

## Terms of use for the Bremen Laboratory for the Helium-Isotope-Analysis *Helis*, Dept. Oceanography, Institute of Environmental Physics, University of Bremen

### § 0 Preamble

This term of use should ensure undisturbed operation of the laboratory for helium isotope analyses (named Helis) of the Institute of Environmental Physics (IUP) at the University of Bremen. The objectives of operation are to develop new scientific knowledge and methods. Basic principles are the fundamentals of good scientific practice of the German Science Foundation.

### § 1 Scope of Application

This term of use is in effect for the usage of the laboratory by members of the IUP, Dept. Oceanography, as well as external Scientists (named: users) and all related contracts.

### § 2 General Matter

(1) The Helis laboratory is specialized for precise analyses of small amount of the isotope  $^3\text{He}$  in water samples. Additionally the isotopes  $^4\text{He}$  and  $^{20}\text{Ne}$  are analysed. Via the in-situ production of  $^3\text{He}$  from tritium small concentration of tritium in water samples can be detected.

(2) All type of aqueous samples can be analysed. Gas samples and dissolved gases in non-aqueous samples could be analysed if appropriate.

(3) The operation is carried out only by designated staff of the IUP.

### § 3 Formation of Contract

(1) The user may avail oneself about methods and performance of the lab by available articles in professional journals. These are listed on the lab website.

If the user requested any analysis the project details have to be discussed with the lab manager.

(2) The user specifies the number of samples and their chemical properties. If special needs for storage are required this is reported to the lab manager with an extra note.

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Abt. Ozeanographie

Fachbereich 01

Physik/Elektrotechnik

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**01.07.2021**

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#### Bankverbindungen:

Bremer Landesbank  
Swift-Code: BRLADE22  
IBAN: DE37 2905 0000  
1070 5000 07

Umsatzsteuernummer  
71-545/22101

Umsatzsteuer-ID  
DE811 245 070

(3) For groundwater studies the user may request inspection of the study site in advance. Furthermore the user may order the sampling.

(4) The user receives a binding offer from Helis with a minimum duration of 12 months. The offer states separate positions as costs for transportation of special sample containers.

(5) After awarding the contract for analysis Helis will give an estimated period for data delivery. The user has no claim to receive the data in the given period.

(6) Helis will provide special sample for the ordered number of samples. This may take up to 14 days in Europe.

#### **§ 4 Appointed Dates**

Helis will provide an estimated period for data delivery. For any technical reasons the user must also take account of long-term delay. Helis is not responsible for any extra expenses the user may take because of the delay of data.

#### **§ 5 Fees**

(1) Preparation, analyses and determination of concentration of  $^3\text{He}$ ,  $^4\text{He}$  and Ne in a water sample will be invoiced with 330€.

(2) Preparation, analyses and determination of concentration of  $^3\text{H}$  in a water sample will be invoiced with 330€.

(3) For more than 4 samples a discount of 5% will be granted.

(4) For projects in cooperation with institutes for ocean research 160€ per ocean water sample ( $^3\text{He}$ ,  $^4\text{He}$  & Ne or  $^3\text{H}$  analyses) will be charged. The minimum number of samples must be 50. A loss rate of 15% for ocean samples must be accepted. Target dates for large samples set (>300) can be subject of large variations.

(5) For scientific co-operations with project of the University of Bremen 260€ per groundwater sample and 130€ per ocean water sample ( $^3\text{He}$ ,  $^4\text{He}$  & Ne or  $^3\text{H}$  analysis) will be charged.

(6) Other fees:

- For evaluation of data not generated at Helis: 120€/h
- On site inspection of the study field: 600€/Tag

- Sampling with free access to the well/pipe system: 900€/Tag.
- Gas samples according to time and effort: minimum 360€ per sample.

(7) Prices are excluded VAT tax. All costs for counselling, sample preparation, disposal of sample material, data evaluation and short interpretation of the data generated at Helis are included. A digital list with sample data and comments will be send via email and may used by the customer for any application.

Interpretation for groundwater samples can be performed only if data of the study site as elevation, water temperature at elevation (or mean yearly temperature) and filter depths of the well are provided.

(8) The costs for analysis will be submitted by the invoice from the University of Bremen. A time for payment will be assigned. Costs are due to the account

Deutsche Bundesbank

BIC/SWIFT-Code: MARKDEF1250

IBAN: DE21 2500 0000 0025 1015 44

Tax number of the University of Bremen 460/100/05505

Purchase tax ID DE811 245 070

Der Nutzer kommt mit der Zahlung des Nutzungsentgelts spätestens in Verzug, wenn er nicht innerhalb von 30 Tagen nach Fälligkeit und Zugang der Rechnung leistet. Der Nutzer ist in Nicht-EU-Staaten für die rechtmäßige Versteuerung der Leistungen verantwortlich.

(9) For non-successful analysis Helis is allowed to charge for the effort without proof 50€ per sample.

(10) It is not possible to charge Helis for a replacement of non-successful analysed samples

## **§ 6 Preparation, workflow and results of analysis**

(1) Groundwater samples:

the purchaser has to submit a digital sample list including at least: purchaser, project name, unique sample name, consecutive sample number in this project, consecutive number of sample container, water temperature (of yearly mean) elevation and filter depth.

Helis can refuse to analyse samples, if labeling is ambiguous.

- (2) Ocean water samples:  
the purchaser has to submit a digital sample list including at least: purchaser, project name, station number, cast number, bottle number, water depth, potential temperature, salinity, consecutive number of sample container.  
Helis can refuse to analyse samples, if labeling is ambiguous.
- (3) the scientific evaluation is conducted by the purchaser. Helis can provide advice and discussion. If staff members of Helis are involved in scientific evaluation DFG regulation for publication apply. If data generated by Helis are used in publications a reprint must be send to Helis.

#### **§ 7 Liability**

- (1) For use and dissemination of results Helis disclaims any liability.
- (2) If any precaution for sampling and storage are required Helis disclaims any liability for inappropriate handling and subsequent debasement of the results.

#### **§ 8 Handling of data**

- (1) Data provided by the purchase are only accessible by Helis staff.
- (2) Analytical results can be used by Helis only for the purpose to improve analytical procedures.

#### **§ 9 Final clause**

- (1) Place of fulfilment is Bremen, Germany. Bremen is the only place of jurisdiction. This **term of use** is subject to the law of Germany.
- (2) Changes and supplements of this **term of use** will be published at:  
[www.noblegas.uni-bremen.de](http://www.noblegas.uni-bremen.de)
- (3) Notes on sampling, contact details of staff, publications can be found at the Helis website: [www.noblegas.uni-bremen.de](http://www.noblegas.uni-bremen.de)