Nanochemistry and Nanobiotechnology

Nanochemical processes in polymineral ferrioxide-silica pelagic systems

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Conceptions of nanochemical transfer role in mineral particles' contact zones of different concentrated ferrioxide-silicate systems accompanied by nanochemical recondensation (isothermal distillation) in laminar mixing conditions (State 1) or mechanochemical ultradispersion in turbulent conditions (State 2) [1] were theoretically considered and experimentally checked by chemical, rheological and medicobiological methods.

It was shown (on example of peloids) an improvement of medicobiological indexes of medical muds and growth of their efficiency in pelotherapy in conditions of nanoparticle formation (Fig.1).

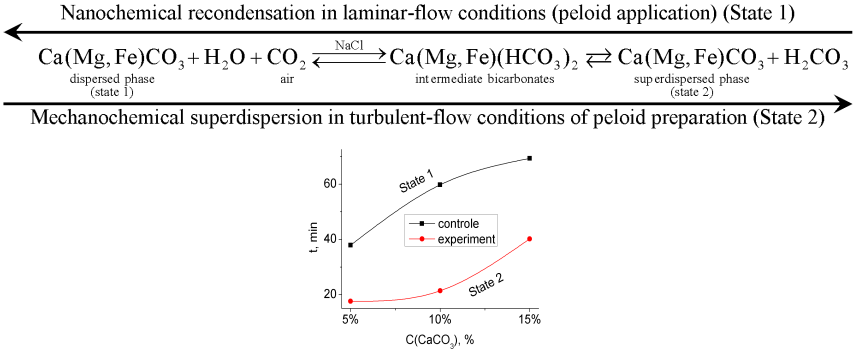

Fig. 1. Medicobiological indexes of tested animals

1. *Panko A.V., Kovzun I.G., Nikipelova E.M., Protsenko I.T.* Biocolloid-chemical influence of calcium carbonate nanoparticles on medical-endoecological properties of peloids // CERECO-2014: Book of Abstracts. – 2014. – P. 69-70.