

Linköping, 03/08/2022

Letter of Recommendation

I am pleased to add my support to the nomination of Dr. Vitezslav Stranak for a professorship in the field of Applied Physics at the University of South Bohemia, Czech Republic. As a fellow researcher in the field of High Power Impulse Magnetron Sputtering (HiPIMS), I can attest to his great scientific achievements in plasma and coatings physics. For the last 15 years Dr. Stranak has been at the forefront of international research efforts within the joint fields of applied plasma physics, surface engineering and biochemistry to develop nanostructured surfaces. His work has been, and remains, highly original and always at the cutting edge, particularly his contributions on the deposition of thin antibacterial Ti-Cu surfaces for hip-joint implant coatings, which also involved developing a novel dual-HiPIMS deposition system. In addition to developing new coatings and new plasma-assisted deposition systems, he has also been a great driving force in developing and applying plasma diagnostics, which is needed to better understand the fundamental mechanisms in these processes. These are some of the most important papers produced to date, informing new research directions, and stimulating co-workers and the world-wide magnetron/HiPIMS community alike. These works also show that Dr. Stranak clearly has the capacity to combine in-depth knowledge in materials science as well as in applied plasma physics, which is rare in our field.

Dr. Stranak has a good publication track record including authorship of one book chapter and about 75 peer-reviewed journal papers in physics and material science (h-index 21, over 1300 citations). His work has also resulted in six patents within new deposition technology, plasma diagnostics, and thin films.

Dr. Stranak has an extensive network of colleagues and co-workers world-wide, which has strengthened through several international fellowships (Austria, Germany, and Poland). He is regularly invited to speak at top international conferences (about 40 oral presentations so far and nine invited talks). He has also made important contributions to the organization of conferences, such as the International Conference on Metallurgical Coatings and Thin Films (ICMCTF) in the US, where he has been a symposium chair for the last five years. He is furthermore a member of the Czech Physical Society and elected member of the advisory board in the Czech Vacuum Society.

In conclusion, his contribution to plasma science has been exemplary. He is well-known within the community, a natural leader, and an excellent plasma experimentalist. I wholeheartedly recommend him for a professorship in the field of Applied Physics.

Sincerely yours,

Daniel Lundin
Guest Professor, Linköping University