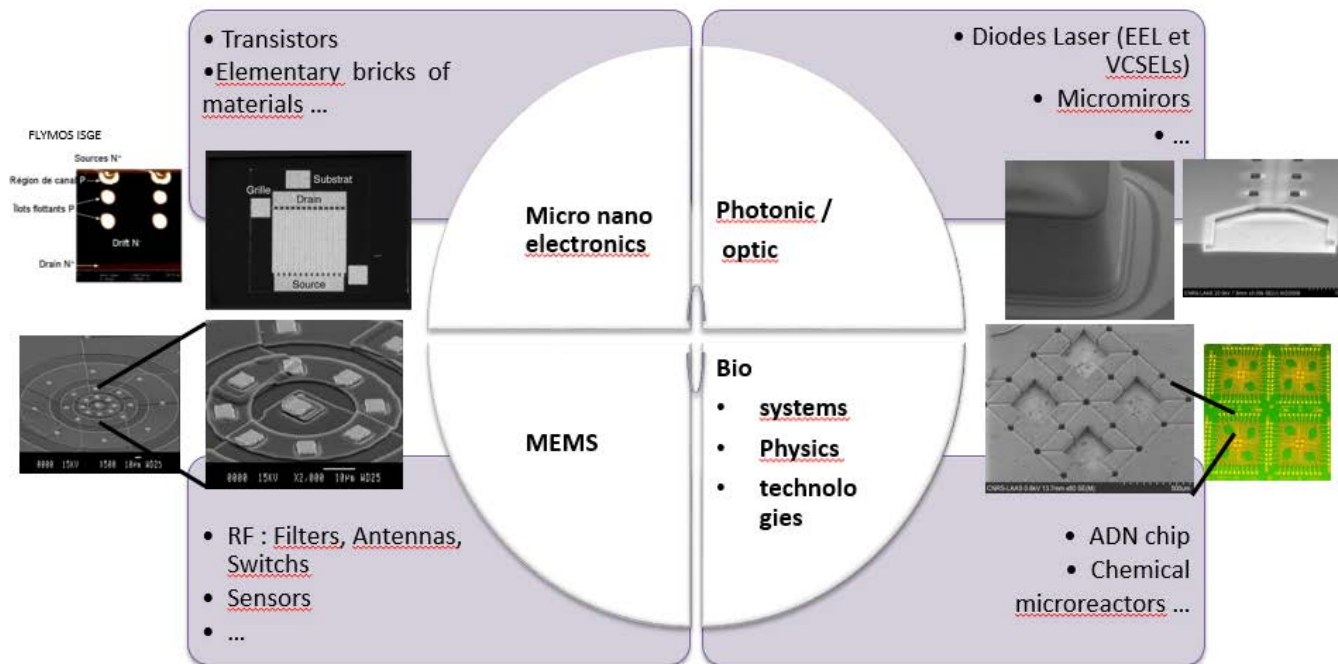
> **Take care of your activities and others's ones**

The needs for managing a budget

> 1,4 M€/year running budget
> 0,5M€/year Investment in average
> Assume
  ▪ By CNRS
  ▪ Funders through the funding of your projects

Evolution du budget fluides compris k€

> Funders ask for very precise justifications
  ▪ Implementation of a certified billing
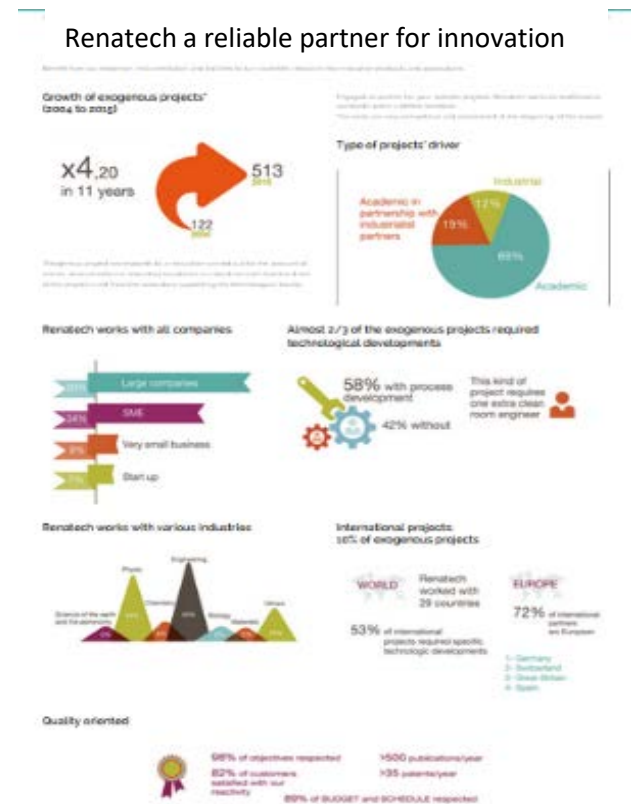> **Every activity as a cost, be aware when working**

