CZ.1.07/2.3.00/20.0148 NANOLABSYS
Mezinárodní spolupráce v oblasti „*in vivo*“ zobrazovacích technik
Laboratoř Metalomiky a Nanotechnologií

Vás zve na přednášku na téma:

MONITORING OF NUCLEIC ACIDS INTERACTION WITH COORDINATION COMPOUNDS OF COPPER AND NICKEL, THEIR CHARACTERIZATION INCLUDING MASS SPECTROMETRY

Doc. RNDr. Pavel Kopel, Ph.D.

Abstract

The study of an interaction between transition metal complexes and DNA has received much attention, because binding studies of small molecules to DNA are important in the development of new therapeutic reagents. Copper and nickel complexes can be bind to DNA in a nonspecific (noncovalent) mode of interaction such as electrostatic or intercalative binding. A series of copper(II) and nickel(II) complexes with N-donor ligands bridged by dicarboxylic acid or trithiocyanuric acid have been prepared. The complexes were characterized by physicochemical and spectroscopic methods; in addition, the structures of two complexes were characterized by single crystal X-ray crystallography. The interaction of these complexes with DNA was investigated with the help of absorption spectroscopy. The results suggest an intercalative interaction of the complexes with DNA.

Program

1. Úvodní informace o významu uhlíku,
2. formy uhlíku, nanoformy uhlíku, grafen, trubice, fulereny
3. využití uhlíkových nanoforem pro interakci s ionty těžkých kovů
4. Shrnutí

pátek 19. 04. 2013, 11:00 h
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INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