

Petra Patakova

Professor

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Education

- 1994 - PhD in biotechnology after external PhD study at the University of Chemistry and Technology Prague (UCTP)
- 1990 – MSc in chemistry at the UCTP

Academic experience

- June 2019- till now professor of biotechnology at the Department of Biotechnology of the UCTP
- 2012 – 2019 associate professor at the Department of Biotechnology of the UCTP
- 1995 – 2012 assistant professor at the Department of Biotechnology of the UCTP
- 1994 - 1995 research assistant at the Department of Fermentation Chemistry and Bioengineering, UCTP
- 1990 - 1994 PhD study at the Institute of Microbiology of the Czech Academy of Sciences

Research interests

- Physiology and genetics of solventogenic clostridia
- Microbial production of biofuels, namely butanol and ethanol from renewable substrate
- Production and biological activity of *Monascus* pigments

Publications

- **PATAKOVA P**, BRANSKA, B, SEDLAR K, VASYLKIVSKA M, JURECKOVA K, KOLEK J, CICKOVA P, PROVAZNIK I. Acidogenesis, solventogenesis, metabolic stress response and life cycle changes in *Clostridium beijerinckii* NRRL B-598 at the transcriptomic level. *Scientific Reports*, 2019, 9(1).
- SEDLAR K, KOSCOVA P, VASYLKIVSKA M, BRANSKA B, KOLEK J, KUPKOVA K, **PATAKOVA P**, PROVAZNIK I. Transcription profiling of butanol producer *Clostridium beijerinckii* NRRL B-598 using RNA-Seq. *BMC Genomics*, 2018, 19(415).
- **PATAKOVA P**, KOLEK J, SEDLAR K, KOSCOVA P, BRANSKA B, KUPKOVA K, PAULOVA L, PROVAZNIK I. Comparative analysis of high butanol tolerance and production in clostridia. *Biotechnology Advances*, 2017, 36(3), 721-738.
- KOLEK J, SEDLAR K, PROVAZNIK I, **PATAKOVA P**. Dam and Dcm methylations prevent gene transfer into *Clostridium pasteurianum* NRRL B-598: development of methods for electrotransformation, conjugation, and sonoporation. *Biotechnology for Biofuels*, 2016, 9(1).
- KOLEK J., DIALLO M., VASYLIKVSKA M., BRANSKA B., SEDLAR K., LOPEZ-CONTRERAS A.M., **PATAKOVA P.** : Comparison of expression of key sporulation, solventogenic and acetogenic genes in *C.beijerinckii* NRRL B-598 and its mutant strain overexpressing spo0A. *Appl. Microbiol. Biotechnol.* 101, 8279-8291 (2017)
- PATROVSKY M., SINOVSKA K., BRANSKA B., **PATAKOVA P.** Effect of initial pH, nitrogen sources and cultivation time on the production of yellow or orange *Monascus purpureus* pigments and the mycotoxin citrinin. *Food Sci. Nutrition* 7:3494-3500 (2019)