The needs for reporting

> Guardianships (CNRS, Ministery, etc..) ask for continuous reporting of facts and key figures
  - To give budgets
  - To give technical human ressources

> For know-how sustainability

> **We all need to apply the procedures to ensure the resources sustainability.**

Renatech a reliable partner for innovation

The needs for individual implication

> Everyone is requested 2 - 3 times/year
  - Friday from 15:30 to 16:30
  - Storage, supply, calibration and inspection of chemistry, photolithography and characterization areas.

> To help you organize yourself
  1. A quarterly planning is released by mail
 2. You are reminded the Monday of the week of your intervention.

> If unavailable, you must find someone who will replace you, or last indicate your vacancy. If one of these situation supply information to soutienteam@laas.fr

> **In case of repeated non justified vacancies your access to clean room is close.**
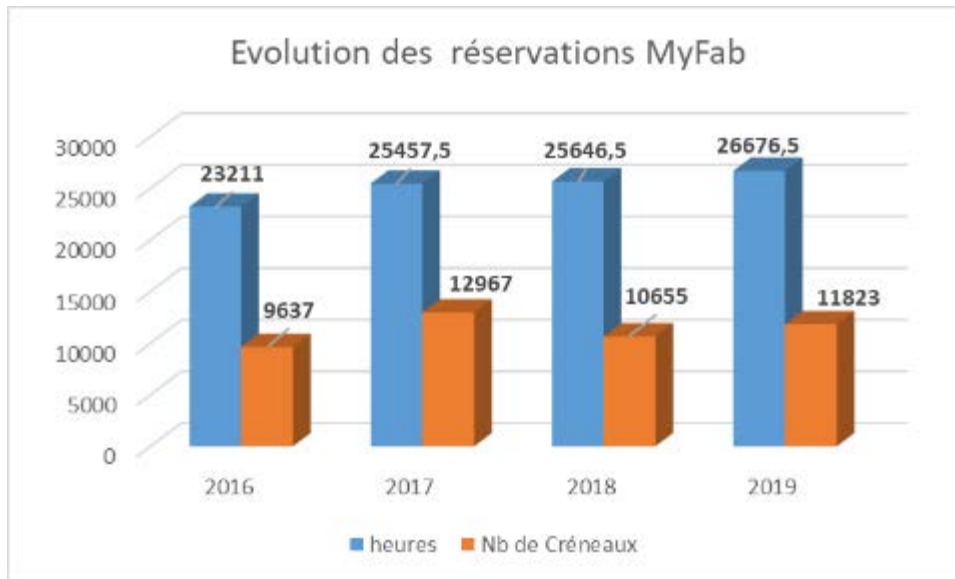
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To help you : the Team service

