

GDCh- und Chemisches Kolloquium

Der GDCh-Ortsverband Oldenburg und das Institut für Chemie der Carl von Ossietzky Universität Oldenburg laden zu einem Vortrag

von Prof. Dr. Ioannis Pashalidis, University of Cyprus
zum Thema From Metal-Ion Adsorption to Environmental Radiochemistry of Uranium

herzlich ein.

Termin: **Donnerstag, den 30. Juni 2016, 17 Uhr c.t.**
Großer Hörsaal der Naturwissenschaften, W3-1-161,
Carl-von-Ossietzky-Straße 9-11

Einladender Prof. Dr. Carsten Dosche

The presentation focuses on three of the current research activities of the Radioanalytical and Environmental Research Lab

a) Biochar Fibres and Metal-ion Adsorption

Biochar fibers have excellent characteristics as adsorbents (e.g. compatibility, low-cost, porosity etc.) and after surface modifications they can bind efficiently increased amounts of pollutants. Biofibres obtained from the cladodes of *Opuntia Ficus-Indica* have been chemically modified to be used as efficient adsorbents for the recovery of f-element ions from aqueous solutions.

b) Uranium Analysis in Cypriot Waters

Alpha-spectroscopy (after separation and pre-concentration by Chelex-100) has been applied for the determination of uranium levels in various types of (ground)waters in Cyprus. A statistically significant correlation between geological background and uranium levels has been found. In particular, waters in contact with sedimentary rock formations are characterized by higher uranium levels than waters hosted by igneous rock formations.

c) Phosphogypsum Disposal in Cyprus

Phosphogypsum disposal at a coastal area in Cyprus initiated a study on its long-term environmental impact. From field measurements, simulated lab experiments and thermodynamic calculations insight into the chemical reactions taking place, and particularly into the uranium chemistry occurring in the phosphogypsum system under oxic and suboxic conditions was gained.

GDCh-Ortsverband Oldenburg
Der Vorsitzende
Prof. Dr. Frank Rößner

Institut für Chemie
Der Direktor
Prof. Dr. Thorsten Klüner

