



swarm

Co-funded by the
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of the European Union



Theme-based training of teaching staff for acquiring new teaching and learning methods WP 2.5

Priv.-Doz. DI Dr. Michael Tritthart
University of Natural Resources and Life Sciences BOKU, Vienna

Meeting / 4th February 2020

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

University of Nis



www.swarm.ni.ac.rs

**Strengthening of master curricula in water resources
management for the Western Balkans HEIs and stakeholders**

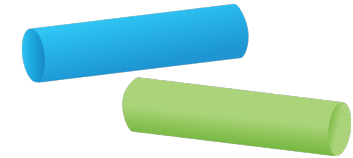
Project number: 597888-EPP-1-2018-1-RS-EPPKA2-CBHE-JP

Schedule

- Tuesday 4th until Thursday 6th of February 2020
(Travelling dates: 3rd and 7th of February 2020)
- University of Natural Resources and Life Sciences, Vienna (BOKU)
- 3 Sessions
 - New teaching and learning methods
 - Study visits
 - Water-related higher education



Session 1



New teaching and learning methods

Tuesday, 4 th February 2020		
Vienna, Muthgasse 107		
New teaching and learning methods		
09:15-09:30	Registration of SWARM participants	
09:30-09:45	Welcome address	Dr. Tritthart, BOKU
09:45-12:15	Innovative teaching practices	Dr. Weber, BOKU
12:15-13:00	Lunch	
13:00-17:30	Online learning methods	Dr. Weber, BOKU

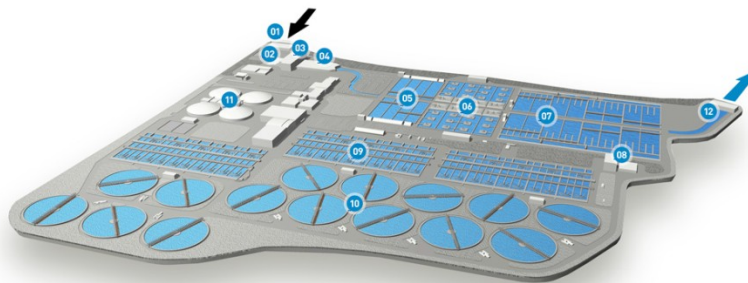
Have your notebooks
ready





Session 2 *Study visits*

Wednesday, 5 th February 2020		
Vienna, Wien Mitte – Landstraße		
Study visits		
09:15	Meeting point Wien Mitte - Landstraße	
10:00-12:00	Tour Waste Water Treatment Plant of Vienna	
12:00-13:00	Lunch break	
13:00-15:00	Tour hydro power plant Freudenau	
15:00-15:30	Transport to Wien Mitte	



- | | | | |
|------------------------|---------------------------|---------------------------------|------------------------------|
| 01 GRAVEL TRAP | 04 SAND TRAP | 07 INTERMEDIATE SETTLING | 10 FINAL CLARIFICATION TANKS |
| 02 SCREW PUMP FACILITY | 05 PRIMARY SEDIMENTATION | 08 INTERMEDIATE PUMPING STATION | 11 SLUDGE THICKENERS |
| 03 SCREENING PLANT | 06 AERATION TANKS STAGE 1 | 09 AERATION TANKS STAGE 2 | 12 DISCHARGE |

