



Mgr. Zdenka Lukáčová Bujňáková, PhD.

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Current position(s):

Senior Researcher

Head of the Department of Mechanochemistry

Member of Scientific Board IGt

Profile:

Mgr. Zdenka Lukáčová Bujňáková, PhD., has finished PhD. study in 2013 and is currently leader of the Department of Mechanochemistry at Institute of Geotechnics, which is the centre of research in the field of mechanochemistry in Slovakia. In 2015, she obtained Young Research Scientist Award of Slovak Academy of Sciences (3rd place). She is now engaged in many tasks regarding the mechanochemical synthesis of materials, but she is very experienced in the field of preparation of nanosuspensions for medical applications. During the years 2016 and 2017, Dr. Lukáčová Bujňáková spent several months at Technische Universität Clausthal, and short stays at Institute of Material Science of Seville (CSIC-US), Sevilla and Institute of Catalysis, Bulgarian Academy of Sciences, Sofia. From 2010 she published 50 scientific papers in CC journals. Her work was cited 183 times in SCI database. She was co-investigator or deputy of principal investigator in many national and bilateral projects (APVV, VEGA).

Experience:

2006 - 2009 Ekolab, s.r.o. – laboratory technician

2009 – till now Institute of Geotechnics SAS

Organisation of Scientific Meetings:

2017 – Organizing Committee, 9th International Conference of Mechanochemistry and Mechanical Alloying INCOME2017, September 3-7, 2017, Košice, Slovakia

Projects:

(najviac 5 najvýznamnejších projektov, ktoré pracovník viedol, resp. spolupracoval na ich vedení):

1. APVV-14-0103 – deputy of principal investigator
2. VEGA 2/0065/18 – deputy of principal investigator

Five representative publications:

Researcher ID (in SCOPUS): **36676823200**

1. CHOLUJOVÁ, Dana - **BUJŇÁKOVÁ, Zdenka** - DUTKOVÁ, Erika - HIDEHIMA, Teru - GROEN, Richard W. J. - MITSIADES, Constantine S. - RICHARDSON, Paul G. - DORFMAN, David - BALÁŽ, Peter - ANDERSON, Kenneth C. - JAKUBÍKOVÁ, Jana. Realgar nanoparticles versus ATO arsenic compounds induce in vitro and in vivo activity against multiple myeloma. In British Journal of Haematology, 2017, vol. 179, no. 5, p. 756-771.

2. **BUJŇÁKOVÁ, Zdenka** - BALÁŽ, Matej - ZDURIENČÍKOVÁ, Martina - SEDLÁK, Ján - ČAPLOVIČOVÁ, Mária - ČAPLOVIČ, Ľubomír - DUTKOVÁ, Erika - ZORKOVSKÁ, Anna - TOTHOVÁ, Erika - BALÁŽ, Peter - SHPOTYUK, Oleh - ANDREJKO, S. Preparation, properties and anticancer effects of mixed As₄S₄/ZnS nanoparticles capped by Poloxamer 407. In Materials Science and Engineering C: Materials for Biological Applications, 2017, vol. 71, p. 541-551.

3. **BUJŇÁKOVÁ, Zdenka** - BALÁŽ, Matej - DUTKOVÁ, Erika - BALÁŽ, Peter - KELLO, Martin - MOJŽIŠOVÁ, Gabriela - MOJŽIŠ, Ján - VILKOVÁ, Mária - IMRICH, Ján - PSOTKA, Miroslav. Mechanochemical approach for the capping of mixed core CdS/ZnS nanocrystals: Elimination of cadmium toxicity. In Journal of Colloid and Interface Science, 2017, vol. 486, p. 97-111.

4. **BUJŇÁKOVÁ, Zdenka** - DUTKOVÁ, Erika - BALÁŽ, Matej - TOTHOVÁ, Erika - BALÁŽ, Peter. Stability studies of As₄S₄ nanosuspension prepared by wet milling in Poloxamer 407. In International Journal of Pharmaceutics, 2015, vol. 478., p. 187-192. (3.650 - IF2014). (2015 - Current Contents). ISSN 0378-5173.

5. **BUJŇÁKOVÁ, Zdenka** - BALÁŽ, Peter - ZORKOVSKÁ, Anna - SAYAGUÉS, Mária Jesús - KOVÁČ, Jozef - TIMKO, Milan. Arsenic sorption by nanocrystalline magnetite: An example of environmentally promising interface with geosphere. In Journal of Hazardous Materials, 2013, vol. 262, p. 1204-1212.

Fellowships / Awards / Memberships of Scientific Societies:

2015 – Young Research Scientist Award of Slovak Academy of Sciences (3rd place)