Ivan Pribec

PERSONAL DATA

Place and date of birth:	Batemans Bay, Australia 21 August 1992
Nationality:	Slovenian & Australia
Phone:	+386 40 884 565
Email:	ivan@pribec.si / ivan.pribec@tum.de

EDUCATION

Oct. 2014 – May 2017	 University of Ljubljana, Ljubljana Master's degree in chemical engineering Thesis: The description of chemical reactions with the lattice Boltzmann method Advisors: Prof. Dr. Igor Plazl & Prof. Dr. Tomaz Urbic GPA: 9.71/10 Received award certificate for study achievements in year 2014/15
Sept. 2015 – Mar. 2016	 Friedrich-Alexander Universität Erlangen-Nürnberg, Erlangen Erasmus+ exchange semester Finished courses in Numerical fluid mechanics, Multi-scale simulations methods and Basics in computational materials science
Oct. 2011 – Sept. 2014	 University of Ljubljana, Ljubljana Bachelor's degree in chemical engineering Thesis: <i>The photocatalytic oxidation of water</i> Advisor: Prof. Dr. Radovan Stanislav Pejovnik GPA: 9.88/10 Received award certificate for study achievements in years 2011/12 and 2012/13
July 2014 (2 weeks)	University of Crete , Heraklion Erasmus Intensive Training Programme – <i>Bioinspired Materials for Solar</i> <i>Energy Utilization</i>
Sept. 2007 – July 2011	 Gimnazija Koper, Koper Matura Final grade: 29/34 Competed in math, physics, chemistry and English language competitions at the regional and national level

RESEARCH EXPERIENCE

June 2017 – Present	Technical University Munich, WZW, Freising
	Researcher at Chair of Brewing and Beverage Technology
	• Modeling and simulation of food and beverage related processes
	using the lattice Boltzmann method
	Development of meshless lattice Boltzmann method

Oct. 2016 – May 2017	 Jožef Stefan Institute, Ljubljana Student researcher at Parallel and distributed systems laboratory Finite element analysis of contact mechanics using FreeFEM Development of node cloud refinement routine for meshless PDE solver library in C++ Application of PDE solver to advection-diffusion problems
Mar. 2015 – July 2015	 Faculty of Chemistry and Chemical Technology, Ljubljana Student researcher in project "Utilization of computational tools for the design and optimization of processes in chemistry and chemical engineering" Finished weekly computational assignments exploring the use of numerical methods such as finite-difference and lattice Boltzmann methods for modeling and simulation of chemical reactors. Acquired skills in procedural programming in Fortran, scripting in Python as well as limited basics of OpenMP for parallel programming.

PRESENTATIONS

Pribec, I., Slak, J., Fattahi, E., Geier, D., Kosec, G., and Becker, T. (2018). A strong-from meshless lattice Boltzmann method. Lecture at conference Discrete Simulation in Fluid Dynamics 2018, Worcester, Massachusetts.

Pribec, I., Urbic, T., and Plazl, I. (2017). A lattice Boltzmann approach for bimolecular reactions. Lecture at conference Discrete Simulation in Fluid Dynamics 2017, Erlangen, Germany.

Pribec, I., Plazl, I., and Urbic, T. (2015). Simulation of reactive flows using the Lattice Boltzmann method. Poster presentation delivered at Implementation of microreactor technology in biotechnology : 3rd international conference, Opatija, Croatia.

Pribec, I., Urbic, T., and Plazl, I. (2015). Lattice Boltzmann investigation of chemical kinetics in microflow reactor. Lecture delivered at Flowing matter: applications, dissemination and outreach: international workshop, Sofia, Bulgaria.

Urbic, T., **Pribec, I.**, and Plazl, I. (2015). Chemical reactions in microflow reactor by Lattice Boltzmann method. Lecture delivered at 24th International Conference on Discrete Simulation of Fluid Dynamics, Edinburgh, United Kingdom.

CONFERENCE PROCEEDINGS

Pribec, I., Urbic, T., and Plazl, I. (2016). Modelling reaction-diffusion dynamics in microsystems. Poster presentation at 26th European Symposium on Computer Aided Process Engineering, Portorož, Slovenia. *Computer-aided chemical engineering*. Vol. 38, pages 1623-1628.

Pribec, I., Plazl, I., and Urbic, T. (2015). Modelling reaction-diffusion dynamics in microsystems with the lattice Boltzmann method. *Conference proceedings of Slovenian Chemical Days 2015*. Slovenian Chemical Society, Ljubljana.

LANGUAGES

Slovenian: native English: fluent/good knowledge Italian: basic knowledge German: basic knowledge (B1)

SKILLS

Programming: C++, Fortran, MATLAB/Octave, Python Text and graphics: Microsoft Office products, Latex Scientific software: FreeFEM, ParaView, gnuplot

INTERESTS AND ACTIVITIES

Book-binding, gardening, winemaking, olive tree cultivation, dry-stone retaining walls, reading, computational fluid dynamics, music, traveling