

Practical Coach training system

From 2013-11-20 a new training system will be implemented for tools at Lund Nano Lab. In this system practical coaches will be responsible for training of new users.

The new system will be able to offer training that is more tailored to the background of the new users and will extend the actual time spent on training that was previously limited due to available time of the lab staff.

The practical coach will arrange a number of training sessions depending on the actual background of the new user. When the practical coach and the new user feel confident that the new user knows the tool well enough to work on their own the users will apply for a tool license in LIMS. This will be followed by a qualification by the tool responsible which will be carried out as a short test where the new user demonstrates that they can operate the tool. Extra attention will be paid to testing the knowledge of the safety procedures regarding a tool or process. Failure to understand and adhere to the safety procedures will mean an automatic fail and the user will have to perform more training with the practical coach before they can apply for license again. For some simpler tools the qualification may be done oral test only. Initial training on wet chemical benches and fume hoods will still be performed by the lab staff. The training will be accomplished by the practical coach providing the new user with detailed information regarding the specific processes used.

To make the most efficient use of time we recommend the practical coach uses real samples and not dummy samples, this way the practical coach will get some work done while performing the training.

At the end of this document you will be able to find information regarding the number of hours logged on a tool a user should have before they become a practical coach, as well as information on how many hours/sessions we recommend a training to take before the new user is fully trained. These numbers are mere recommendations and should be adapted to the new user's background.

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Recommendations for required experience to become a practical coach and time/sessions required for training of new users can be found below. Remember that these times are to be seen as guidelines, a user who is experienced in similar tools may need only a single training session while others with no experience with any scientific equipment may need more than listed.

Tool name or type	Minimum experience needed to become practical coach	Approximate number of sessions for an unexperienced user
SEM	10 sessions or 20 hours	3
EBL	10 sessions or 30 hours	4
Sputter - Polaron E5100 DC (31)	5 sessions	1-2
Evaporators	10 sessions	3
UV lithography MJB4	5 sessions	2-3
UV lithography MJB3	5 sessions	2-3
Bonding machine - K&S 4523 (12)	10 sessions	3
Probe station - Cascade 11000B (1001)	5 sessions	3
Plasma Ashers	3 sessions	1
Etcher RIE - Trion T2 (224)	5 sessions	2-3
Etcher RIE - Trion T2- End point detector	5 sessions	2-3
NIL 6 inch system - Obducat (306)	10 sessions	4
Scribers	3 sessions	1-2
Ellipsometer Woollam M2000VI (302)	5 sessions	1
ALD	7 sessions	2-3
Sputterer - AJA Orion 5 (206)	5 sessions	2
RTP system - RTP 1200 (204)	2 sessions	1
Etcher ICP-RIE - Oxford Instruments (701)	5 sessions	2
AFM - Dimension 3100 (301)	5 sessions	2
XRD - Bruker D8 (605)	5 sessions	2