

Studying Environmental Chemistry in Bayreuth: New MA programme set to begin in WS 2016/17

International, interdisciplinary, and unique – these words best describe the new master's programme Environmental Chemistry that will be taught entirely in English starting in Winter Semester 2016/17.

Application deadline: 15 July 2016

Experts in the field of environmental chemistry are currently in high demand, and in view of ever-increasing industrialization and globalization, demand for such experts is expected to increase rapidly in the coming years. For this reason, environmental chemists have excellent job prospects all around the world.

"We recognized this trend and started laying the groundwork early for the launch of our new master's programme 'Environmental Chemistry'. It is held entirely in English, and it is geared towards graduates of bachelor's programmes who are interested in chemistry and the environmental sciences and want to work internationally later on," said Prof. Dr. Britta Planer-Friedrich, Professor of Environmental Geochemistry at the University of Bayreuth and programme advisor for the new degree programme. "In particular, we hope to attract a highly motivated, international group of young people to the University of Bayreuth to study environmental chemistry – young people who are from countries that are working hard to address environmental issues by examining causes and effects as well as those from countries that have not yet developed any solution approaches to counter their dramatic environmental problems," said Prof. Planer-Friedrich.

Aim of the new master's programme Environmental Chemistry



The programme of study seeks to provide highly qualified students with the training they need to become experts and leaders in science, environmental protection, and political and financial consulting. On the basis of solid expertise, graduates must be able to discover new problems, analyse complex states of affairs, and develop flexible solution approaches. In particular, international students from developing and emerging countries will enjoy excellent career prospects after graduation thanks to the growing pressure caused by industrialization and the corresponding demand for expertise in their home countries.

Friedrich Boeing, friend of Iceland, on the degree programme Environmental Chemistry

One of the first students whose interest was sparked by the new master's programme Environmental Chemistry is Friedrich Boeing, a 24-year-old who just finished his bachelor's in Geoecology at the University of Bayreuth. Boeing explained that it was the excellent reputation of Bayreuth's programme in Geoecology that originally brought him to northern Bavaria from Potsdam four years ago.



Friedrich Boeing measures the moisture content of the soil on a field internship.

“The new master’s programme Environmental Chemistry appeared right on cue for me – I am really happy to have this amazing opportunity to continue my studies on this unique green campus, where everything you need is right at your doorstep. Seminars are held in small groups, and we get a lot of one-on-one supervision,” explained the recent graduate, who also spent six months studying abroad at a partner university in Iceland – “paradies for adventurers who want to experience both hot springs and glaciers.” He even wrote his bachelor’s thesis based on the geothermal waters he investigated there.

Summary of the Master’s Programme Environmental Chemistry

Admission requirements:

- Bachelor of Science (B.Sc.) in biology, chemistry, geoecology, geology...
- a solid basic understanding of physics, chemistry, biology, the environmental sciences
- mastery of the English language

Language of the master’s programme: held completely in English

Programme advisor: Prof. Dr. Britta Planer-Friedrich

Aptitude assessment process – application deadline: 15 July 2016

Start of the programme: Winter Semester 2016/17

Standard period of study: 4 semesters of full-time study (part-time study is possible)

Degree: Master of Science (M.Sc.)

More information: www.environchem.uni-bayreuth.de

Contact:

Prof. Dr. Britta Planer-Friedrich

Programme Advisor for Environmental Chemistry

Professor of Environmental Chemistry

University of Bayreuth

Universitätsstr. 30

95447 Bayreuth

Phone: +49 (0) 921 553999

E-mail: environchem@uni-bayreuth.de

www.environchem.uni-bayreuth.de



Additional Information:

What is environmental chemistry?

