



COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: KRISTINA RADOŠEVIĆ

Type (Academic or Industrial): Academic

Country: CROATIA

Leadership position in the COST: -

Working Group in which you are involved: Work Group 3

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Laboratory/Company:

University of Zagreb, Faculty of Food Technology and Biotechnology, Department of Biochemical Engineering, **Laboratory for Cell Culture Technology and Biotransformations**, Pierottijeva 6, 10000 Zagreb, Croatia

Laboratory/Company info (limited to 400 characters):

Current scientific research of the Laboratory for Cell Culture Technology and Biotransformations includes: preparation, characterization and implementation of deep eutectic solvents in food technology, biotechnology, pharmacy and chemical technology; biocatalysis in obtaining enantiomeric pure compounds; assessment of protein hydrolysates of plant origin as partial substituent of proteins contained in animal serum.

Link to the home page of the Laboratory/Company:

http://www.pbf.unizg.hr/en/departments/department_of_biochemical_engineering/laboratory_for_cell_culture_technology_and_biotransformations

Fields of expertise (limited to 400 characters):

- development and application of animal technology
- determination of (cyto)toxicity and *in vitro* biological activity
- assessment of basic cellular processes (cell proliferation, cell death)
- biological activity of plant extracts as well as synthesized pure compounds
- *in vitro* cell systems for monitoring of environmentally presented substances

5 Main publications or patents:

- Panić, M., Radić Stojković, M., Kraljić, K., Škevin, D., Radojčić Redovniković, I., Gaurina Srček, V., **Radosevic, K.** (2019) Ready-to-use green polyphenolic extracts from food byproducts. *Food Chemistry* 283, 628-636.
- **Radosevic, K.**; Curko, N.; Srcek Gaurina, V.; et al. (2016) Natural deep eutectic solvents as beneficial extractants for enhancement of plant extracts bioactivity *LWT-Food Science and Technology* 73, 45-51.
- Bubalo Cvjetko, M.; **Radosevic, K.**; Redovnikovic Radojicic, I.; et al. (2014) A brief overview of the potential environmental hazards of ionic liquids. *Ecotoxicology and Environmental Safety* 99, 1-12.



- **Radosevic, K.**, Bubalo Cvjetko, M.; Sreck Gaurina, V.; et al. (2015) Evaluation of toxicity and biodegradability of choline chloride based deep eutectic solvents. *Ecotoxicology and Environmental Safety* 112, 46-53.
- Slivac, I.; Blajic, V.; **Radosevic, K.**; et al. (2010) Influence of different ammonium, lactate and glutamine concentrations on CCO cell growth. *Cytotechnology*, 62(6) 585-594.

Collaborations:

- Bilateral Austrian (Universität Graz)-Croatian scientific project "Natural deep eutectic solvents for the preparation of chiral synthons using alcohol dehydrogenases" (2020-2022)
- Bilateral Chinese (School of Chemistry and Chemical Engineering, Anhui University of Technology)-Croatian scientific project "Phenolic compounds green extraction from plant-endophytes using natural deep eutectic solvents" (2020-2022)
- Bilateral project Serbia-Croatia "Biological potential of subcritical extracts from plant waste" (2016-2018)
- Vio Chemicals AG, Zürich, Switzerland (collaborators at Croatian Science Foundation project "Rational design of deep eutectic solvents for chiral drug preparation" 2020-2024)
- prof. Giancarlo Cravotto from Dipartimento di Scienza e Tecnologia del Farmaco, University of Turin, Italy (collaborators at Croatian Science Foundation project "Rational design of deep eutectic solvents for chiral drug preparation" 2020-2024)

Facilities:

- Equipment for cultivation of animal cell cultures (incubators, laminar flow chamber, inverted microscope, microscope, Muse[®] Cell Analyzer as simple flow cytometry, orbital shakers)
- Analytical equipment (HPLC-DAD, GCMS, spectrophotometer, spectrofluorimeter)
- Equipment for performing biocatalytic reactions (laminar flow chamber, incubators, shaker, enzymes, whole cells)
- Equipment for extraction (microwave-ultrasound reactor, shakers)
- Software (Biovia COSMOSuite)