

Supervisor's opinion on the Ph.D. thesis  
**“Preparation and characterization of nanocomposite  
thin films for polymer electronics”**

written by

**Bitá Ghasemi**

submitted to the

**Tomas Bata University in Zlín**

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Bitá Ghasemi studied Ph.D. programme 'Nanotechnology and Advanced Materials' at Tomas Bata University in Zlín, Czech Republic. During her studies, she fulfilled all duties connected with the study programme and successfully passed the state doctoral exam in 2022. Her dissertation work is focused on the preparation and characterization of polymer and nanocomposite thin films, study of the structural ordering of the polymer chains in the films. A significant scientific contribution is the exploration of how the disorder influences the room temperature photoluminescence emission and what impact it has on the electroluminescence and other properties of polymer LEDs made from these films. The results of these studies have been embodied in one already published work and one manuscript which is under second stage of review (revisions submitted). The results were also published on two international conferences.

Bitá Ghasemi is an author or co-author of two other publications listed in WoS. She also has active experience from other active presentations at scientific conferences. Her Google Scholar Profile can be found at <https://scholar.google.com/citations?user=SbPlvcEAAA&hl=cs&oi=ao>.

Bitá also spent two weeks at the Faculty of mathematics and Physics, Charles University in Prague under the supervision of Assoc. Prof. Jana Toušková and Asso. Prof. Jiří Toušek in 2022 and three months at the University of Edinburgh, School of Engineering under the supervision of Prof. Tayebbeh Ameri in 2023.

As mentioned above, the dissertation thesis is based on one published, one submitted original full-length article at the stage of submitted revisions and two conference contributions. The journals (Polymers and Applied Surface Science) are relevant to the field of study and are impacted and indexed by Thomson Reuters ISI Web of Science. Bitá Ghasemi is the first author of these papers and conference presentations, and her contribution to these publications was the most significant. Therefore, the body of the Thesis consists of parts potentially indicated by similarity analysis in anti-plagiarism text-checking systems. It must be emphasized that no plagiarism was detected and any scores in similarity goes on the account of properly cited original works of the author or properly cited references to the works of other authors or on the very general minor inevitable similarities, e.g. citations in the Bibliography.

To summarize, during her study at the TBU in Zlín, Bitá Ghasemi has demonstrated sufficient diligence, knowledge and effort necessary for the successful fulfilment of the studied Ph.D. 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, Bitá Ghasemi will be awarded the Doctor of Philosophy (Ph.D.) degree.

Zlín 23<sup>rd</sup> February 2024

prof. Ing. et Ing. Ivo Kuřitka, Ph.D. et Ph.D.  
Supervisor