All around the world, environmental problems are arising as a result of increased industrialization and depletion of natural resources. Contamination is not usually limited to air or water or soil, but rather affects whole ecosystems, including the biosphere – often even on a global scale. Prime examples of this are forest decline due to acid rain, damage to marine ecosystems caused by oil spills, accumulation of microplastics in the environment, and the appearance of harmful substances in food. The development of sustainable ways to manage resources often lags behind industrial development. In this connection, emerging countries often repeat the same mistakes that industrialized countries made years ago due to a lack of awareness and expertise – and are now either facing irreparable damage or spending a great deal of money in an attempt to solve the problems.

Environmental chemistry examines the origins of materials that are relevant to the environment, their transport and decomposition properties, and their effects on the biosphere. As an highly interdisciplinary applied science, environmental chemistry gives one a fundamental understanding of the processes in air, water, and soil. It also provides one with a variety of analytic tools and an understanding of inorganic/organic chemistry, biology/microbiology, toxicology, system analysis, and human-environment interaction.

Admission requirements

The master's programme is open to outstanding, talented, and hard-working students from Germany and abroad. Applicants undergo a so-called "aptitude assessment process"; the application to take part in the process must be submitted by 15 July 2016. Applicants are deemed to be suited for the programme if they

- have a good grasp of the material covered in their bachelor's programme,
- are highly interested in issues relating to environmental chemistry,
- are able to reflect and think abstractly,
- have a passive and active mastery of the English language.

A Bachelor of Science (B.Sc.) is generally required for admission to the master's programme Environmental Chemistry. The applicant's initial degree should be in one of the following subjects: biology, chemistry, geoecology, geology, forestry, agricultural sciences, hydrology, ecological engineering, limnology, meteorology, physical geography, environmental physics, environmental informatics, environmental economics, environmental law, the environmental sciences, and related disciplines. A solid understanding of physics, chemistry, biology, and the environmental sciences is also required.



■ **Winter Semester 2016/17 marks the start of five new master's programmes at the University of Bayreuth that are taught entirely in English:**

- **Environmental Chemistry**
 - o aptitude assessment process – application deadline: 15 July 2016
- **History & Economics**
 - o aptitude assessment process – application deadline: 15 July 2016
- **Biofabrication**
 - o aptitude assessment process – application deadline: 15 July 2016
- **Development Studies**
 - o standard enrolment process
- **Environmental Geography**
 - o standard enrolment process



The University of Bayreuth at a Glance

The University of Bayreuth is a young, research-oriented campus university. The University's founding mission in 1975 was to support interdisciplinary research and teaching and to develop interdisciplinary research priorities with which it could strengthen its own profile. Its research programmes and programmes of study are frequently updated and cover the natural sciences, law, business and economics, languages and literature, and cultural studies.

A good instructor-to-student ratio, high performance standards, interdisciplinary collaboration, and academic excellence have allowed the University to maintain its strong position in the rankings. The University of Bayreuth is included among the best young universities in the world in the Times Higher Education (THE) worldwide ranking "100 under 50".

The University of Bayreuth has been an international leader in African Studies for many years; the Bayreuth International Graduate School of African Studies (BIGSAS) is part of the Excellence Initiative by the German federal and state governments. High Pressure & High Temperature Research carried out at the Bavarian Research Institute of Experimental Geochemistry & Geophysics has also established a strong reputation worldwide. Polymer research at the University is a frontrunner in the funding ranking published by the German Research Foundation (DFG). The University of Bayreuth has a tight international network of strategically selected university partnerships.

There are currently around 13,500 students enrolled in 146 different programmes of study offered by the University's six faculties. With around 1,200 members of the academic staff (of whom there are 235 professors) and roughly 900 non-academic staff members, the University of Bayreuth is one of the region's largest employers.

Contact:

Brigitte Kohlberg

Press & PR Manager

University Communications

Press, Marketing & Communications

University of Bayreuth

Universitätsstr. 30 / ZUV

95447 Bayreuth

Phone: (+49) 921 / 55-5357 oder -5324

E-mail pressestelle@uni-bayreuth.de

www.uni-bayreuth.de