

**solutions**

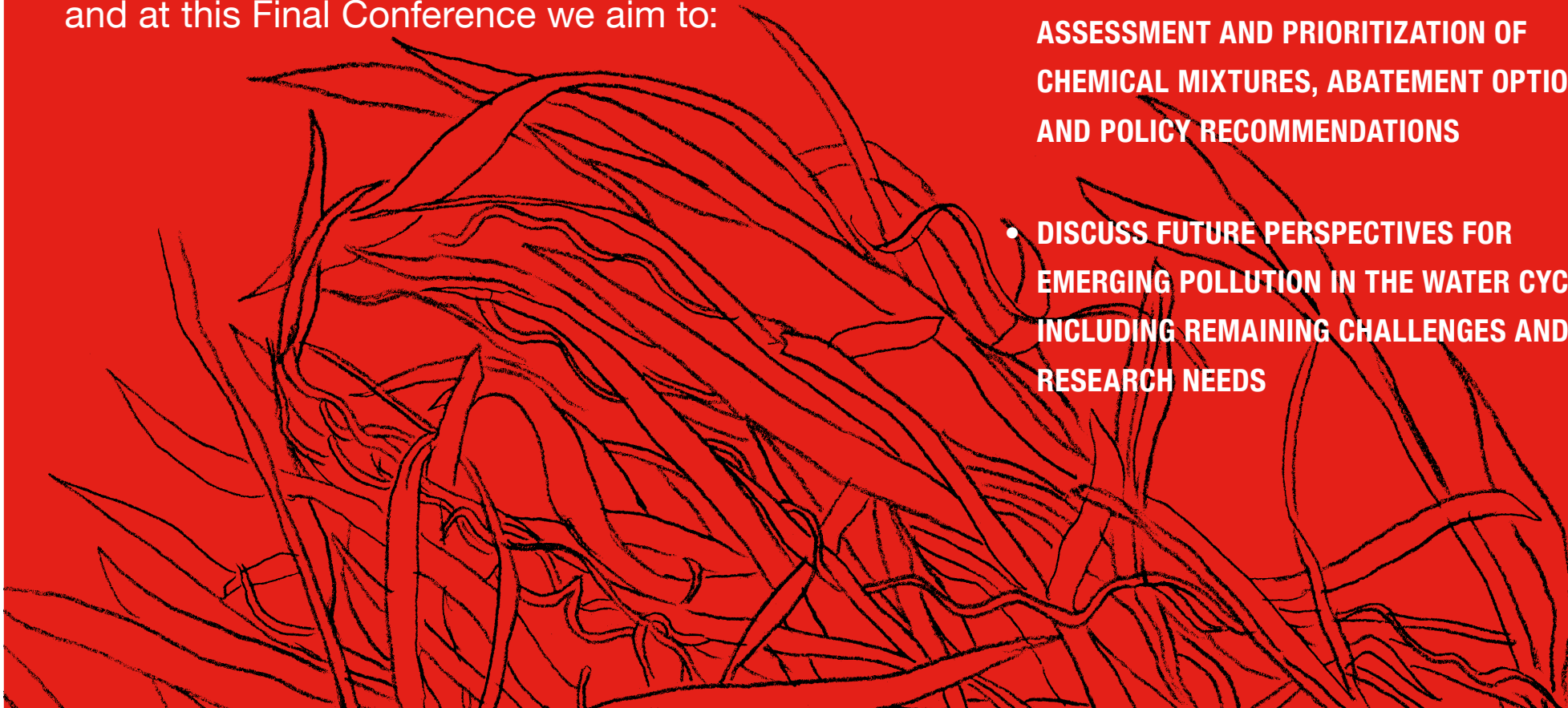
**FINAL  
CONFERENCE  
LEIPZIG  
19–21 JUNE  
2018**



The major focus of this Final Conference is to disseminate and critically discuss the extensive outcomes of this project with you as potential stakeholder and end-user of SOLUTIONS.

