

## **Supervisor evaluation**

### **Student: Ing. Mgr. Vojtěch Bělohav**

Vojtěch Bělohav started his PhD studies at the Department of Process Engineering of CTU in 2016. The doctoral study is carried under a co-tutoring agreement with the Universitat Politècnica de Catalunya in Barcelona (UPC). As part of his studies under the contract, he worked on his PhD thesis at UPC from September 2017 to July 2018 under the supervision of Dr. Enrica Uggetti (please find enclosed supervisor evaluation).

The doctoral thesis was devoted to the study of the influence of design and process parameters on the production of microalgae in different photobioreactor concepts. Vojtěch has worked on many experiments on pilot-plant and laboratory-scale photobioreactors installed in the laboratories of the Environmental Engineering and Microbiology Research group of UPC and the Department of Process Engineering of CTU. The obtained experimental results were independently processed, evaluated, and interpreted so that they could be further used in mathematical and physical models of the studied processes and equipment. In addition to experiments, he also worked on CFD simulations of flow conditions in photobioreactors. He used the obtained knowledge to design device modifications to increase the yield of the processes with impact on their industrial application.

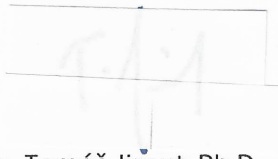
Vojtěch Bělohav elaborated his PhD thesis within his active involvement in the excellent research project OP RDE CZ.02.1.01/0.0/0.0/16\_019/0000753 - Research centre for low-carbon energy technologies. Vojtěch is the lead researcher in the field of CO<sub>2</sub> utilization in photobioreactors within this project. He has also been involved in several applied and contract research projects carried out at the Department of Process Engineering. In these projects, his main focus was on the design of hydraulic and diffusion separation equipment.

He regularly publishes and presents the results of his scientific research work at international professional forums. He is the main author or co-author of 13 articles in impacted journals and journals indexed in WoS and Scopus databases. It needs to be appreciated that whenever he completes a partial part of his scientific work, he is ready to actively present and publish these results. Moreover, Vojtěch presenting the results of his work at the international level within the framework of his active participation in many international professional conferences. Since the results of his thesis are applicable on an industrial scale, he is co-author of a utility model, which is currently being extended to the level of an international patent.

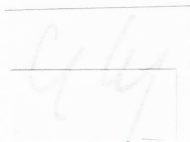
Vojtěch Bělohav has been very actively involved in teaching in both undergraduate and postgraduate studies at the Department of Process Engineering during his doctoral studies. Currently, he teaches courses in Momentum, Heat and Mass Transfer, Diffusion Separation Processes and Equipment, both in the Czech and English versions. He also leads experimental and design projects in postgraduate studies in both Czech and English versions. As a guarantor and

lecturer of these courses and as a head of the department, I must highly appreciate his active and innovative approach to teaching and his friendly but demanding approach to students. Vojtěch also regularly participates in the supervision of students and he already led successfully defended bachelor and master thesis.

Vojtěch Bělohav is now working at the Department of Process Engineering at the CTU as an assistant. Due to his excellent results of scientific research work and active involvement in R&D activities, teaching and other activities, he will continue his academic career at our department as a postdoctoral researcher after his successful thesis defense.



Prof. Ing. Tomáš Jirout, Ph.D.  
supervisor



Doc. Ing. Lukáš Krátký, Ph.D.  
co-supervisor