> Nearly 30 Engineers, Assisting Engineers, Technicians, Apprentices under the direct authority of the director
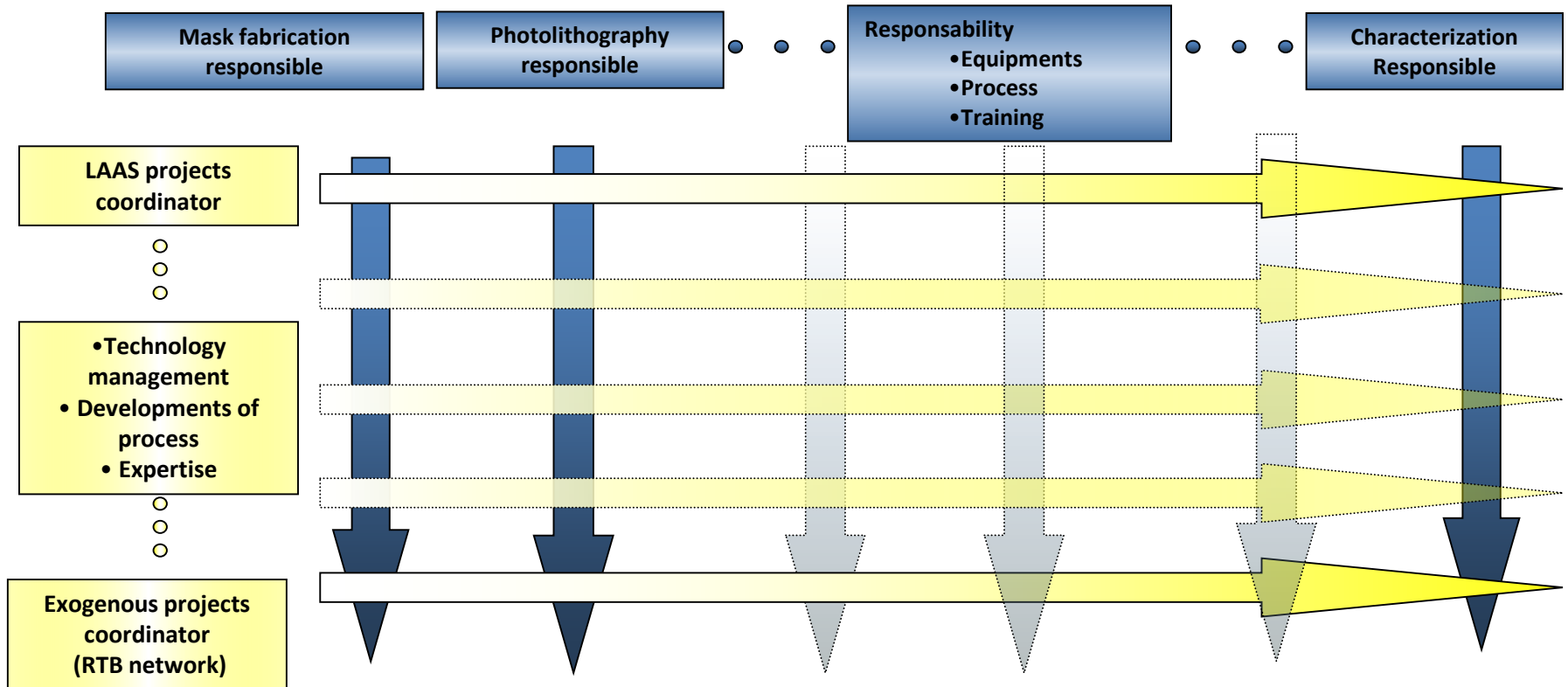
> You have to know the technical coordinators of your projects

The needs for managing activities

> To optimize the access to ressources and knowledge

- **Myfab online application https://lims.laas.fr/Default.aspx**

> **Booking and logging are compulsary**

Make Myfab as Mypersonnalfab

> **Take a moment to master Myfab's core functions**

Home screen or menu Tools/My licenced Tools
1) The equipment on which you have a license is displayed
2) Click **book** opens booking calendar.

Menu : Tools / view bookings / booking overview
1) Variants
Variant 1 My favourites tick activated
- display of your favourite equipment and their booking schedule
Variant 2 use filter tick activated
- Displaying equipment and their booking schedule according to filters
- Click **Add** add the equipment i your favorites
2) Click on the *name of the equipment* opens the booking calendar

Menu Tools / All tools
1) All the equipment is displayed
2) Click **book** opens the booking calendar.

Direct access to the booking calendar
1) Calendar icon (top right)/ *Calendar*
2) Viewing the reservation schedule of the equipment shown in the *resource* drop-down menu (top left)
3) Choose your equipment from the drop-down menu
4) Set a time slot with the mouse
5) Double click in the slot

Inquiring the booking slot
Grey items are optional / Colour items are mandatory
Create Booking
- Recall of reserved equipment
- Determining the booking slot (Minimum 30 minutes)
- Automatic time calculation
- Project choice (in the list where you have the right to book)
- Additional information useful about the process
- Message that appears on the booking calendar as the mouse passes
- If batch option used check as project-related batch
Click **book** validate the booking

Initial configuration (to be applied the first time, then remains frozen)
Menu User/My profile / user settings
1) set *Remember page filters* to "Allways remember filter"
2) Save
Menu Tools/ Log / Log status
1) In filters set up the 4 fields as follows
2) The logs linked to your bookings are under the filters
Using *add/remove columns (x of 11 column chosen)* set the sorting filters to a minimum as follows
You can check for additional items if other information helps you validate logs
3) Log status field gives log situation
Not started : None information validated
Started : Available informations non validated
Completed : All informations validated
4) At any time you can change completed logs (even retroactively)

Home screen→ display books still to be validated
1) Set the 3 *My bookings* filters as follows
2) Click *log* to validate an unvalidated slot

Menu Tools/ Log / Log status
1) Clik *log* of the booking you want to validate
2) The window specific to each equipment is displayed
Grey items are optional / Colour items are mandatory
- Recall of the booking and the project (you can change it)
- If batch option used check as project-related batch
- Real-time use to be accurately informed
- Possible accuracy to the minute
- If problem during the process check the box and explain the problem.
- Equipment managers receive a message with your information
- Data on the process to be informed
- Watch out for the units!
- If an uninformed field you won't be able to save or complete (MyFab will tell you)
- If you do not have the requested value indicate 999 to be able to save/complete
- Change status or message for this tool (current status Available)
- Changing equipment status if you notice a recurring problem
- Save as started: information not definitively validated
- Completed: validated information