The project is related to the implementation and advancement of the Water Framework Directive, and at this Final Conference we aim to:

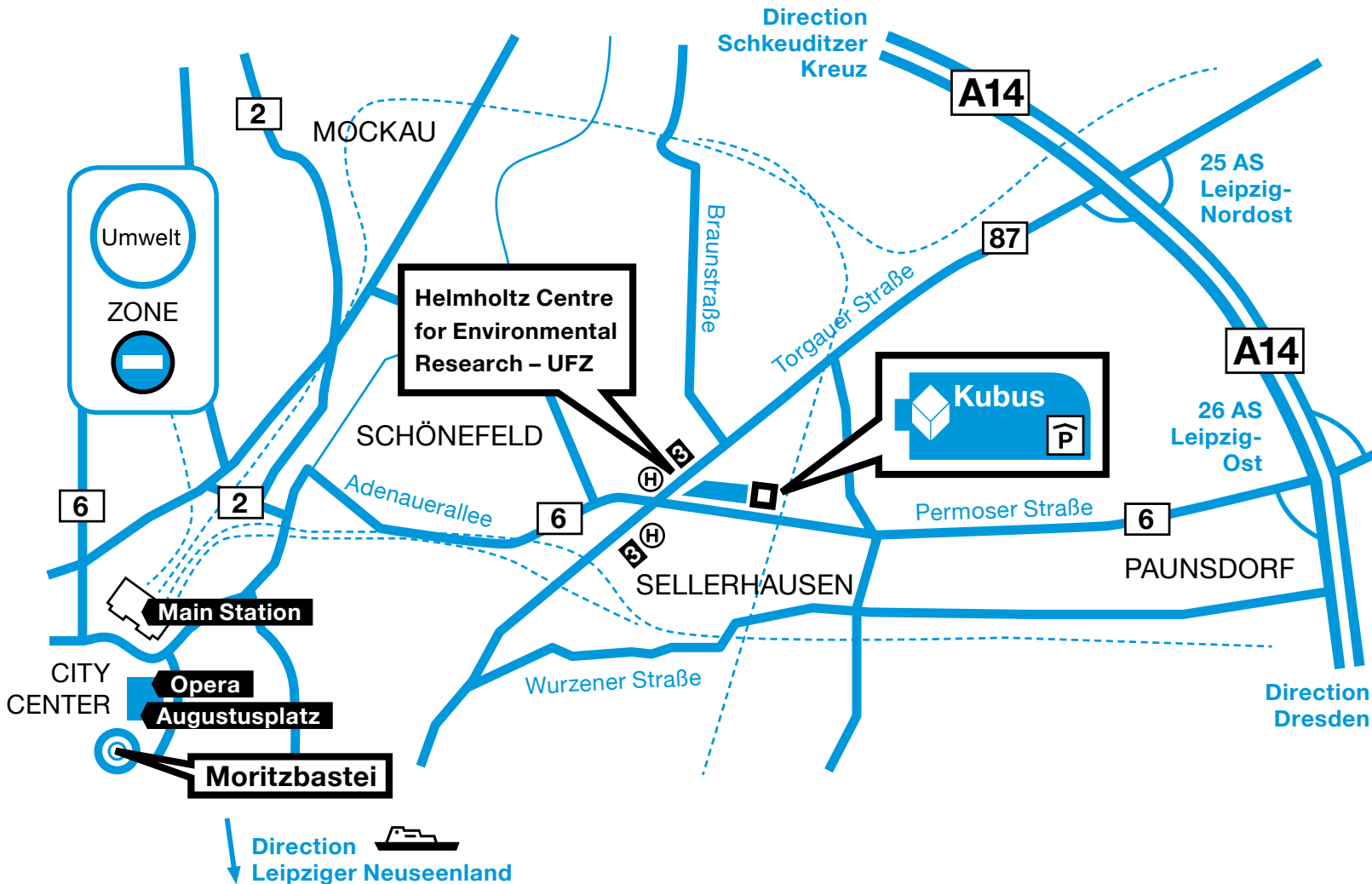
- **HIGHLIGHT NOVEL APPROACHES AND TOOLS FOR A MORE HOLISTIC AND EFFICIENT MONITORING AND ASSESSMENT OF WATER CONTAMINATION**
- **PRESENT ADVANCED EXPOSURE AND RISK MODELS, EFFECT-BASED MONITORING TOOLS, ASSESSMENT AND PRIORITIZATION OF CHEMICAL MIXTURES, ABATEMENT OPTIONS AND POLICY RECOMMENDATIONS**
- **DISCUSS FUTURE PERSPECTIVES FOR EMERGING POLLUTION IN THE WATER CYCLE INCLUDING REMAINING CHALLENGES AND RESEARCH NEEDS**



How to reach the

# LEIPZIGER KUBUS

Helmholtz Centre for Environmental Research – UFZ  
Permoserstraße 15, 04318 Leipzig



## By car

On **A14** motorway take exit “Leipzig- Ost” and head for Leipzig Stadtzentrum/City Centre → follow Permoserstrasse up to the underground parking sign for conference Leipziger KUBUS on right hand side.

