Abstract:

This thesis is focused on the preparation of porous materials which may be usable for radionuclide uptake. These characteristics can be found at nanoporous materials (size of pores 1 – 100 nm) or at polymers. Nanoporous metal oxides and silica gel with styrene-divinylbenzene-TODGA modified surface were prepared and characterized for this purposes. All new prepared substances were tested for the efficiency of radionuclides capture. These measurements were done in Ústav jaderného výzkumu in Řež or in our laboratory.