



Univerzita Karlova v Praze, Přírodovědecká fakulta

The Department of Chemistry invites for a lecture
organized as a part of the lecture series

Quo Vadis Chemistry

Electron Transfer, Hydrogen Bonds and Radicals in Organometallic Systems

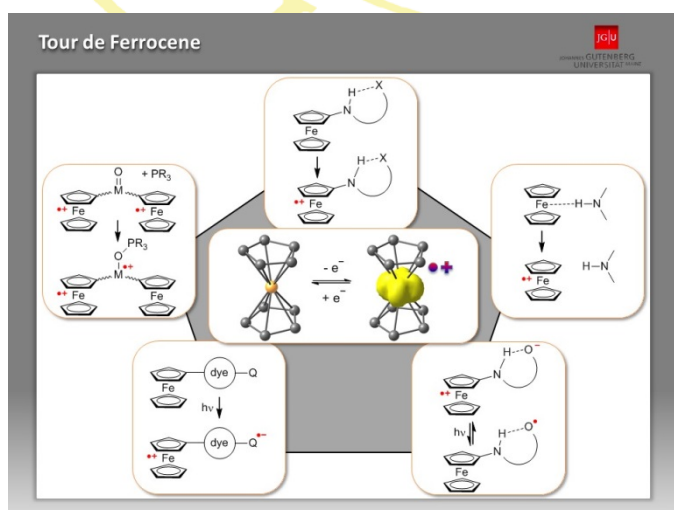


which will be delivered by

Katja Heinze

from Johannes Gutenberg University,
Mainz, Germany

on Monday, April 10, 2015 at 15:00
in lecture halls CH2 at the Department of Chemistry,
Hlavova 8, Praha 2



Ferrocenes –prototypical organometallics – still offer surprising reactivity as well as barely recognized and underexplored features. This lecture attempts to highlight some of such “ferrocene surprises”: peptidic oligoferrocenes combine the secondary structure elements of bio-materials based on hydrogen bonds with the redox features of ferrocenes to give redox-responsive foldamers, non-classical hydrogen bonding involves the metal center of ferrocene itself giving redox-switches or photo-switches, redox-asymmetric valence isomeric ferrocenium phenolates/phenoxy radicals are switched by near-IR light, highly reactive ferrocenyl radicals

are potentially relevant for biological action, and the ferrocene/ferrocenium couple acts as redox-cofactor in functional bioinspired model systems for oxotransferase enzymes and the photosystem.