

# Curriculum vitae & List of publications

# Petr Ouředníček

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**Born:** 1<sup>st</sup> June, 1989, Brno (Czech Republic)

**Address:** Lánice 47, 595 01, Velká Bíteš, Czech Republic

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## Education

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2015 – present: Ph.D. studies

Applied and landscape ecology, Faculty of Environmental Sciences

**Czech University of Life Sciences, Prague, Czech Republic**

Thesis: *Biochar based amendments in the environment; different modeling approaches*

2012 – 2015: Master study program  
Environmental Modelling, Faculty of Environmental Sciences  
**Czech University of Life Sciences, Prague, Czech Republic**  
Thesis: *Simulation of Pb and Zn transport through the soil profile after amorphous manganese oxide (AMO) treating*

2008 – 2012: Bachelor study program  
Applied Ecology, Faculty of Environmental Sciences  
**Czech University of Life Sciences, Prague, Czech Republic**  
Thesis: *Grape stalk waste as a low-cost sorbent of hexavalent chromium*

## Publications

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- Jačka L., Trakal L., **Ouředníček P.**, Pohořelý M., Šípek V. (2018) Biochar presence in soil significantly decreased saturated hydraulic conductivity due to swelling. *Soil and Tillage Research*, 184:181-185
- Trakal L., Michálková Z., Beesley L., Vítková M., **Ouředníček P.**, Barceló A. P., Ettler V., Číhalová S., Komárek M. (2018) AMOchar: Amorphous manganese oxide coating of biochar improves its efficiency at removing metal(loid)s from aqueous solutions. *Science of the Total Environment*, Volume 625: 71-78
- Hudcová B., Vítková M., **Ouředníček P.**, Komárek, M. (2018) Stability and stabilizing efficiency of Mg-Fe layered double hydroxides and mixed oxides in aqueous solutions and soils with elevated As(V), Pb(II) and Zn(II) contents. *Science of the Total Environment*, Volume 648: 1511-1519
- Ouředníček, P.**, Hudcová B., Trakal L., Pohořelý M., Komárek M. (2019) Synthesis of modified amorphous manganese oxide using low-cost sugars and biochars: Material characterization and metal(loid) sorption properties. *Science of the Total Environment*, Volume 670: 1159 – 1169

## Grants and projects

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- Principal investigator on grant: Development and production of innovative materials from waste products for stabilization of metals and metalloids: A comprehensive experimental and model approach  
*CIGA 20174204 (Czech University of Life Sciences)*
- Principal investigator on grant: Modelling transport of Zn through the soil profile using laboratory columns  
*IGA 20174242 (Czech University of Life Sciences)*
- Investigator on project: Ministry of Education, Youth and Sports of the Czech Republic (projects no. CZ.07.1.02/0.0/0.0/16\_040/0000368 and CZ.02.1.01/0.0/0.0/16\_026/0008403)
- Investigator on project: Ministry of Education, Youth and Sports of the Czech Republic (COST CZ LD13068) and the Czech Science Foundation (GAČR 14-02183P)

## Teaching activities

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- Environmental Soil Chemistry – laboratory course
- Environmental hydrogeology
- Workshop for EGS (HYDRUS and PHREEQC modelling)
- Field Practise for EGS – laboratory course
- Supervision of 4 bachelor theses
- Consultant of 5 master theses

## Voluntary and other activities

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- Representative of the Czech Republic in rowing 2007 - 2021 (national champion, academic champion of the Czech Republic, participant of the European and World Rowing Championships)
- European Champion and Vice-Champion in indoor rowing (2020)
- World record holder on the indoor rowing machine in the 24-hour race (2021)