

## Specific lab rules/procedures for soft matter facility

Jing Li,

facility manager

The soft matter characterization facility offers user access to 10 different instruments: AFM (C268), Instron – tensile testing (K206), rheometer (C419), dynamic mechanical thermal analyzer (DMA), contact angle meter, surface tension meter, viscometer, densimeter, refractometer, Karl Fischer (KF) titrator (all in C257). In addition, a gel permeation chromatograph (GPC) will be accessible through the mass spec facility.

The facility is part of MACAL, so usage will primarily follow MACAL policies

[https://www.mmk.su.se/polopoly\\_fs/1.207200.1570715797!/menu/standard/file/policyMACAL\\_update.pdf](https://www.mmk.su.se/polopoly_fs/1.207200.1570715797!/menu/standard/file/policyMACAL_update.pdf)

In particular: All instruments are registered in a booking system (LIMS). New users who want to use equipment supervised must contact the soft matter lab manager Jing Li and undergo training until they are approved as independent users. Only independent users are entitled to book and operate instrumentation. For MACAL being able to operate as an open user facility, it is of utmost importance that users comply strictly to the rules and procedure set up by the facility managers for using MACAL lab space and instrumentation. Operating equipment not according to training procedures, manipulating equipment, or operating equipment without booking is considered unauthorized use and can be penalized in the form of additional fees or even suspension.

When entering/working in labs C419 and C257, it is requested to wear a lab coat, safety goggles and close-toed shoes since also chemicals are handled in these labs. As for all MACAL labs, users have to notify the facility manager if they intend to use the facility after 6 pm and on week-ends. And after using the facility during evenings/week-ends, users have to check-out by sending a text message/email to the facility manager. External (i.e. not MMK) users will be given outside office hour access only in exceptional cases. It is understood that users will keep the lab space clean, and remove samples and/or waste generated after measurements. Further, instruments have to be left in their original service state for the next user. A no-show up fee will be charged if a user removes a booking with shorter notice than 24 h.

In order to maximize efficacy, regular training sessions will be organized within a fixed week every month (on maximally five consecutive work days). Jing Li will maintain a queue system for training sessions (essentially based on a first come first serve principle). Most instrument trainings can be done in 1 - 2 h slots, and may be necessary to be repeated in order to achieve independent user approval. AFM training will be offered on two levels, basic and advanced. Basic AFM training is performed with standard samples and takes minimum 4 hours. It will allow the user to understand the working principle and capabilities of the instrument, as well as enable its basic operation. Advanced AFM training includes user samples and will be offered as

several modules covering the various operation modes of the AFM. An advanced training module will at least be two work days long, i.e.  $2 \times 8$  hrs.

Trainings of MMK students (bachelor, master, and PhD) is for free. Training of external students and senior researchers (including MMK) is counted as assisted usage of an instrument and subject to a fee (see facility homepage). It is not possible to have bachelor students trained at the AFM, and master students will only be trained in case they perform a 60 credits project work.

Some instruments (e.g. DMA and contact angle/surface tension) allow for non-standard setups/experimental conditions. Requests for non-standard setups must be discussed with Jing Li at least one week prior intended use. Time spent beyond one hour by the facility manager for changing set ups will be counted as assisted usage of the instrument. If substantial help beyond basic training is given by the facility manager, e.g., support with advanced data collection and data interpretation, leading to results that are included in a scientific publication, this will justify co-authorship on the paper for the facility manager.

### **Disclosure and safety policy**

1. A user must inform the lab manager (Jing Li) about nature of their samples for a use of MACAL soft matter instruments.
2. A risk assessment should be conducted in advance by the user who intends to use instruments/lab spaces that belong to soft matter facility on testing of hazardous/harmful/pathogenic (bio) materials that may cause harms on human being. And the risk assessment should be evaluated by the lab manager (Jing Li) together with a safety officer at MMK.
3. Microorganisms in risk class 2 (BSL-2, may cause human infections) is completely forbidden at MACAL soft matter lab. Working with genetic modification of organisms in Class1 is completely forbidden at MACAL soft matter lab.