

Marek Kieliszek

Dr hab. inż. (Ph.D. D.Sc. Eng.)

Profile

Open minded, hardworking and adaptable with a passion for science and technical flair. I have a clear logical mind with a practical approach to problem solving and a drive to see things through to completion. I like to work under pressure and I like challenges. I like to think constructively and I know that the simple solution might not always be the best.

Experience

2015-01 Present **Warsaw University of Life Sciences - SGGW**
Faculty of Food Science
Department of Biotechnology, Microbiology and Food Evaluation

2008-09 **prof. Waław Dąbrowski**
2014-12 **Institute of Agricultural and Food Biotechnology (IBPRS)**
Department of Microbiology

Education

2019-07 **Warsaw University Of Life Sciences - SGGW,**
Faculty Of Food Sciences, D.Sc.

2015-06 **Warsaw University Of Life Sciences - SGGW,**
Faculty Of Food Sciences, Ph.D.

Summary of patents and patent applications

- 1 International patent. Method for honey wort high-sugar alcohol fermentation (2017) Pub. no. WO2015102500-A1; PL406718-A1; EP2914755-B1, Int. appl. PCT/PL2014/000111
- 2 Nowy szczep bakterii *Lactobacillus delbrueckii* oraz jego zastosowanie do wytwarzania pierzgi (2017) PL. 226477 B1 (in Polish)
- 3 Sposób otrzymywania preparatu $\beta(1,3)/(1,6)$ -glukanów drożdży *Candida utilis* (2017) PL.420212 (in Polish)
- 4 International patent. New strain *Lactobacillus delbrueckii* bacteria and its use of bee pollen. (2017) Pub. no. WO2015093997-A1; PL406622-A1; EP2914754, Int. appl. PCT/PL2014/050061

Summary of scientific monographs

- 1 Zasady przyjmowania i przechowywania drobnoustrojów. Kolekcja Kultur Drobnoustrojów Przemysłowych (2009) ISBN 9788392571179 (in Polish)
- 2 **Kieliszek M.**, Błażej S. (2017) Microbial transglutaminase and applications in food industry. Chapter 10: Microbial Enzyme Technology in Food Applications (Ray R. C., Rosell C. M.), CRC Press Taylor and Francis Group, 180–198, ISBN 978-14-987498-3-1,
- 3 Bezpieczeństwo Zdrowotne Żywności Aspekty Mikrobiologiczne, Chemiczne i Ocena Towaroznawcza (2015) ISBN 9788393542178 (in Polish)

National Center for Biotechnology Information (NCBI GenBank (<http://www.ncbi.nlm.nih.gov/nucleotide>))

I am a co-author of the nucleotide sequences and genomes (133) of strains

Personal data

E-mail

marek_kieliszek@sggw.pl

Social media

ResearchGate

https://www.researchgate.net/profile/Marek_Kieliszek

Orcid

<http://orcid.org/0000-0002-5836-4865>

Foreign Languages

English, German

Skills

Examples:

knowledge of the programs: MS Office - Word, Excel, Power Point, Outlook

knowledge of the programs: GIMP, Corel, Statgraphics, Statistica, Sigma Plot, Table Curve, Blast, PyMol

knowledge of analytic methodologies

Publications (as of 2019.07)