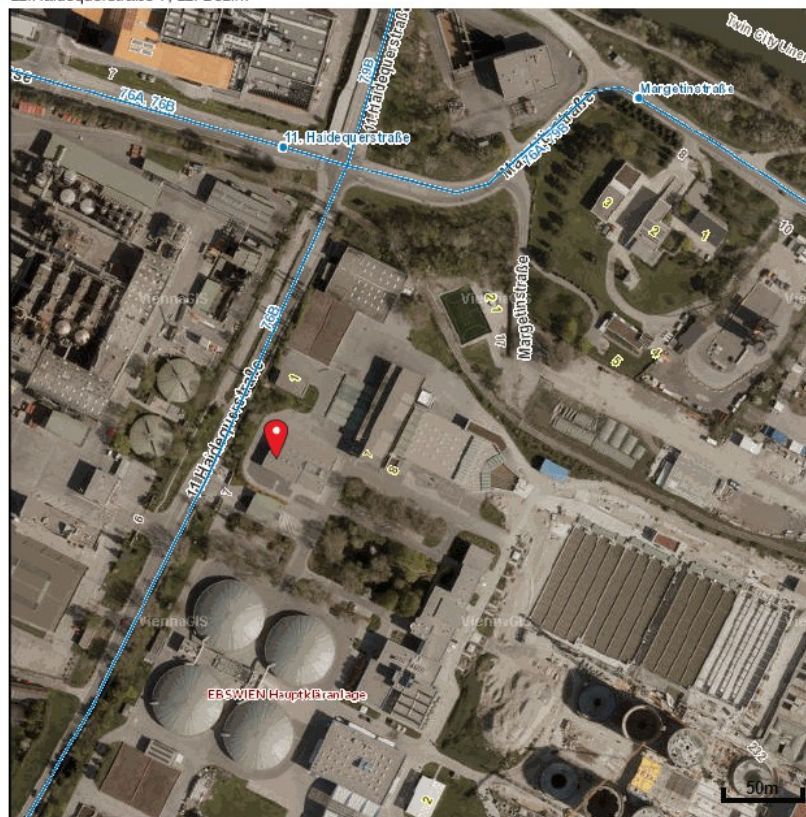


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Wastewater treatment plant: 11. Haidequerstraße 7, 1110 Vienna



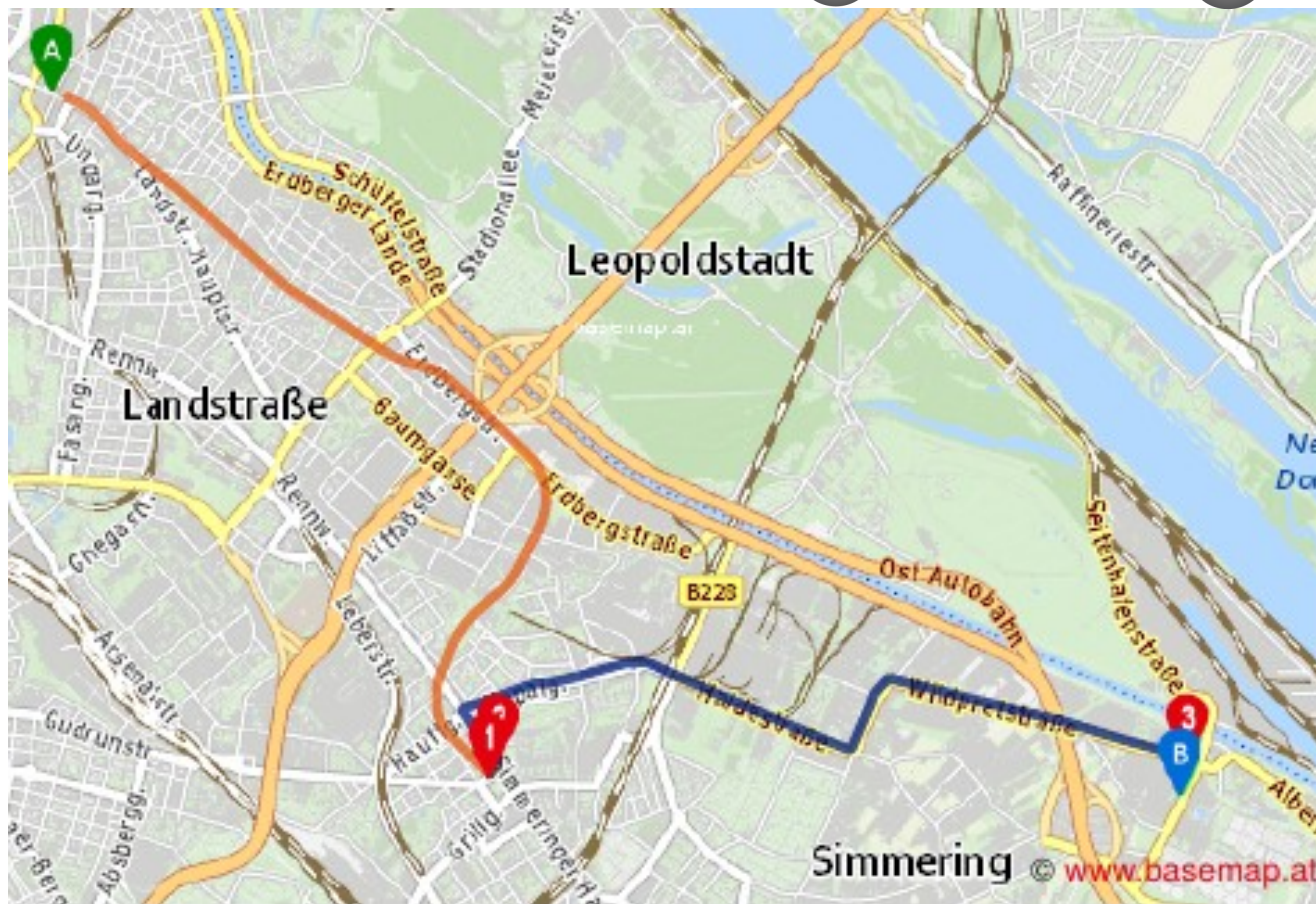
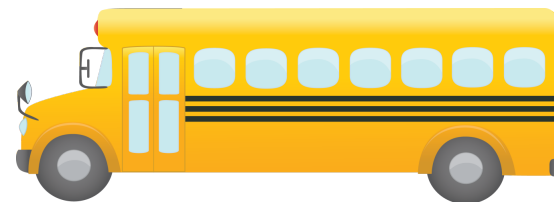
11. Haidequerstraße 7, 11. Bezirk



