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INTERACTION OF NANOPARTICLES AND BIOLOGICAL FLUIDS

Zorica Ajduković[1], Nenad Ignjatović[2], Nenad Petrović[1], Jelena Rajković[3], Dragana Kenić Marinković[1], Stevo Najman[4], Dragan Mihailović[5], Dragan Uskoković[2]
[1]Faculty of Medicine, Clinic of Stomatology, Department of Prosthodontics, University of Niš, Serbia, [2]Institute of Technical Sciences of SASA, Belgrade, Serbia, [3]Department of Biology and Ecology Faculty of Science and Mathematics, University of Niš, Serbia, [4]Faculty of Medicine, Institute of Biomedical Research, University of Niš, Serbia, [5]Faculty of Medicine, Institute of pathology, University of Niš, Serbia

Recent studies have shown that the behavior of nanoparticles in *in vivo* conditions is not solely dependant on their physical properties, such are size and shape. The surface of nanoparticles in biological fluids interacts with biomoleculs such are proteins, adsorbs these moleculs, and leads to formation of nanopartical-biomoelcular comlex known as “protein corona”. This protein corona changes the properties of nanoparticles and their behavior *in vivo*. In this work three types of nanomaterial based on Hap and polymers were incubated in rats plasma, and the identification and quantification of proteins in protein corona that had formed around these nanoparticles, was done by means of electrophoresis and mass spectrophotometery.

Keywords: nanoparticles, biological fluids, spectrophotometery.