Supervisor's opinion on the PhD. thesis "Composite Materials for Medical Application"

written by

Michal Machovský

submitted to the

Tomas Bata University in Zlin

Ing. Michal Machovský. studied Ph.D. programme "Technology of Macromolecular Substances" at the Faculty of Technology, TBU in Zlín, Czech Republic. Within his studies he has fulfilled all duties connected with the study programme and successfully passed the state exam in 2011. His work is focused on the development of novel materials on the base of zinc oxide fillers and hybrid Ag/ZnO fillers compounded with medical grade softened PVC as the model system for inorganic antibacterial polymer systems with the aim to obtain materials with a potential for being used in medicine.

The dissertation thesis consists of one already published original full length articles in the Materials Research Bulletin and three other manuscripts submitted to Crystal Growth and Design, Chemical engineering journal and Polymer composites. All these journals are relevant to the field of study and they are impacted and indexed by Thomson Reuters ISI Web of Science. Michal Machovský is the first author of three of the collected papers and his contribution to these publications was the most significant. His contribution to the last paper was important as well. All papers were written with a small number of co-authors. Besides the four papers included into the thesis, he is trhe co-author of eleven other already published articles in impacted journals. Mr. Machovský presented his results on international conferences with eighteen fulltext contributions in proceedings too. During his study at the TBU in Zlin, Mr. Machovský has demonstrated sufficient diligence, knowledge and effort necessary for successful fulfilment of the studied PhD. programme.

With regard to these facts and according to my opinion, the submitted dissertation work is well conceived and I recommend it to be defended and upon successful defence to award Mr. Bernal the degree Doctor of Philosophy (Ph.D.).

Assoc. Prof Ing. et Ing. Ivo Kuřitka, Ph.D. et Ph.D.

Supervisor

Zlín, 12.07.2013