<https://www.wien.gv.at/stadtplan/>

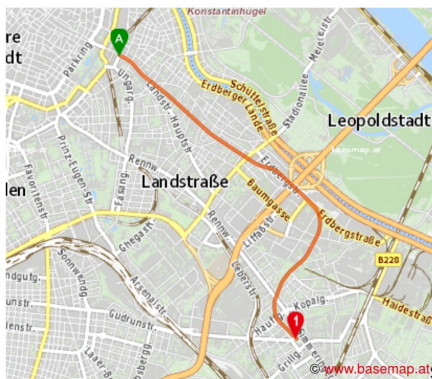
Quelle: Stadt Wien - ViennaGIS <http://www.wien.gv.at/viennagis>

Get to the WWTP by public transport

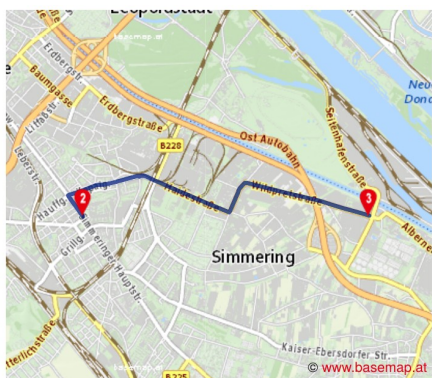


Meet at 9:15 in front of Wiener Linien Ticket shop at Wien Mitte/Landstraße (U3, U4)
get a 24h ticket (8€)

