

Tutor's review of the course of study

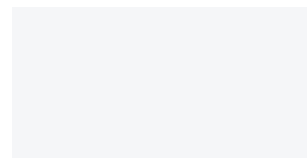
Dipl.-Ing. Christoph Pohl entered the full-time Ph.D study Oct 1, 2017. During his doctoral study he dealt with the topic of concrete degradation due to high temperatures and its numerical modeling. He covered the whole topic in a multidisciplinary way, where it was necessary to combine physical chemistry, nonlinear mechanics, transport processes, numerical methods and results from laboratory experiments. In all areas, he demonstrated good orientation, the ability to learn new things, absorb information from articles, discuss problems and think analytically.

During his doctoral studies, he was employed at Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, BAM) as a research assistant. This allowed him to receive funding, to work with co-tutor Dr.-Ing. Jörg F. Unger, to access experimental data from μ CT and to discuss several hypothesis with BAM staff. He participated in three courses devoted for Ph.D. students: Modeling of Localized Inelastic Deformation (2017 by Prof. M. Jirásek), Thermodynamics of Irreversible Processes in Material Systems (2018, Udine) and Workshop Data Analysis (2020, Berlin).

The doctoral study resulted in 4 conference papers, 1 invited lecture and 1 impacted article, published in *Materials* (80% contribution as the main author). He programmed from the scratch the whole multiphase coupled model within the FeniCS project. He spent considerable effort in model formulation, uncertainty quantification and numerical convergence. I have to acknowledge considerable effort of his co-tutor Dr.-Ing. Jörg F. Unger, who was supporting Dipl.-Ing. Christoph Pohl at BAM.

I wish Christoph a successful defense of his Ph.D. thesis.

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Doc. Ing. Vít Šmilauer, Ph.D., DSc.