Supervisor's opinion on the dissertation titled

"Development of polymer systems suitable for processing *via* advanced technologies of 3D printing and electrospinning"

written by

Ing. Lenka Vítková

The dissertation is written as collection of commented articles. The chosen form of the dissertation makes sense because the student has published 7 articles throughout her studies at Tomas Bata University in Zlin and 5 of them are the basis for the text of the dissertation. All papers were published in reputable impacted journals (for example: ACS Biomacromolecules, APL Bioengineering, Carbohydrate Polymers, etc.). As I write my supervisor's opinion, another article is being prepared based on the results obtained during her doctoral studies, but it will certainly be published after the defence.

Based on the above, it is not necessary for me to comment on the dissertation thesis as such because all articles have been thoroughly reviewed by referees. However, what I would like to comment on is the activities of the PhD student during her studies. I am pleased to say that as a supervisor I played a role more as a satisfied observer of how Lenka Vítková performed throughout her study. Perhaps sometimes I slightly corrected the paths she took. However, Lenka Vítková was so creative and independent that in 4 years of study she grew into a quality scientist who will do honor to our Alma Mater in the spirit of the university motto "Erudire et creare". It can be said that she has outgrown her supervisor thanks to her hard work and thorough study. Unfortunately, at Tomas Bata University in Zlín, we do not have the possibility to gain "Suma cum laude" status for high quality of dissertation. If this were this case, then I am quite sure that Lenka Vítková would certainly deserve this evaluation.

Finally, it is perhaps worth mentioning that the PhD student has obtained a postdoctoral position at Queen's University in Kingston, Canada (with Professor Kevin De France - Department of Chemical Engineering). In the light of these facts, I certainly recommend the dissertation for defence and I believe that both the opponents and the members of committee for the dissertation defence will certainly agree that Lenka Vítková should be awarded the degree of Ph.D., i.e. *Philosophie Doctor*.

In Zlín, on 3rd June 2023

prof. Mgr. Aleš Mráček, Ph.D.

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