

SAMPLE PREPARATION LABORATORY (room 311)

USERS RULES.

The 311 Laboratory equipment is designed for:

- Manual mineral separation;
- Epoxy embedding;
- Manual preparation of polished epoxy mounts;
- Carbon coating for EPMA and electron microscope;
- Fluid inclusion microthermometry

The equipment includes:

- Olympus BX51 polarizing microscope (transmitted/reflected lights) with SC30 video camera;
- HP computer for use Stream Start Imaging Solution Software for acquisition and measure
- Olympus Stereomicroscope SZ51 (Loupe binoculaire) ;
- Olympus Stereomicroscope SZX7 (Loupe binoculaire) ;
- The Cast N' Vac vacuum impregnation systems for use with epoxy mounting;
- 2 grinding-polishing machines (Polisseuses) MetaServ 250 (Buehler);
- Weller soldering station (for pick up grains from epoxy mounts), hot plate, oven, ultrasonic bath; additional small equipments;
- Quorum Q150TE turbo-pumped carbon coater;
- A heating stage (Linkam) coupled with a Olympus microscope equipped with long working distance objectives

Before working in 311, one must:

- Complete the administrative part of ISTerre (registration, insurance, etc.) if you are a visitor, an ISTerre affiliate or attached to a partner laboratory.
- Have an internship agreement (for students) or a current contract (for contract workers).

- Familiarize yourself with the ISTerre internal regulations, emergency numbers and contact details for Prevention Assistants:

Julien Carcaillet julien.carcaillet@univ-grenoble-alpes.fr tel : 0476635930

Nathaniel Findling nathaniel.findling@univ-grenoble-alpes.fr tel : 0476514078

- Read and understand these rules.
- Coordinate with the persons responsible for the training (list below) to get training and the instructions on the use equipment and consumables and obtain authorization to work by signing “Training checklist”:

<u>Valentina Batanova</u>	valentina.batanova@univ-grenoble-alpes.fr ;
<u>Nathaniel Findling</u>	nathaniel.findling@univ-grenoble-alpes.fr ;
<u>Valerie Magnin</u>	valerie.magnin@univ-grenoble-alpes.fr ;
<u>Daria Gavrilenko</u>	daria.gavrilenko@univ-grenoble-alpes.fr

- Check the availability of equipment on the web-site <https://www.isterre.fr/french/services-plateformes/plateforme-microanalyses/article/preparation-de-micro-echantillons.html> and send a message to one of the persons in charge listed above to reserve equipment for polishing or preparing epoxy embedding.

Carbon coater can be used for EPMA and electron microscope without special reservation only by authorized users.

While working in 311, one must:

- Handle the equipment with care and clean laboratory equipment, accessories and work area after each use;
- Follow the manipulation protocols and the general rules for handling chemicals;
- Register the use of the equipment and epoxy resin in the laboratory notebooks attached to each piece of equipment;

- Use microscopes and loupes binocular in room 311 only for observation during sample preparation. For all other needs please use microscopes in room 09 (ground floor);
- Make sure you have received a proper training before using the Linkam heating stage for fluid inclusion.

Follow Covid-19 UGA regulations,

Only 3 persons may work simultaneously in Lab 311.