

Policy BioMolecular Characterization Umeå (BMCU):

The BioMolecular Characterization Umeå is an open access facility that provides state-of-the-art equipment macromolecular characterization, like affinity measurements by SPR, ITC and QCM-D, macromolecule folding by CD and DSC and weight measurements by Mass Photometry (MP)

ORGANIZATION

BMCU staff:

Director: Ronnie Berntsson: ronnie.berntsson@umu.se

Co-director: Marta Bally: marta.bally@umu.se

Facility manager: Johan Olofsson Edlund: johan.olofsson.edlund@umu.se

IT specialist: Hussein Haggag: hussein.haggag@umu.se

Steering board:

- Thomas Borén, Medicinsk Kemi och Biofysik, UmU
- Richard Lundmark, Integrativ Medicinsk Biologi, UmU
- Ronnie Berntsson, Medicinsk Kemi och Biofysik, UmU
- Linda Sandblad, Kemi, UmU
- Anders Olofsson, Medicinsk Kemi och Biofysik, UmU
- Jonathan Gilthorpe, Integrativ Medicinsk Biologi, UmU
- Stephanie Robert, Umeå Plant Science Centre, SLU
- Mattias Alenius, Molekylärbiologi, UmU
- Irene Martinez Carrasco, UmU
- Marta Bally, UmU

Affiliated to steering board:

- Erik Johansson, Prefekt, Medicinsk kemi och Biofysik, UmU
- Staffan Johansson, Prefekt Integrativ Medicinsk biologi, UmU

II. POLICIES AND PROCEDURES OF THE FACILITY

1. INSTRUMENTS USER CLUB

User registration:

The macromolecular characterization instruments at BMCU are running under a general userclub. In order to access the instruments, the Principal investigator must contact the manager to join the user club and sign an annual agreement contract. The contracts will be renewed at the end of January every year, and once you are members BMCU will send out the contracts for renewal on a yearly basis. A group that is not a member can join in at any time during the year, but they will still have to renew the contracts at the end of January.

Care and Use of Equipment:

Please never attempt to fix any equipment problems no matter how trivial they may seem. As soon as possible, contact BMCU staff. We will attempt to rectify the problem or will contact the appropriate service personnel. Following instrument use, the room and equipment should be left clean, operational, and in the standard configuration. The logbook must be filled in. If the instrument is damaged due to a bad usage of the instrument the Principal Investigator will be charged accordingly.

Training:

For use of BMCU equipment, it is mandatory to first take the corresponding driver's license per instrument. Services from the platform includes instructions for use and cleaning of equipment, as well as test running and verification of performance status. If users are found to lack appropriate driver's license for the equipment but still use it, access to the facility will be terminated for the user and the corresponding group and PI. Renewed access will only be considered after application by the PI to the board.

Booking:

Once the user has finished the training, the e-booking system will be activated for him/her. You can find the link on the website: <http://booking.chem.umu.se/> Users can only reserve time for their own use and no user may reserve time on any instrument for someone else.

During heavy occupancy time periods, for any instruments within BMCU, internal user will be prioritized over external users.

Fees:

Academic Institutions: The membership of the userclub is free of charge as of January 2023. Running costs for the instruments ITC, Biacore, DSC and QCM-D instruments are charged per day and the fee is 1000 SEK for ITC, SPR, and DSC and 500 Kr for QCM-D. The CD and MP instruments are billed according to hours used (150 SEK per hour), but can be booked for the full day for a fee of 1000 SEK. Additionally, we will invoice a fee of 500 SEK (CD and MP), 2500 SEK (Biacore, ProteOn and ITC) and 1500 SEK (QCM-D) for each introduction session.

Industry and External Users: The company or institution will have to sign a similar agreement and will be offered the services at market price for each of the respective instruments.

Contacts:

Responsible persons:

Johan Olofsson (all instruments): johan.olofsson.edlund@umu.se

Hudson Pace (QCM-D): Hudson.pace@umu.se

Farahnaz Ranjbarian (MP): farahnaz.ranjbarian@umu.se

Ikenna Obi (CD): Ikenna.obi@umu.se

2. SAMPLES/ HAZARDOUS MATERIALS:

Users must communicate to the BMCU staff if their samples are toxic or dangerous and require any specific handling. The principal investigator of the project is responsible for assuring that the analysis can be performed according to the Biosafety level (BSL) of the room where the instrument is located.

3. COMPUTERS AND DATA STORAGE:

Users are responsible for securing the long-term storage of their own data. The facility does not take any responsibility for lost files due to technical problems with the computer/hard disks. Do not download/upload programs or files onto BMCU computers. Users doing so, may have their use of the facility restricted. BMCU computers are not to be used for any purpose other than data acquisition or analysis.

4. ACKNOWLEDGEMENTS/CO-AUTHORSHIP POLICY:

Investigators are requested to recognize the role of BMCU in producing data for publication in the acknowledgement section of the manuscript. This will enable us to demonstrate our importance to the research programs at the university and help to ultimately obtain additional equipment and funding critical for meeting the needs of our users.

- Recommended acknowledgement: *"We acknowledge the Biochemical Macromolecular Characterization Umeå at Umeå university"*.

We would also appreciate if you could acknowledge BMCU contribution in your oral presentations.

We ask that the authors or principal investigator to submit a copy of the bibliographic reference of the publication for our records.

Co-authorship for staff within BMCU may be requested in the following instances:

- Significant intellectual contribution to experimental design.
- Extensive analysis and/or interpretation of data.
- Extensive and preparation of data for the purpose of publication.

Authorship agreements are made prior to initiation of work by the BMCU staff in discussions with the director of BMCU, BMCU staff and the users. BMCU staff cannot be included as an author without the opportunity to review the manuscript prior to publication.

5. BMCU REPORT and SURVEY:

BMCU presents an annual report to KBC where we reflect the budget for next year and the current use of the facility in terms of number of projects, users and publications. We also provide information about courses, workshops and teaching.