



COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: Roman Bleha

Type (Academic or Industrial): Academic

Country: Czech Republic

Leadership position in the COST: CA 18224

Working Group in which you are involved: WG3

E-mail: roman.bleha@vscht.cz

Laboratory/Company: University of Chemistry and Technology, Prague, Faculty of Food and Biochemical Technology, Department of Carbohydrates and Cereals

Laboratory/Company info (limited to 400 characters): Laboratory which is focused on isolation and structural characterisation of polysaccharides from non-traditional food matrices. Part of University of Chemistry and Technology, Prague, Faculty of Food and Biochemical Technology, Department of Carbohydrates and Cereals. Personnel: 2 researchers and leading researchers, 2 PhD students, 1 postdoctoral fellows.

Link to the home page of the Laboratory/Company: <https://sch.vscht.cz/>

Fields of expertise (limited to 400 characters):

- Isolation, purification of polysaccharides from non-traditional food matrices
- FTIR, Raman and NMR spectroscopy of polysaccharides
- GC/FID, GC/MS, SEC and GPC chromatography of polysaccharides
- Application of polysaccharides in food, pharmacy and medicine
-

5 Main publications or patents:

- **Bleha, R.**; Shevtsova, T.; Kružík, V.; Brindza, J.; Sinica, A. Morphology, physicochemical properties and fractionation of bee pollens. *Czech Journal of Food Sciences* 2019, 37 (1), 1–8. <https://doi.org/10.17221/139/2018-CJFS>
- **Bleha, R.**; Shevtsova, T.; Kružík, V.; Škorpilová, T.; Saloň, I.; Erban, E.; Brindza, J.; Brovarkyi, V.; Sinica, A. Bee breads from two regions of Eastern Ukraine: composition, physical properties and biological activities. *Czech Journal of Food Sciences* 2019, 37 (1), 9–20. <https://doi.org/10.17221/201/2018-CJFS>
- Ekaterina Baeva, **Roman Bleha**, Ekaterina Lavrova, Leonid Sushytskyi, Jana Čopíková, Ivan Jablonsky, Pavel Klouček and Andriy Synytsya: Polysaccharides from Basidiocarps of Cultivating Mushroom *Pleurotus ostreatus*: Isolation and Structural Characterization, *Molecules*. 24 (15), 1-16 (2019). doi:10.3390/molecules24152740
- Synytsya A., Monkai J., **Bleha R.**, Macurkova M., Ruml T., Ahn J., Chukeatirote E. (2017): Antimicrobial activity of crude extracts prepared from fungal mycelia. *Asian Pacif. J. Trop. Biomed.* 7(3): 257–261.



- Choi J. W., Synytsya A., Capek P., **Bleha R.**, Pohl R., Park Y. I. (2016): Structural analysis and anti-obesity effect of a pectic polysaccharide isolated from Korean mulberry fruit Oddi (*Morus alba* L.). Carbohydr. Polym. 146: 187–196.

Collaborations:

Universidade de Aveiro, Catholic university of Korea, Slovak University of Agriculture in Nitra, Czech University of Life Sciences Prague, Slovak Academy of Sciences, University of Ss. Cyril and Methodius in Trnava

Facilities:

- FTIR Nicolet 6700
- FTIR with Raman module iS50
- GPC Multi-detector GPC/SEC System | OMNISEC
- SEC - chromatography
- MAE Speedwave two
- UV/VIS Specord 50 Plus
- GC/FID Shimadzu 2010
- GC/MS Shimadzu 2010 SE