Support for academics from Ukraine

1. department

II 3 - Drinking Water and Swimming Pool Hygiene

2. brief profile of the department

The department advises the ministry of health and national authorities in respect of regulatory guidelines for drinking water and swimming pool water, and it is involved in a broad research on this topic. We focus on the protection of drinking water resources and the improvement of processes covering the whole chain of water extraction, treatment and distribution up to the point of consumption. Our research is conducted in microbial, chemical and toxicological laboratories and by the help of experimental equipment on half-pilot scale. Risks on Swimming pool water, e.g. about disinfection by-products are considered as well.

possible topics:
- II 3.1 Toxic cyanobacteria: field studies on occurrence of benthic cyanobacteria, developing suitable culture methods for benthic cyanobacteria
- II 3.1 Environmental analysis: analysis of organic trace substances and cyanobacterial toxins using LC-MS/MS; establishing a suspect target screening method for the cyanotoxin microcystin using high-resolution LC-MS/MS
- II 3.1 Investigations on contaminant fate (i.e. cyanobacterial toxins, urease and nitrification inhibitors) in soil and saturated systems in laboratory (batch and column experiments) and semi-technical scale (i.e. lysimeters, facility for the simulation of riverbank and slow sand filtration), modelling of the data (optional)
- II 3.3: Experimental investigation in water treatment (disinfection, adsorption, oxidation, biotransformation, membrane and fixed bed filtration), chemical analyses and method development, data processing and visualization, construction of pilot plants, field sampling, literature surveys and data collection
- II 3.6 Development, establishment and evaluation of in vitro methods for the assessment of mixture toxicities in drinking water
- II 3.6 Literature searches on toxicological evaluations of drinking water-relevant substances
3. areas of study for visiting scientist

- Agricultural and Forest Sciences
- Social Sciences
- Engineering Sciences
- Natural Sciences
- Medical and Health Sciences
- Mathematics and Computer Sciences
- Economics-, Law- and Administration Sciences

4. location

- Dessau
- Bad Elster
- Berlin Buchholzweg
- Berlin Corrensplatz
- Berlin Marienfelde
- Langen
- other:

5. specialist contact person

name: Camilla Beulker
phone number: +49 30 8903 4286
e-mail: camilla.beulker@uba.de