UNIVERSITÄT BAYREUTH

Bayceer
Bayreuther Zentrum für Ökologie und Umweltforschung

Wintersemester / ***Winter Term 2014/15***

Do. /*Thu.* 12 st
Gebäude/*Building*
GEO
Hörsaal/*Lecture hall*
H6

BayCEER Kolloquium

Vortragsreihe Ökologie und Umweltforschung
Lecture series in Ecology and Environmental Research

Donnerstag 16. 10. 2014, 12:00 Uhr, H6

Anschließend Postkolloquium mit Mittagsimbiss im Foyer H6

Dr. Martin Obst

Environmental Analytical Microscopy,
Universität Tübingen

Innovative approaches in experimental biogeochemistry - analytics on the sub-micron scale for a better process understanding

The fate of contaminants such as heavy metals and sorbents in heterogeneous environmental systems such as soils or biofilms is often controlled by (redox-)reactions, mineral precipitation / dissolution / transformation processes, or by the sorption to surface functional groups.

Analysis on the bulk scale hide (sub-)micron heterogeneities and often fail at the identification of intermediate products that appear at low concentrations only. These drawbacks often limit a fundamental process understanding. Novel analysis approaches that combine chemical sensitivity with high spatial resolution and innovative concepts for data analysis can help to identify these processes and the underlying mechanisms.

In this talk I will present several examples wherein novel and innovative, spatially resolved analysis approaches were required to understand environmental redox processes and the fate of contaminants such as Cd and As.

Die Vortragsreihe ist eine interdisziplinäre Plattform zur Information und Diskussion für Studierende, Forschende und Lehrende

Gäste sind herzlich willkommen

The lecture series serves as an inter-disciplinary platform for students, junior and senior scientists.

Guests are cordially invited!