- Kieliszek M.** (2019) Selenium—fascinating microelement, properties and sources in food. *Molecules*, 24(7), 1298.
- Chlebowska-Śmigiel A., Kycia K., Neffe-Skocińska K., **Kieliszek M.**, Gniewosz M., Kołożyn-Krajewska D. (2019) Effect of pullulan on physicochemical, microbiological, and sensory quality of yogurts. *Current Pharmaceutical Biotechnology*, 20(6), 489-496.
- Kot A.M., Błażej S., Kieliszek M., Gientka I., Bryś, J. (2019) Simultaneous production of lipids and carotenoids by the red yeast *Rhodotorula* from waste glycerol fraction and potato wastewater. *Applied Biochemistry and Biotechnology*, 1-19, doi:10.1007/s12010-019-03023-z
- Kieliszek M.**, Błażej S., Bzducha-Wróbel A., Kot A. M. (2019) Effect of selenium on growth and antioxidative system of yeast cells. *Molecular Biology Reports*, 46, 1797-1808.
- Kieliszek M.**, Błażej S., Bzducha-Wróbel A., Kot A. M. (2019) Effect of selenium on lipid and amino acid metabolism in yeast cells. *Biological Trace Element Research*, 187, 316–327.
Correction: **Kieliszek M.**, Błażej S., Bzducha-Wróbel A., Kot A. M. (2019) Effect of selenium on lipid and amino acid metabolism in yeast cells. *Biological Trace Element Research*, 187, 328–328.
- Kieliszek M.**, Błażej S., Piwowarek K., Brzezicka K. (2018) Equilibrium modeling of selenium binding from aqueous solutions by *Candida utilis* ATCC 9950 yeasts. *3 Biotech*, 8, 388.
- Kieliszek M.**, Błażej S. (2018) Speciation analysis of selenium in *Candida utilis* yeast cells using HPLC-ICP-MS and UHPLC-ESI-Orbitrap MS techniques. *Applied Sciences*, 8, 2050.
- Bzducha-Wróbel A., Pobiega K., Błażej S., **Kieliszek M.** (2018) The scale-up cultivation of *Candida utilis* in waste potato juice water with glycerol affects biomass and $\beta(1,3)/(1,6)$ -glucan characteristic and yield. *Applied Microbiology and Biotechnology*, 102(21), 9131–9145.
- Bzducha-Wróbel A., Błażej S., **Kieliszek M.**, Pobiega K., Falana K., Janowicz M. (2018) Modification of the cell wall structure of *Saccharomyces cerevisiae* strains during cultivation on waste potato juice water and glycerol towards biosynthesis of functional polysaccharides. *Journal of Biotechnology*, 281, 1–10.
- Cendrowski A., Ścibisz I., Mitek M., **Kieliszek M.** (2018) Influence of harvest seasons on the chemical composition and antioxidant activity in *Rosa rugosa* petals. *Agrochimica*, 62(2), 157–165.
- Kieliszek M.**, Lipinski B. (2018) Pathophysiological significance of protein hydrophobic interactions: an emerging hypothesis. *Medical Hypotheses*, 110, 15–22.
- Kieliszek M.**, Piwowarek K., Kot A. M., Błażej S., Chlebowska-Śmigiel A., Wolska I. (2018) Pollen and bee bread as new health-oriented products: a review. *Trends in Food Science and Technology*, 71, 170–180.
- Damaziak K., Marzec A., **Kieliszek M.**, Bucław M., Michalczyk M., Niemiec J. (2018) Comparative study on vitelline membrane structure and correlations with their strength and yolk content physical parameters of ostrich, emu and greater rhea eggs. *Poultry Science*, 97 (3), 1032–1040.
- Kurcz A., Błażej S., Kot A. M., Bzducha-Wróbel A., **Kieliszek M.** (2018) Application of industrial wastes for the production of microbial single-cell protein by fodder yeast *Candida utilis*. *Waste Biomass Valorization*, 9(1), 57–64.
- Piwowarek K., Lipińska E., Hać-Szymańczuk E., **Kieliszek M.**, Ścibisz I. (2018) *Propionibacterium* spp. - source of propionic acid, vitamin B12, and other metabolites important for the industry. *Applied Microbiology and Biotechnology*, 102(2), 515–538.
- Kot A. M., Błażej S., Gientka I., **Kieliszek M.**, Bryś J. (2018) Torulene and torularhodin - "new" fungal carotenoids for industry? *Microbial Cell Factories*, 17:49.
- Kieliszek M.**, Lipinski B., Błażej S. (2017) Application of sodium selenite in the prevention and treatment of cancers. *Cells*, 6(4), 39.
- Cendrowski A., Ścibisz I., **Kieliszek M.**, Kolniak-Ostek J., Mitek M. (2017) UPLC-PDA-Q/TOF-MS profile of polyphenolic compounds of liqueurs from *Rose* petals (*Rosa rugosa*). *Molecules*, 22, 1832.
- Cendrowski A., Ścibisz I., Mitek M., **Kieliszek M.**, Kolniak-Ostek J. (2017) Profile of the phenolic compounds of *Rosa rugosa* petals. *Journal of Food Quality*, vol. 2017, Article ID 7941347, 10 pages, 2017.