Leipzig has an “environmental protection zone”. Vehicles must have a green badge in order to be permitted entering the city zone.

## By tram

In front of Central Station Leipzig take **tram No.3** (heading to “Sommerfeld” or “Taucha”) → after about 15 min alight at stop “Torgauer/Permoserstraße” → walk Permoserstraße 300 m eastward to find the entrance of KUBUS.

## By plane

From Airport Leipzig/Halle take train (regional express) to Central Station Leipzig → from the Central Station take **tram No.3**

## By taxi

Taxi from Central Station Leipzig approximately 22 € (ca. 7 km), from Airport approximately 45 € (ca. 25 km).

# TUESDAY 19TH

DAY 1

14.30—15.00

**WELCOME**

Dietrich Borchardt, UFZ

15.00—15.30

**AFTER FIVE YEARS OF RESEARCH:  
REVISITING OUR AMBITIONS**

Werner Brack, UFZ

15.30—16.00

**MULTIPLE STRESS – DO CHEMICALS PLAY A ROLE?**

Sebastian Birk, MARS

Coffee break

16.30—17.30

**CHEMICAL QUALITY AND RISK – CAN IT BE PREDICTED?  
THE SOLUTIONS MODEL TRAIN**

**chair: Jos van Gils, Deltares**

→ Exposure and risk modelling on  
a European scale

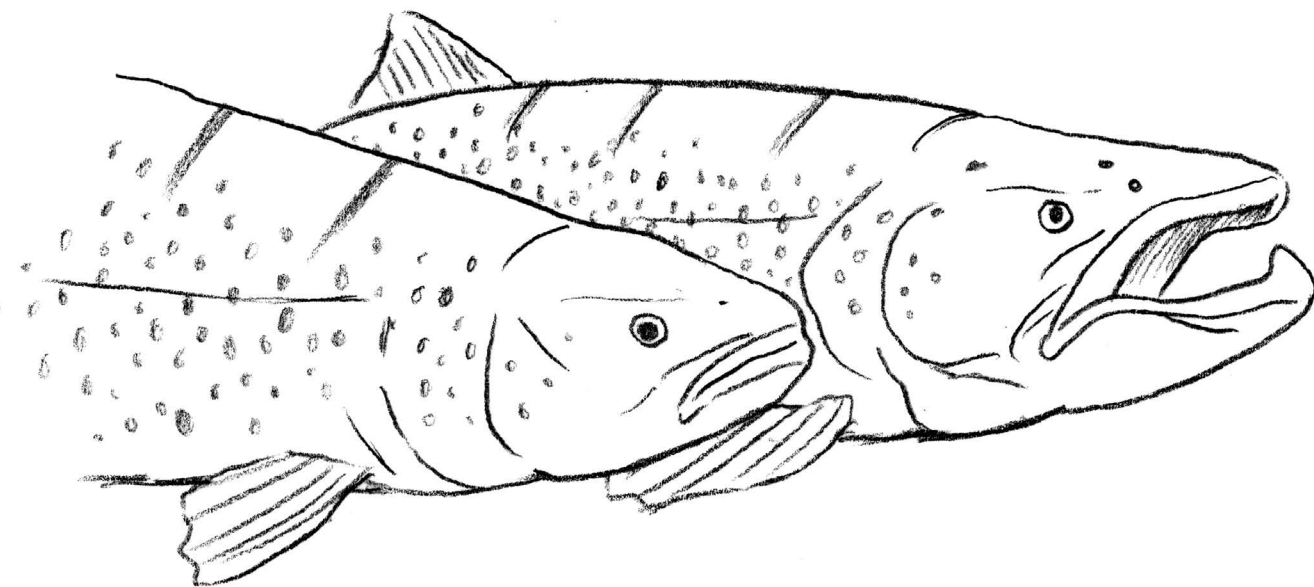
Jos van Gils/Andreas Kortenkamp BRUNEL  
(25 min)

→ How modeling helps to link contamination  
and ecological status

Andreas Focks, ALTERRA (15 min)

