

Policy document for MACAL

## **Background**

MACAL (Materials Analysis Center at Arrhenius Laboratory) supervises the use of a large part of instruments at the Department of Materials and Environmental Chemistry (MMK), Stockholm University, located at the Arrhenius Laboratory. Electron microscopes and related equipments are not supervised by MACAL but by the Electron Microscopy Center (EMC). MACAL was established to ensure that equipment of general interest is maintained at a high level and available to researchers at the department and also to external users. MACAL has economic responsibility for the running costs of supervised equipment, including services, maintenance and consumables. A suitable user fee system is therefore established to cover costs, as described further below.

Instrumentation is grouped into facilities. Each facility is headed by a manager who is responsible for (i) the economical aspects of a facility, (ii) the maintenance and accessibility of instrumentation and (iii) efficient user training. A facility manager has also broad competence in the processing, evaluation and interpretation of measurement data. A facility manager will approve independent users and – if needed - serve external users.

Further aims of MACAL are to coordinate the department's competence and use of instruments for materials characterization in interdisciplinary areas, to advertise the department's expertise and equipments outside MMK, act as a consultancy in the field of materials characterization and provide practical trainings on a regular basis, both for internal and external users.

## **Facilities under MACAL**

- X-ray diffraction
- Optical spectroscopy
- Surface analysis
- Thermal analysis
- Physical property characterization
- Gas/liquid chromatography – mass spectrometry

## **Additional equipment**

Some pieces of equipment are neither supervised by MACAL nor EMC, but within individual research groups and include:

- Scanning probe microscopes
- Solid state NMR
- Materials processing (Sparc plasma sintering)

To gain access to this equipment the responsible research group (specified on the homepage) has to be contacted.

### **Access**

New users who want to use equipment supervised by MACAL must contact the corresponding facility manger, specified on the homepage.

### **Costs**

Recharge fees for use of instruments supervised by MACAL are set individually for each instrument by the responsible facility manager, in agreement with the management of MACAL. There are three levels of fees: *internal (departmental)*, *external academic* and *non-academic* users. By internal use is meant research work within a project that is hosted by the Department of Materials and Environmental Chemistry, Stockholm University or instrument use for teaching purposes. Students that carry out diploma work and are registered as such at the department are considered internal users. Different charges are furthermore set depending on whether the user alone carries out the measurements or if operator help and/or data evaluation is required.

### **Contact persons**

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