Menu Tools / My licenced tools → Logging without booking
Click *log* allows log without having a pre-booking.
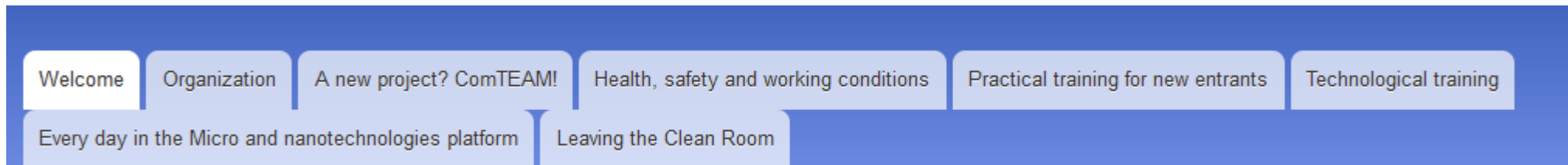To be used mainly to note supplies (tool = Fourniture) or equipment at very short time of use (chemical benches, tencor, ...)

> **Furnitures and wafers tools are just to log (not to book)**
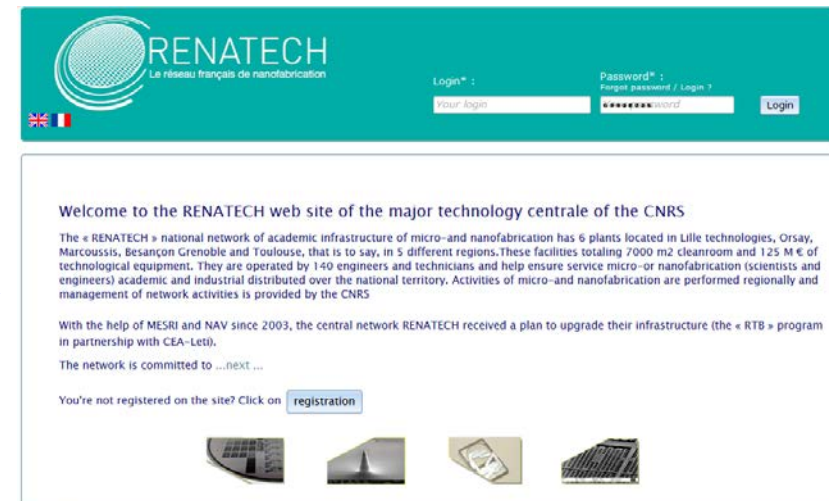> **Logs fields timespan must be exact as we invoice on it**

Others numeric tools

> ## A wealth of information available on <u>TEAM intranet</u>

| Welcome | Organization | A new project? ComTEAM! | Health, safety and working conditions | Practical training for new entrants | Technological training |

| Every day in the Micro and nanotechnologies platform | Leaving the Clean Room |

> ## Administrative management required for all projects.

- <u>https://www.renatech.org/projet/</u>

RENATECH
Le réseau français de nanofabrication

Login* : Your login
Password* : Forgot password / Login ?
[Login]

Welcome to the RENATECH web site of the major technology centrale of the CNRS

The « RENATECH » national network of academic infrastructure of micro-and nanofabrication has 6 plants located in Lille technologies, Orsay, Marcoussis, Besançon Grenoble and Toulouse, that is to say, in 5 different regions.These facilities totaling 7000 m2 cleanroom and 125 M € of technological equipment. They are operated by 140 engineers and technicians and help ensure service micro-or nanofabrication (scientists and engineers) academic and industrial distributed over the national territory. Activities of micro-and nanofabrication are performed regionally and management of network activities is provided by the CNRS

With the help of MESRI and NAV since 2003, the central network RENATECH received a plan to upgrade their infrastructure (the « RTB » program in partnership with CEA-Leti).

The network is committed to ...next ...

You're not registered on the site? Click on [registration]

(*)Mandatory fields
Renatech form, Release 6.09 December 28, 2018

The key points to remember

> An environment that depends on the attitude of each

> Coexistence of a many projects with different objectives

> Procedures to apply to give a common framework

> Know the references and technical coordinators of projects

> Crucial importance of the MyFab application for booking and logging

YOUR HELP IS ESSENTIAL TO HELP US TO WORK INTELLIGENTLY AND TO ADAPT OUR ORGANIZATION

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