

Česká společnost chemická, pobočka Brno

Vás zve na přednášku, která se koná v místnosti 132, 1.NP, budova A11, Kamenice 5, Přírodovědecké fakulty Masarykovy univerzity, Brno

Ve čtvrtek 2. března 2017 v 14:00 hod.

svůj příspěvek přednese:

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Metal complexes of macrocyclic compounds in medicinal and analytical chemistry

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Macrocyclic ligands are compounds capable to form complexes with metal ions, cationic/anionic and non-charged organic guests. Their metal complexes with poly-azamacrocyclic ligands exhibit extraordinary thermodynamic and kinetic properties, therefore those lanthanide(III) complexes are utilized in many areas of medicine (e.g. complexes of metal radioisotopes as ^{90}Y , ^{153}Sm , ^{166}Ho , ^{177}Lu in nuclear medicine, Gd(III) complexes as MRI contrast agents, Eu(III) or Tb(III) complexes as luminescent probes). Analogously, Cu(II) complexes are also employed for radioimmunotherapy (^{67}Cu) and diagnostics (^{64}Cu – positron emission tomography). The lecture will be divided into two parts. The introduction will give the overview of basic physico-chemical properties of macrocyclic ligands, mostly their reactivity towards metal ions. Then some examples of metal complexes studied in author's lab in recent years will be presented and some their applications in medicinal and analytical chemistry will be demonstrated.