



Boron-, REE-nanotheranostics

Hybrid Inorganic-Organic Nanobiocomposites With High Response To Minimally Or Non-Invasive Electromagnetic And Corpuscular Penetrating Irradiation For Multichannel Theranostics

Boris Sukhov^{1,2}

¹ *V.V. Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk, Russia*

² *Novosibirsk State University, Novosibirsk, Russia*

E-mail: boris_sukhov@mail.ru

A methodology is being developed for the synthesis of hybrid inorganic-organic nanobiocomposites, which are various multi-element inorganic nanoparticles (with a complex of neutron-capturing, magnetic, photoactive, and other properties) encapsulated in biotargeted polymer macromolecules. Nanoconstructions obtained in this way are promising for use in parallel multichannel therapy and diagnostics (theranostics). Methods for the synthesis of nanobiocomposites, their structure and diverse biomedical potential will be discussed.