



Univerzita Karlova v Praze, Přírodovědecká fakulta

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

## Quo Vadis Chemie

# *Analysis of Complex Organic Mixtures with High Resolution Mass Spectrometry*



kterou přednese

## Roland Thissen

Institut de Planetologie et d'Astrophysique de  
Grenoble, Francie

dne 20.01. v 14:00 hod.  
v posluchárně CH2, v budově chemických kateder PřF UK  
Hlavova 8, Praha 2

Abstrakt: Our group performs FT-Orbitrap mass spectrometry measurements on a variety of materials, related to space exploration. They can be either synthesized analogs or natural material, which exhibit a common signature of being very crowded organic mixtures. The very high mass resolution and precision of the instrument give access to an integral representation of the mixtures, in which the exact masses can be interpreted into individual molecular formulas, ionic adducts, showing polymeric and isotopic patterns. The interpretation of such high information containing datasets requested for the development of expert tools, which allow us to propose promising methods for the analysis of unknown spectra, which I will illustrate in my talk