



Univerzita Karlova v Praze, Přírodovědecká fakulta

Sekce chemie PřF UK v Praze  
zve všechny zájemce na přednášku z cyklu

## Quo Vadis Chemie

*Combined NMR and DFT  
approaches to investigate the  
solution structure of metal  
complexes*

kterou přednese

**Dr. Carlos Platas-Iglesias**



pracoviště

**Universidade da Coruña, A Coruña,  
Spanělsko**

dne 1. prosince v 15:00 hod.  
v posluchárně CH2, v budově chemických kateder PřF UK  
Hlavova 8, Praha 2

**Abstrakt:** Determining the structure in solution of coordination compounds is important for the rational design of complexes with pre-determined properties. Many metal ions are paramagnetic and, therefore, they induce important paramagnetic shifts in their  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra. These paramagnetic shifts encode useful structural information that can be analyzed with the aid of density functional theory (DFT) calculations. Several examples of this combined NMR/DFT approach, applied to complexes of the lanthanide(III) ions and transition metal ions of the  $d$ -block, will be presented.

