

Summer school: Aquatic eco(system)toxicology

Supervision: Prof. Dr. Christoph Schäfers (University of Münster) & Prof. Dr. Christian Schlechtriem (University of Siegen)

The lectures are held in English and are supported by experienced scientists of Fraunhofer IME, Schmallenberg

Classification: Advanced module

Semester SoSe 2016

Students: BSc Chemistry, MSc Chemistry, MSc Biology...

Date 29.08.2016 to 09.09.2016

Ort/Location: Schmallenberg, Fraunhofer IME

Beginn/Start: 29.08.2016; 10:00

Pre-requisite knowledge: Basics in Chemistry, Ecology, Physiology

For **registration** please send an e-mail to christian.schlechtriem@ime.fraunhofer.de

Aims: Introduction to various subjects and issues related to the field of ecotoxicology. Overview of scientific methods and their regulatory acceptance.

Lectures: Concepts and methodological approaches of ecotoxicology, environmental chemistry, exposition models, biodegradation, uptake and bioaccumulation, structure-effect relationships.

Aquatic ecotoxicology: test methods, statistical evaluation method, mesocosm studies, higher-tier approaches, effect modelling, endocrine disruptors, nanomaterials, monitoring. Terrestrial ecotoxicology

Practical training: Demonstration of complex testing systems, practical exercises (aquatic ecotoxicity tests with standard organisms, data evaluation, hazard and risk assessment of chemicals). Training course report.

Seminar: Number of participants 8 (University of Siegen)
Preparation of a seminar presentation and report based on supplementing literature. Topics will be announced prior to the course.

Examination: Seminar report and training course report

Credit points: 6KP

Further information on request to help you plan your stay in Schmallenberg.

Prof. Dr. Christian Schlechtriem

Head of Department Bioaccumulation and Animal Metabolism
Fraunhofer Institute for Molecular Biology and Applied Ecology IME
Auf dem Aberg 1
57392 Schmallenberg
Phone +49 2972 302-186