Publications (as of 2019.07)

- 20 Gientka I., **Kieliszek M.**, Jermacz K., Błażej S. (2017) Identification and characterization of oleaginous yeast isolated from kefir and their ability to accumulate intracellular fats in deproteinated potato wastewater with different carbon sources. *BioMed Research International*, 2017, Article ID 6061042, 19 pages, 2017.
- 21 **Kieliszek M.**, Błażej S., Kurek E. (2017) Binding and conversion of selenium in *Candida utilis* ATCC 9950 yeasts in bioreactor culture. *Molecules*, 22(3), 352.
- 22 **Kieliszek M.**, Kot A. M., Bzducha-Wróbel A., Błażej S., Gientka I., Kurcz A. (2017) Biotechnological use of *Candida* yeasts – a review. *Fungal Biology Reviews*, 31(4), 185–198.
- 23 Chlebowska-Śmigiel A., Gniewosz M., **Kieliszek M.**, Bzducha-Wróbel A. (2017) The effect of pullulan on the growth and activity of selected stool microflora of human. *Current Pharmaceutical Biotechnology*, 18(2), 121–126.
- 24 Gientka I., Gadaszewska M., Błażej S., **Kieliszek M.**, Bzducha-Wróbel A., Stasiak-Różańska L., Kot A. M. (2017) Evaluation of lipid biosynthesis ability by *Rhodotorula* and *Sporobolomyces* strains in medium with glycerol. *European Food Research and Technology*, 243, 275–286.
- 25 **Kieliszek M.**, Błażej S. (2016) Current knowledge on the importance of selenium in food for living organisms: a review. *Molecules*, 21(5), 609.
- 26 **Kieliszek M.**, Błażej S., Płaczek M. (2016) Spectrophotometric evaluation of selenium binding by *Saccharomyces cerevisiae* ATCC MYA-2200 and *Candida utilis* ATCC 9950 yeast. *Journal of Trace Elements in Medicine and Biology*, 35, 90–96.
- 27 Kot A. M., Błażej S., Kurcz A., Gientka I., **Kieliszek M.** (2016) *Rhodotorula glutinis*-potential source of lipids, carotenoids, and enzymes for use in industries. *Applied Microbiology and Biotechnology*, 100(14), 6103–6117.
- 28 **Kieliszek M.**, Misiewicz A. (2014) Microbial transglutaminase and its application in the food industry. A review. *Folia Microbiologica*, 59(3), 241–250.
- 29 **Kieliszek M.**, Błażej S., Bzducha-Wróbel A., Kurcz A. (2016) Effects of selenium on morphological changes in *Candida utilis* ATCC 9950 yeast cells. *Biological Trace Element Research*, 169(2), 387–393.
- 30 **Kieliszek M.**, Błażej S., Gientka I., Bzducha-Wróbel A. (2015) Accumulation and metabolism of selenium by yeast cell. *Applied Microbiology and Biotechnology*, 99 (13), 5373–5382.
- 31 **Kieliszek M.**, Błażej S., Bzducha-Wróbel A. (2015) Influence of selenium content in the culture medium on protein profile of yeast cells *Candida utilis* ATCC 9950. *Oxidative Medicine and Cellular Longevity*, 2015, Article ID 659750, 6 pages.
- 32 **Kieliszek M.**, Błażej S. (2013) Selenium: significance, and outlook for supplementation. *Nutrition*, 29(5), 713–718.
- 33 Bzducha-Wróbel A., **Kieliszek M.**, Błażej S. (2013) Chemical composition of the cell wall of probiotic and brewer's yeast in response to cultivation medium with glycerol as a carbon source. *European Food Research and Technology*, 237(4), 489–499.
- 34 Waśko A., **Kieliszek M.**, Targoński Z. (2012) Purification and characterization of a proteinase from the probiotic *Lactobacillus rhamnosus* OXY. *Preparative Biochemistry and Biotechnology*, 42(5), 476–488.

Citations (as of 2019.07)

Web of Science: 549

Scopus Elsevier: 590