→ Ecological risk modelling by  
Dutch Water Boards

Bas van de Wal, STOWA (20 min)



### 09.00—10.30 **CHEMICAL QUALITY AND RISK – CAN IT BE MONITORED IN A HOLISTIC WAY? THE SOLUTIONS TOOLBOX**

**chair: Rolf Altenburger, UFZ**

- Effect-based tools for monitoring of water quality  
**Rolf Altenburger, UFZ (20 min)**
- Non-target screening and EDA  
**Martin Krauss, UFZ (20 min)**
- EU perspective on new approaches and methods for the monitoring and assessment of surface waters **Mario Carere, ISS (20 min)**
- Discussion (30 min)

### Coffee Break

### 11.00—12.30 **CHEMICAL QUALITY AND PRIORITIZATION – DO WE NEED NOVEL APPROACHES FOR MIXTURES?**

**chair: Michael Faust, F+B**

- Multiple-lines-of-evidence approach for identifying priority mixtures and drivers of mixture toxicity under the WFD  
**Michael Faust, F+B (20 min)**
- Experience from case studies  
**Thomas Backhaus, UGOT (20 min)**
- Commission view on the identification of priority mixtures and mixture risk drivers across regulatory silos  
**Peter Korytar, European Commission (20 min)**
- Discussion (30 min)

### Lunch and Group Picture

### 13.30—15.00 **CHEMICAL QUALITY: SOLUTIONS FOR A NON-TOXIC ENVIRONMENT**

**chair: Leo Posthuma, RIVM**

- From chemical problems to chemical footprints to solution-focused abatement opportunities  
**Leo Posthuma/Annemarie van Wezel, KWR (15 min)**
- How to increase coherence and cross-compliance of chemicals and water regulation  
**John Munthe, IVL (15 min)**
- Pollution problems of the future  
**Dirk Bunke, OEKO (15 min)**
- The role and interests of the European water sector regarding micropollutants. Research needs and possible cooperation  
**Michaël Bentvelsen, EUREAU (15 min)**
- Discussion (30 min)

### 15.00—15.30 **CHEMICAL QUALITY UNDER WATER SCARCITY – CHALLENGES AND SOLUTIONS UNDER CLIMATE CHANGE**

**Damia Barcelo/Antoni Ginebreda, CSIC / GLOBAQUA**

### Coffee Break

16.00—17.30

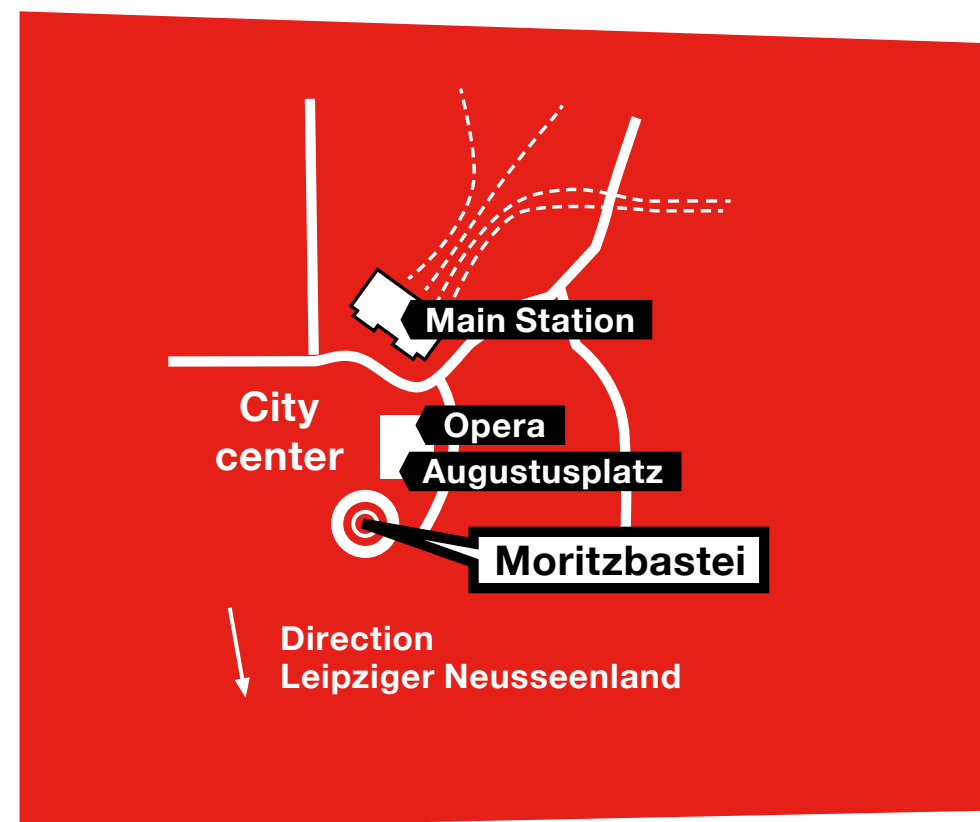
### SOLUTIONS PLATFORM FOR NEXT GENERATION ENVIRONMENTAL RESEARCH IN EUROPE – YOUNG RESEARCHERS PRESENT THEIR WORK

