

## Helmholtz Laboratory for the Geochemistry of the Earth Surface (HELGES) at GFZ Potsdam

### Terms and Conditions “Nutzerordnung”

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The Helmholtz Laboratory for the Geochemistry of the Earth Surface (HELGES) is part of the section 3.3 “Earth Surface Geochemistry” at Helmholtz Centre Potsdam GFZ - German Research Centre for Geosciences. By using our facility you agree to the following terms and conditions:

#### 1. Laboratory equipment and services

HELGES offers analyses of geological or environmental samples for element concentrations or metal isotope ratios. Sample preparation is performed in a metal-free clean lab equipped with laminar flow workstations for contamination-free sample treatment. For isotope ratio analyses a Thermo Scientific *Neptune* Multicollector Inductively Coupled Plasma Mass Spectrometer (MC-ICP-MS) is used. For element concentration analyses, several instruments are available, according to individual sample requirements: a Varian *720ES* axial Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES), a Thermo Scientific *iCAP-Qc* Quadrupole Inductively Coupled Plasma Mass Spectrometer (Q-ICP-MS), and a Thermo Scientific *Element2* Sector-Field Inductively Coupled Plasma Mass Spectrometer (SF-ICP-MS). Samples can be analysed either as solutions (e.g., water or dissolved rock) or solids, with a femtosecond laser ablation system (fsLA) available for in-situ microanalyses. For detailed information please visit our lab page <https://www.gfz-potsdam.de/en/section/earth-surface-geochemistry/infrastructure/helges/>.

#### 2. User types and analysis fees

The facility is available for external users / research groups as follows:

##### (A) Non-academic Commercial Analytical Services

Analyses performed for industry or non-academic research will be charged on a full-cost basis at the listed rates per sample, including sample preparation and analyses performed by GFZ staff. Deliverables include an Excel table reporting the analytical results from samples and quality control reference materials, and a short report on sample preparation, analytical conditions, data evaluation method and uncertainty evaluation. GFZ staff will not be involved in the scientific interpretation or publication of the results.

##### (B) Academic Research – Collaboration

Researchers from universities or other academic research institutes can request access to the analytical facilities at GFZ HELGES to use the analytical infrastructure. A collaborative project means that GFZ scientists will be involved in the scientific planning and design of the project, including sample selection, advice on sampling, sample preparation, analysis, data evaluation and interpretation, and will co-author publications. It is expected that the PhD students or postdocs applying will conduct the lab work and analysis at GFZ by themselves, after initial training provided by GFZ staff. Additional charges for method development may apply. Publications shall indicate that laboratory work was done at the “Helmholtz Laboratory for the Geochemistry of the Earth Surface at GFZ Potsdam” (see 7).

The valid price list is attached as ANNEX 1.

#### 3. Access to the HELGES laboratory

Based on your “Application for Analyses” our project selection committee will evaluate your project and decide about the access to our facility and inform you.

Please be aware that the agreed access to the sample preparation and analysis in our laboratory can be canceled by the laboratory staff if the laboratory is not ready for use due to technical defects or personnel bottlenecks.

#### **4. Carrying out analyses and support for the user**

A GFZ (Section 3.3) scientist responsible for supervision will be assigned to your project.

Before starting the analyses, you shall provide a list of the basic metadata (sample names, types, locations, sampling date, sample treatment, other relevant information on chemical or physical properties, etc.) to your supervising GFZ scientist.

#### **5. Work safety issues**

The users of the laboratory are instructed in the safety regulations before starting their work. The use of the laboratory may only take place after safety instruction by the laboratory staff. The user has to acknowledge with a signature the reading of the operating instructions, the hazard assessments and the user regulations of the laboratory.

Any breach of the terms and conditions, Laboratory Regulations or Occupational Health and Safety Regulations may lead to permanent exclusion from the laboratory use.

#### **6. Liability**

GFZ continually strive to provide high-quality data. Nonetheless, GFZ shall not be held liable in the event that results from our facility are subject of subsequent revision. Furthermore, we will not be held responsible for samples lost in transit.

GFZ shall not be responsible to the user for any indirect or consequential loss or similar damage such as, but not limited to, loss of profit, loss of revenue or loss of contracts, provided such damage was not caused by a wilful act.

If damage to the laboratory equipment is caused by faulty operation or negligence of the user, the damage must be remedied timely by the user.

#### **7. Publishing of Data**

We ask that you do not distribute, disclose externally, or publish any data produced at GFZ before your supervising scientist has assured its quality and approved its release.

Unless otherwise agreed your supervising GFZ scientist (and possibly other engaged persons) will be co-author on any publication containing this data.

Any publication or presentation at meetings or conferences (incl. abstract submissions) requires prior notice and agreement by the GFZ supervising scientist.

Publications shall indicate that laboratory work was done at the "Helmholtz Laboratory for the Geochemistry of the Earth Surface at GFZ Potsdam".

We expect publication of the data within a period of no more than two years after finalizing data generation.

In case of follow-up samples that relate to this project, we ask you to submit a supplementary proposal that includes publication plans and a manuscript outline.

Users agree to follow the DFG recommendations for the publication of scientific data ('Ensuring Good Scientific Practice', Deutsche Forschungsgemeinschaft, 2013).