U3 U3 09:20 Landstraße
Simmering 09:29 Enkplatz

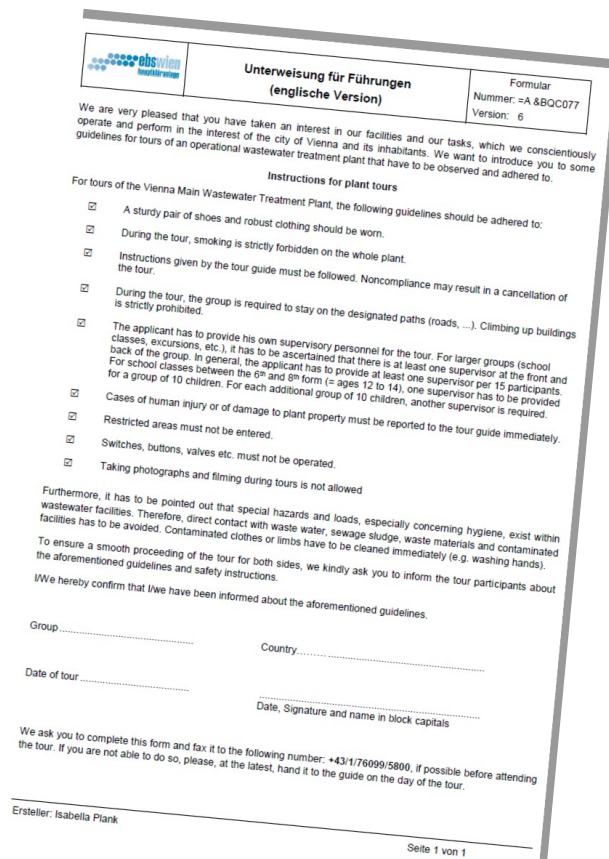


76A 76A 09:36 Enkplatz U/Grillgasse
Alberner 09:48 11. Haidequerstraße
Hafen



Session 2 Study visits

Instructions for WWTP tours



**Unterweisung für Führungen
(englische Version)**

Formular
Nummer: A.8BQC077
Version: 6

We are very pleased that you have taken an interest in our facilities and our tasks, which we conscientiously operate and perform in the interest of the city of Vienna and its inhabitants. We want to introduce you to some guidelines for tours of an operational wastewater treatment plant that have to be observed and adhered to.

Instructions for plant tours

For tours of the Vienna Main Wastewater Treatment Plant, the following guidelines should be adhered to:

- ☒ A sturdy pair of shoes and robust clothing should be worn.
- ☒ During the tour, smoking is strictly forbidden on the whole plant.
- ☒ Instructions given by the tour guide must be followed. Noncompliance may result in a cancellation of the tour.
- ☒ During the tour, the group is required to stay on the designated paths (roads, ...). Climbing up buildings is strictly prohibited.
- ☒ The applicant has to provide his own supervisory personnel for the tour. For larger groups (school classes, excursions, etc.), it has to be ascertained that there is at least one supervisor at the front and back of the group. In general, the applicant has to provide at least one supervisor per 15 participants. For school classes between the 6th and 8th form (= ages 12 to 14), one supervisor has to be provided for a group of 10 children. For each additional group of 10 children, another supervisor is required.
- ☒ Cases of human injury or of damage to plant property must be reported to the tour guide immediately.
- ☒ Restricted areas must not be entered.
- ☒ Switches, buttons, valves etc. must not be operated.
- ☒ Taking photographs and filming during tours is not allowed.

Furthermore, it has to be pointed out that special hazards and loads, especially concerning hygiene, exist within wastewater facilities. Therefore, direct contact with waste water, sewage sludge, waste materials and contaminated facilities has to be avoided. Contaminated clothes or limbs have to be cleaned immediately (e.g. washing hands). To ensure a smooth proceeding of the tour for both sides, we kindly ask you to inform the tour participants about the aforementioned guidelines and safety instructions.

I/We hereby confirm that I/we have been informed about the aforementioned guidelines.

Group: Country:

Date of tour: Date, Signature and name in block capitals:

We ask you to complete this form and fax it to the following number: +43/1/76099/5800, if possible before attending the tour. If you are not able to do so, please, at the latest, hand it to the guide on the day of the tour.

