

Sommersemester 2010

Gebäude GEO  
Hörsaal S21

# BayCEER Kolloquium

**Vortragsreihe Ökologie und Umweltforschung****Dienstag 29.06.2010, Punkt 16:00 Uhr, S21****Sondertermin**

## Dr. Ed Burton

**Southern Cross University, Australia**

### **Iron, sulfur and arsenic biogeochemistry in an acid-sulfate wetland: new insights from a landscape-scale experiment**

Iron sulfide oxidation in drained coastal lowland soils liberates acidity, Fe and  $\text{SO}_4$ , and leads to the accumulation of secondary Fe(III) minerals, such as schwertmannite and jarosite. In this seminar, I will describe recent advances in understanding iron, sulfur and arsenic biogeochemistry in acid-sulfate wetland soils. In particular, I will discuss new discoveries from the world's first landscape-scale reflooding of a tidal acid-sulfate wetland. In addition to field observations, the presentation will also include a discussion of new findings from controlled laboratory-based experiments examining sorption-desorption of arsenic and transformations of iron-sulfur in model wetland systems. This will be linked to field observations on the formation and transformation of iron-sulfide minerals, including greigite and pyrite, and the impact on in-situ arsenic behaviour.

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

Gäste sind herzlich willkommen