**chair: Christin Müller, UFZ**

- Mutagenicity in surface waters – Unraveling the role of aromatic amines  
**Melis Muz, UFZ (10 min)**
- Identify Toxic Substance in Mixture Using Reduced Transcriptome of HepG2  
**Wendi Fang, Nanjing University (10 min)**
- N.N. **Ricardo Zwarg, UNICAMP (10 min)**
- Toxicogenomic effect profiling – a non-target bioassay?  
**Andreas Schüttler, UFZ (10 min)**
- N.N. **Erik Müller, UFZ (10 min)**
- Mutagenic profile of water and suspended particulate matter of Danube river  
**Daniel Alexandre Morales, UNICAMP (10 min)**
- Characterization of Biological Pathways Perturbed by Mixtures Using Reduced Human Transcriptomics  
**Pu Xia, Nanjing University (10 min)**
- Assessing the internal and external exposure of gammarids collected in wastewater-impacted streams  
**Nicole Munz, UFZ (10 min)**

19.00 **SOCIAL EVENT**

Moritzbastei Leipzig (40 € per person)  
meet and greet / live-music / drinks & buffet



09.00—10.30

### CHEMICAL QUALITY ON A BASIN LEVEL – WHAT CAN WE LEARN FROM CASE STUDIES

**chair: Jaroslav Slobodnik, EI**

- Water quality in the Danube river and suggestions for the Danube River Basin Specific Pollutants  
**Jaroslav Slobodnik, EI (20 min)**
- Chemicals in the Danube – novel SOLUTIONS for a shared river  
**Adam Kovacs, ICPDR (10 min)**
- Abatement options for waste- and drinking water in the River Rhine basin  
**Juliane Hollender, EAWAG (20 min)**
- Water quality of the Rhine – ongoing work and new challenges  
**Tabea Stötter, IKS/R/CIPR/ICBR (10 min)**
- Discussion (30 min)

10.30—11.30

### USER-FRIENDLY PRODUCTS TO SUPPORT STEPS TOWARDS A NON-TOXIC ENVIRONMENT – RIBATOX / IDPS / DATABASES

**chair: Frank Sleenwaert, VITO**

- RiBaTox  
**Frank Sleenwaert/Guy Engelen, VITO (20 min)**
- SOLUTIONS Knowledge Base  
**Jaroslav Slobodnik, EI (20 min)**
- Abatement database  
**Annemarie van Wezel, KWR (20 min)**

Coffee Break

12.00—13.00

### ACHIEVEMENTS AND FURTHER REQUIREMENTS – HOW TO PROCEED TOWARDS A NON-TOXIC ENVIRONMENT: MESSAGES FROM NGOS, INDUSTRY AND REGULATION

**chair: Werner Brack, UFZ**

- Filling the gaps on the path to a non-toxic environment!  
**Ninja Reineke, CHEMTRUST (15 min)**
- Pharmaceuticals in the environment – research needs for a sustainable medication  
**Reinhard Länge, IPIE (15 min)**
- To a paradigm shift in water quality and safety assessment framework: Water Chemical Safety and Effect Based Monitoring/Water Safety Plans  
**Helen Clayton, European Commission (15 min)**
- Achievements and further requirements from the water industry perspective  
**Armelle Hebert, VEOLIA (15 min)**

Lunch



# THURSDAY 21TH

DAY 3

solutions

**14.00—15.00** **PODIUM DISCUSSION ON REQUIREMENTS ON EUROPEAN RESEARCH ON WATER QUALITY AND CHEMICALS IN THE WATER-FOOD-ENERGY SECURITY NEXUS (SOLUTIONERS + STAKEHOLDERS)**