Ersteller: Isabella Plank

Seite 1 von 1

Thank you for signing
and sending the forms
to us

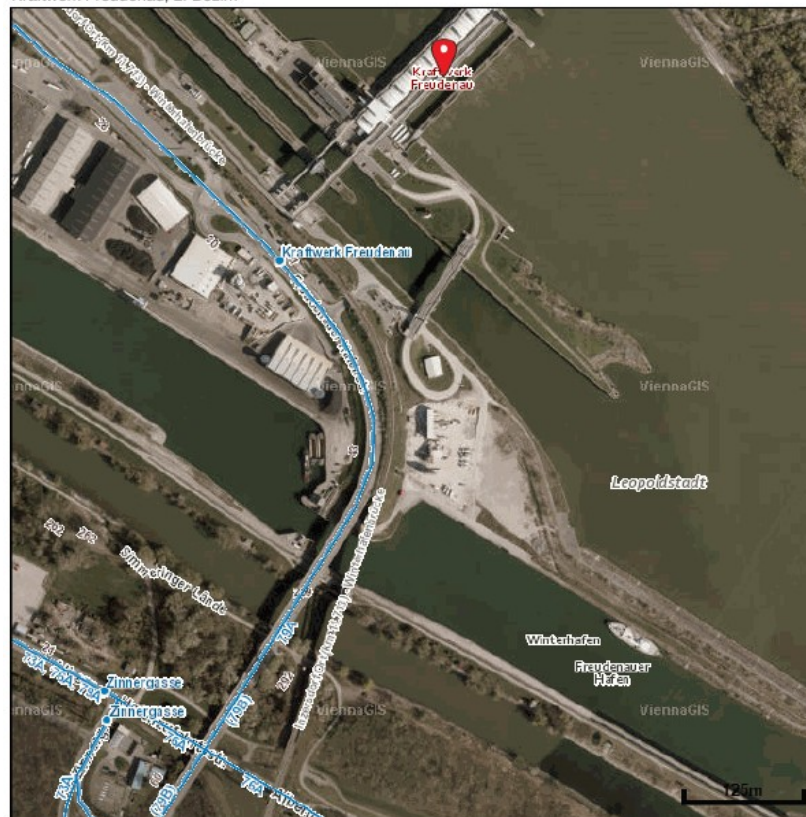
Kraftwerk Freudenau



Kraftwerk Freudenau, 1020 Vienna



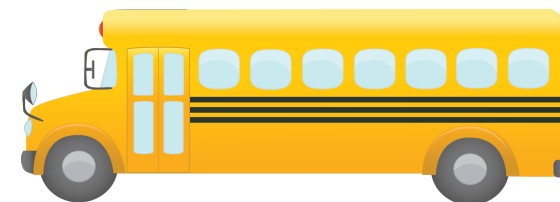
Kraftwerk Freudenau, 2. Bezirk



<https://www.wien.gv.at/stadtplan/>

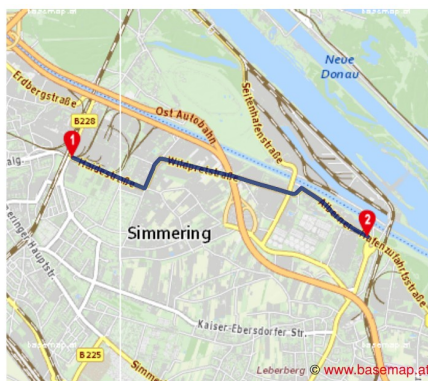
Quelle: Stadt Wien - ViennaGIS <http://www.wien.gv.at/viennagis>


Get to Kraftwerk Freudenau by public transport



Bus 76A and 22min walk

76A 76A 12:11 Haidestraße S
Albern 12:22 Zinnergasse



 Fußweg 12:22 Wien Zinnergasse
22 min 12:44 Wien, Kraftwerk
Freudenau ""

165 m Alberner Hafenzufahrtsstraße

67 m

237 m

Freudenauer Hafenbrücke rechtes Tragwerk

104 m

Freudenauer Hafenbrücke mittleres Tragw.

145 m

Freudenauer Hafenbrücke linkes Tragwerk

306 m Freudenauer Hafenstraße

6 m Freudenauer Hafenstraße

619 m Rundumadum



Have a look at the safety regulations!

Verbund



Safety regulations for the visitor center and the guided tours in the Freudenau hydropower plant

ⓘ **Disclaimer:** The visit of the Freudenau hydropower plant is at your own risk and can only take place in the company of authorized guides.

