Filip Strniša

Born: 29 November 1991
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EDUCATION

University of Ljubljana, Faculty of Chemistry and Chemical Technology, Ljubljana, Slovenia

- *Chemical sciences*, 3rd Bologna cycle — 2016 – 2021 (projected)
  - Stream: Chemical engineering
  - First enrolled: 2016/2017
  - PhD adviser: Prof. Dr. Igor Plazl
- *Chemical engineering*, 2nd Bologna cycle — 2014 – 2016
  - Master's dissertation title: *Uporaba mrežne Boltzmannove metode za modeliranje transportnih pojavov v mikrofluidnih napravah; The use of the lattice Boltzmann method for modelling of transport phenomena in microfluidic devices*
- *Chemical engineering*, 1st Bologna cycle — 2010 – 2014
  - Bachelor's dissertation title: *Mezo nivo modeliranja procesov v mikrosistemih; Mesoscale modeling of processes in microsystems*
  - One year ERASMUS exchange (10 months) at *Friedrich-Alexander-Universität Erlangen-Nürnberg*, Erlangen, Bavaria, Germany, 2011 – 2012

The Prague British School, Prague, Czech Republic

- International Baccalaureate Diploma Programme — 2008 – 2010

Gimnazija Novo mesto, Novo mesto, Slovenia

- Slovenian high school programme — 2006 – 2008

WORK EXPERIENCE

"Jožef Stefan" Institute, Department of Communications Systems, Ljubljana, Slovenia

- Research assistant, Parallel and Distributed Systems Laboratory — 2020 – present

University of Ljubljana, Faculty of Chemistry and Chemical Technology, Ljubljana, Slovenia

- Young researcher, Chair of Chemical Process, Environmental and Biochemical Engineering — 2016 – 2020
  - Professional training: COST-STSM — Institute of Biotechnology and Biochemical Engineering, Technische Universität Graz, Styria, Austria, Supervisor: Prof. Dr. Bernd Nidetzky, February – April 2017 (8 weeks)
  - Professional training: COST-STSM — Biocatalysis Centre, University of Exeter, England, United Kingdom, Supervisor: Prof. Dr. Jennifer Littlechild, October 2017 (2 weeks)
  - Teaching assistant: *Bioprocess engineering* (2016/2017 — 2019/2020), *Biotransformations* (2017/2018), *Biotechnology* (2017/2018, 2018/2019), and *Chemical process design* (2019/2020)
  - Voluntary teaching help: *Numerical methods* (2016/2017 — 2018/2019)

SELECT BIBLIOGRAPHY

SCIENTIFIC PAPERS

[1] F. Strniša, M. Bajić, P. Panjan, I. Plazl, A. M. Sesay, P. Žnidaršič-Plazl, "Characterization of an enzymatic packed-bed microreactor: Experiments and modeling," *Chemical Engineering Journal*, 350, 2018

[2] F. Strniša, T. Urbic, I. Plazl, "A lattice Boltzmann study of 2D steady and unsteady flows around a confined cylinder," *Journal of the Brazilian Society of Mechanical Science and Engineering*, 42 (2), 2020

[3] F. Strniša, P. Žnidaršič-Plazl, I. Plazl, "Lattice Boltzmann modeling-based design of a membrane-free liquid-liquid microseparator," *Chemical and Biochemical Engineering Quarterly*, 34, 2020

[4] F. Strniša, V. S. Tatiparthi, P. Djinović, A. Pintar, I. Plazl, "Ni-containing CeO_2 Rods for Dry Reforming of Methane: Activity Tests and a Multiscale Lattice Boltzmann Model Analysis in Two Model Geometries," *Chemical Engineering Journal*, 413, 2021

AWARDS & SCHOLARSHIPS

- Best decision making hack, Dragonhack — 2015
  In team "Pirček", with teammates Nejc Radež and Gašper Simonič
- Zois scholarship — 2006 – 2012 and 2013 – 2014

LANGUAGES

- Slovenian: native speaker
- English: C1
- German: B2
- Czech: A1

SKILLS & RESEARCH INTERESTS

C/C++, CUDA, OpenMP, OpenCL, Python, Jupyter, LaTeX, Ubuntu, FORTRAN, MS/Libre Office, ParaView, lattice Boltzmann method, fluid mechanics, transport phenomena, microreactor technology, microfluidics

HOBBIES

Triathlon, having a dog, mountain/trail running, MTB/road cycling, swimming, playing guitar, music