**chair: Ilona Bärlund, UFZ**

**15.00—15.30** **SOLUTIONS FOR EMERGING POLLUTANTS: CONCLUSIONS AND RECOMMENDATIONS**

**Werner Brack, UFZ**

**15.30—18.00** **BOAT TRIP AROUND THE LEIPZIGER NEUSSEENLAND**

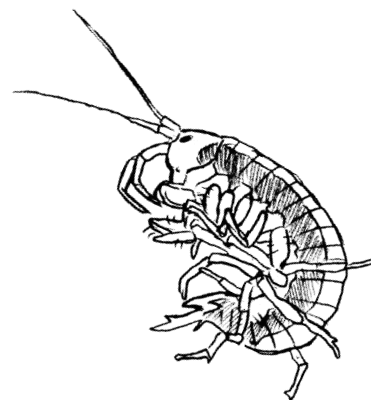
Interesting stories about the development of new lakes caused by past open pit mining, coffee break included (Price for boat and transfer: 20 € per person)





# SOLUTIONS

for present and future  
emerging pollutants  
in land and water  
resources management



## Organization

Werner Brack, Rolf Altenburger, Christin Müller

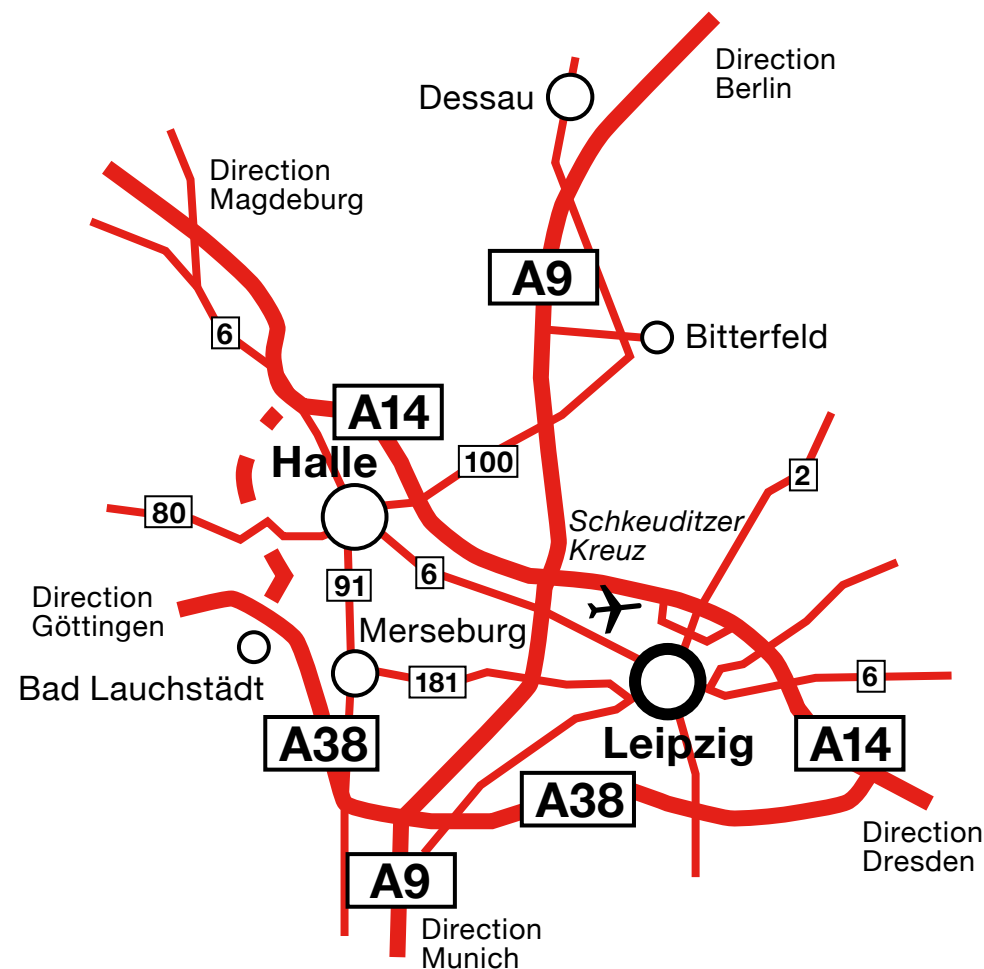
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