ⓘ The Freudenau hydropower plant is an electrical facility. Mind the resulting dangers!

ⓘ During the guided plant tour there is compulsory helmet wear in the area of the powerhouse. The helmets are provided by the plant operator.

ⓘ Always stay with the group!

ⓘ Paying for the expense contribution is no permission for visiting all parts of the power plant. For safety reasons, only certain plant components are part of the guided tour. Due to maintenance, modification or other installation work, the tour can be further restricted for safety reasons. Do not enter any rooms and plant devices which are not part of the guided tour! High voltage systems (generator, energy transmission devices, switch and control gear) are not publicly accessible and therefore exempted from the guided tours.

ⓘ Do not cross any barriers!

ⓘ Do not go in close proximity to unprotected fall sites and to assembly areas!

ⓘ Do not remain under heavy loads!

ⓘ Do not touch any machines, cables, switch and control gears or other devices and equipment!

ⓘ Keep calm and prudent in case of accidents! Provide accidental help to injured persons till the arrival of rescuers! Save accident victims out of the danger spot but mind especially your self-protection! Mind the instruction signs (first-aid-boxes, escape route identification); first-aid-boxes are located in the workshop, under the turbines in the area of the third machine and in the visitor center.

ⓘ Draw your attention to the fact that electric fields occur near high voltage systems (generator, energy transmission devices, switch and control gear). Therefore pregnant women and persons with cardiac pacemakers or other implanted electronic medical devices are generally not allowed to visit the Freudenau hydropower plant for safety reasons!

ⓘ Choose suitable clothing and footwear for the guided tour! Your clothes can get dirty in the course of the tour. Persons with unsuitable footwear – especially persons with high heels – can not participate in the guided tour because of the risk of injury!

ⓘ During the guided tour there is an absolute ban on smoking and alcohol! Drunk persons are not allowed to participate in a guided tour!

ⓘ Report possible sources of danger and safety-relevant occurrences immediately to the authorized guide!

ⓘ Dogs (exempted assistance animals of disabled persons) can not be taken to the visitor center or the guided tour.

ⓘ Infants must be taken in back or stomach wear. Pushchairs are to be parked outside the visitor center. Bikes have to be parked on the public bridge for pedestrians and cyclists (bicycle racks).

ⓘ During the guided tour, stairs must be walked up and down. Outside normal working hours (Monday to Thursday, 7 a.m. to 5 p.m., excluding public holidays), the lifts are NOT available.

ⓘ In the case of fire alarm (evacuation alarm) use the fastest way following the designated escape route to the signed assembly point outside the power plant. Stay with the group and the authorized guide and follow his instructions till the arrival of rescuers! Evacuation alarms are announced through loudspeakers.

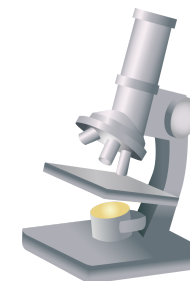
ⓘ Failure to comply with these safety regulations, instructions or prohibitions can result in the termination of the guided tour for safety reasons. The fee will not be refunded in this case. Caused damages to the property of the plant operator or third parties in case of failure to comply lies in the responsibility of the visitor causing. The liability of the guide or VERBUND is excluded.

VERBUND Hydro Power GmbH, Europaplatz 2, 1150 Vienna, Austria
T +43(0)20 313-0, F +43(0)20 313-54 191, hydropower@verbund.com, www.verbund.com
FN 84438z, Commercial Court of Vienna, VAT identification no. ATU14703800, Data Protection Register 0032522, EORI ATEOS100003771



