

	<p>Ing. Ľubomír Medvecký, PhD</p> <p>Institute of Materials Research of SAS Watsonova 47/A, 040 01 Košice tel.: +421 55 7922489 E-mail: lmedvecky@saske.sk URL:</p>
<p>Current position(s): senior researcher</p> <p>Head of Division of functional and hybrid systems</p>	
<p>Profile:</p> <p>Ing. Ľubomír Medvecký, PhD., was head of the Department of Electroceramics, Deputy Director for scientific activity and currently is chairman of the Scientific Council of IMR SAS. He participated in the establishment of research in area of electroceramic materials based on perovskites (titanates) as well as development of biomaterials at IMR SAS. Actually, He is intensively working in the research and development of new biomaterials based on bioceramics and composites for medical applications in regenerative and reconstruction medicine. He has skills in synthesis of precursors by solid phase reaction, precipitation or sol-gel process and development of new methods of preparation and characterization of electroceramic materials, lithium cells, biomaterials, bioceramics, biocomposites and in vitro characterization of biomaterials. The subject of his interest are analyses of kinetics and mechanisms of physico-chemical processes during the synthesis of various types of materials, characterization of their phase and chemical composition and analysis of physical, mechanical and physicochemical properties of materials including chromatographic analysis (HPLC, GPC), microstructural analysis (REM electron microscopy, TEM), and FTIR analysis. He has coordinated a number of national research projects, including projects supported by Structural funds of EU. He has co-authored more than 70 scientific publications (Scopus), cited more than 500 times, 3 patents (h-index: 11).</p>	
<p>Projects:</p> <p><i>VEGA2/0024/11: Development of microstructure and phase transformation of sol-gel precursors of lead-free ferroelectric (K, Na)NbO₃ thin films. 01/2011-12/2013, dep. of principal investigator</i></p> <p><i>VEGA2/0026/11: Composite bioceramic-biopolymer systems with surface active additives. 01/2011-12/2013, principal investigator</i></p> <p><i>VEGA 2/0047/201 Hybrid composite systems with bioglass addition, 2014-2016, principal investigator</i></p> <p><i>Advanced implants seeded with stem cells for regeneration and reconstruction of hard tissues. 01/2010-03/2012, principal investigator, project funded by Structural funds of EU</i></p> <p><i>Centre of excellence of biomedical technologies, 01/2010-06/2015, principal investigator in IMR SAS, project funded by Structural funds of EU</i></p> <p><i>Composites with Novel Functional and Structural Properties by Nanoscale Materials (Nano Composite Materials- NCM),</i></p>	

COST MP 0701, principal investigator in IMR SAS, From nano to macro biomaterials (design, processing, characterization, modeling) and applications to stem cells regenerative orthopedic and dental medicine (NAMABIO), COST MP 1005, principal investigator in IMR SAS, 03/2012-03/2015

1. **MEDVECKÝ, Ľ. - ŠTULAJTEROVÁ, R. - PARILÁK, Ľ. - TRPČEVSKÁ, J. - ĎURIŠIN, J. - BARINOV, S.M.:** Influence of Manganese on Stability and Particle Growth of Hydroxyapatite in Simulated Body Fluid. *Colloids and Surfaces A*, 281, 2006, s.221-229
2. **R. ŠTULAJTEROVÁ, Ľ. MEDVECKÝ,** Effect of calcium ions on transformation brushite to hydroxyapatite in aqueous solution. *Colloids and Surfaces A: Physicochem. Eng. Aspects* 316 (2008) 104–109.
3. **Ľ. MEDVECKÝ, T. SOPČAK, V. GIRMAN, J. BRIANCIN,** Amorphous calcium phosphates synthesized by precipitation from calcium D-gluconate solutions. *Colloids and Surfaces A: Physicochem. Eng. Aspects* 417 (2013) 191– 200
4. **Ľ. MEDVECKÝ- M. GIRETOVÁ- R. ŠTULAJTEROVÁ,** Properties and in vitro characterization of polyhydroxybutyrate–chitosan scaffolds prepared by modified precipitation method. *J Mater Sci: Mater Med* (2014) 25:777–789.
5. **MEDVECKÝ, Ľ. - GIRETOVÁ, M. - ŠTULAJTEROVÁ, R. - KAŠIAROVÁ, M.:** Effect of microstructure characteristics on tetracalcium phosphate-nanomonetite cement in vitro cytotoxicity. *Biomedical Materials*, 10, 2015, s.025006
6. **MEDVECKÝ, Ľ. - ŠTULAJTEROVÁ, R. - GIRETOVÁ, M. - SOPČÁK, T. - FÁBEROVÁ, M.:** Properties of CaO-SiO₂-P₂O₅ reinforced calcium phosphate cements and in vitro osteoblast response. *Biomedical Materials*, 12, 2017, s.025002

Patents:

MEDVECKÝ, Ľ. - BRIANČIN, J.: Powder system for lithium secondary battery. Patent No. 285607. Banská Bystrica : ÚPV SR 2007
MEDVECKÝ, Ľ. - ŠTULAJTEROVÁ, R.: Method of preparation of porous calcium phosphate materials and composites. Patent No. 287378. Banský Bystrica : ÚPV SR, 2010
MEDVECKÝ, Ľ.: Calcium phosphate cement powder mixture and method of its preparation. Patent No. 288348. Banská Bystrica: ÚPV SR 2016