

7/24/2022

To:

Prof. Dr. Martin Kubala, Ph.D.  
Dean of Faculty of Sciences  
Palacký University in Olomouc  
Olomouc, Czech Republic

Dear Dr. Kubala,

I am writing this letter to convey my extremely strong support for Dr. Vit Stranak's application for the full professorship at Palacký University in Olomouc, the Czech Republic. This recommendation is based on my scientific collaboration with Dr. Stranak since 2015.

I have known Vit for several years, beginning when we began collaborating and prepared and subsequently carried out the joint project NATO AWARD G5147, "Ultra sensitive opto-electrochemical detection of liquid explosives fabrication." I acted as a principal investigator of the project consortia consisting of teams from different universities worldwide (Ohio State University, Caltech, Gdansk University of Technology, University of Oulu, South Bohemia University, Hebrew University Jerusalem, and Military University of Technology Poland). Vit was a co-PI at the University of South Bohemia University team. Hence, I know him from numerous online meetings, discussion sessions as well as personal meetings hosted by Prof. William A. Goddard at the Caltech in Pasadena, California. The contribution of Vit's teams to the project was significant; he regularly joined online and personal meetings and carried out an important part of the project research. The project, after its termination, was evaluated by the commission as excellent which encouraged us to continue in our joint research and to apply for another collaborative project (project application is under preparation).

Vit devotes his scientific interest to materials research. In particular, he focuses on functional films and nanoparticle-based surfaces preferentially prepared by plasma-assisted methods. He performs investigations on the border of advanced material science, physics, and biochemistry, which deals with the preparation of novel, nanostructured, functional surfaces with possible and preferential application in biotechnology. I had a chance to attend Vit's talks given at Caltech showing his wider research activity. He is an author and co-author of many pioneering works for the controlled and optimized growth of nanoparticles prepared by gas aggregation techniques and highly engineered nanostructured surfaces. These works have proven both valuable and interesting and have had a strong impact on the community. In addition to their scientific impact, they have been central in many technological applications e.g. active surfaces of sensors. This concept developed by Vit was also utilised for the joint project where systems of boron-doped nanodiamonds with protective nanostructured and corrosion-resistant ZrN film were used as a concept for the detection of explosives. These were mainly prepared by Vit's team in collaboration with the team led by Professor Robert Bogdanowicz at Gdansk University

of Technology. This project highlights the intensive international collaboration of Vit and his ability in bridging interdisciplinary and multinational team efforts.

The above is based on my personal experiences, which I have received during my collaboration with Vit. I have learned about his further achievements from his CV and his early track report. I consider them as excellent in both research and teaching contributions. Overall, Vit has been highly prolific in his scientific work. He is the author/co-author of 75 publications in high-impact journals, a book chapter, and regularly presents achieved results at well-recognized international conferences. His works have been cited more than 1300 times in total, and his current h-index is 21. He has also been productive in applied research, and is a co-author of 6 patents, 8 utility models and 5 functional models. In teaching, Vit has nearly twenty years of teaching experience, which trains graduates in preparation for his “own” courses interfacing with his research interests. He has also built a laboratory and team from the ground-up, being financially supported by external grants, enabling him to work as an independent researcher following his own scientific path. His publications are of high quality and are highly cited. In my opinion, Vit Stranak has achieved all the requirements and is an excellent candidate for the full professorship position. I give my strongest recommendation to his application and I fully support his candidacy.

Sincerely yours,

Marc Bockrath  
Professor of Physics  
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