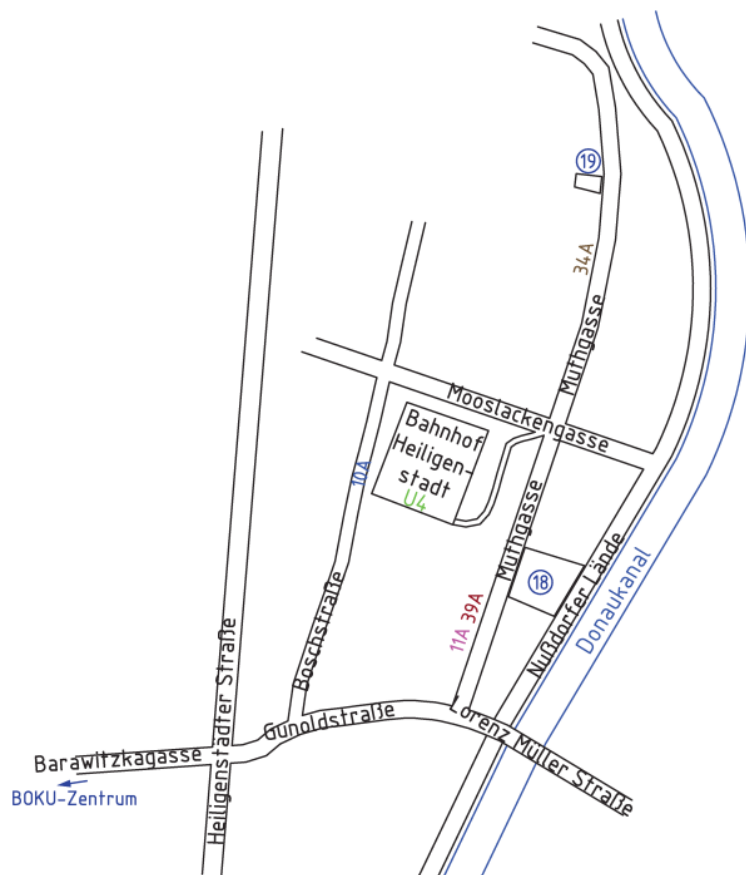
Session 3

Water-related higher education



Thursday, 6 th February 2020		
Vienna, Muthgasse 107		
Water-related higher education		
09:15-09:30	Registration of SWARM participants	
09:30-10:00	Introduction to the e-learning system BOKUlearn	Dr. Tritthart, BOKU
10:00-10:30	eLearning exercises and tests	DI Wildt, BOKU
10:30-11:00	Walk to lab and pilot facilities	
11:00-14:00	Lab and pilot facilities tour	
14:00-15:00	General discussion and closing the meeting	

Walk from Muthgasse 107 (19) to lab and pilot facilities (18)



BOKU-Zentrum

- | | |
|----------------------------|---------------------------|
| ① Gregor Mendel-Haus | 18., Gregor Mendelstr. 33 |
| ② Justus v. Liebig-Haus | 18., Gregor Mendelstr. 33 |
| ③ Adolf v. Guttenberg-Haus | 18. Feistmantelstr. 4 |
| ④ Oskar Simony-Haus | 18., Peter Jordanstr. 65 |
| ⑤ Adolf Cieslar-Haus | 19., Peter Jordanstr. 70 |
| ⑥ Türkenwirt | 19., Peter Jordanstr. 76 |
| ⑦ Wilhelm Exner-Haus | 19., Peter Jordanstr. 82 |
| ⑧ ZIB-Villa | 19., Peter Jordanstr. 82a |
| ⑨ Franz Schwackhöfer-Haus | 19., Peter Jordanstr. 82 |
| ⑩ Villa Max Emanuel | 19., Max Emanuelstr. 17 |
| ⑪ Baracke 1 | 19., Borkowskygasse |
| ⑫ Baracke 2 | 19., Borkowskygasse |
| ⑬ Baracke 3 | 19., Borkowskygasse |
| ⑭ Baracke 4 | 19., Borkowskygasse |
| ⑮ Baracke 5 | 19., Borkowskygasse |
| ⑯ 19., Hasenauerstr. 38 | |
| ⑰ 19., Billrothstr. 53 | |
| ⑱ IG-Muthgasse | 19., Nußdorfer Lände 11 |
| ⑲ 19., Muthgasse 107 | |

Contact information

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Department of Water, Atmosphere and Environment (WAU)
Institute of Hydraulic Engineering and River Research (IWA)



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