

CEITEC MU a Biofyzikální ústav AVČR, v.v.i., ve spolupráci s Českou společností chemickou si Vás dovoluje pozvat na přednášku v sérii
Heyrovský-Ilkovič-Nernst Lecture

*The design of
electrified interfaces:
From amperometric
biosensors to DNA
hybridization*

03/12/2014

STŘEDA

start 14:00

Místnost 211, budova A35
Univerzitní kampus Bohunice
Kamenice 5, Brno

Přednáší:

Profesor Wolfgang Schuhmann

Lehrstuhl für Analytische Chemie, Ruhr-Universität Bochum

Abstrakt:

For a rational design of biodevices comprising either redox enzymes or nucleic acids as specific recognition element for selective detection of an analyte the nature of the used electrode/electrolyte interface has to be elucidated. Specifically, this is of utmost importance if a polyelectrolyte such as single-stranded DNA is immobilized within the double-layer in front of an electrode. Evidently, the applied electrode potential, additional components at the interface as well as the strength and nature of the electrolyte largely determine the properties of the biological recognition element. The lecture is spanning a bridge from interface design and electroanalytical techniques for elucidation of interfacial properties to the development of pathogen assays and multi DNA sensors.

