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Subject reference for dr. B. Stasicki
Our reference



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prof. Wiera Oliferuk
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Dear professor Oliferuk,

Please find below my assessment of the scholarly achievements of dr. Boleslav STASICKI.

I have known dr. Stasicki since 1996, when I started to participate in the annual course on particle image velocimetry at the DLR in Goettingen, Germany, where dr. Stasicki also participates. Also, I have met him at several international conferences and workshops, where I could also follow his career. We have neither published any scientific work together, nor participated in any common project. The only formal relation was through the PivNet EU-network; this was a network activity that ran from 1995 till 2003 and that involved more than 40 European institutes. Hence, I do not see any conflict of interest that would prevent me from writing a reference on behalf of dr. Stasicki.

I have studied the material that was presented to me on the scientific achievements of dr. Stasicki, since obtaining his Ph.D.

Dr. Stasicki has a broad background in experimental methods in aerodynamics. His early work involved the development of measurements probes that could resolve the flow direction and that could be applied to low speed flows and to flows that are not unidirectional. Later in his career he developed novel methods for high-speed and ultra-high-speed photography and videography.

The research field of dr. Stasicki is very well chosen. High-speed photography and high-speed videography provide information on fast and ultra-fast events that otherwise cannot be observed. This has led to fundamental understanding of many practical problems in various domains of research. This also particularly holds for aerodynamics, where complex phenomena occur. The fact that a scientist can first observe such phenomena makes it possible to classify the problem at hand and to determine the right strategy for further research.

Dr. Stasicki has been, in my perception, one of the pioneers in this field. He has developed novel concepts in illumination technology, using LED light sources, many years before such approaches became commonplace. Also, his design of an ultra-high-speed camera system had been unique for many years, and has been the inspiration of other developments.

The field of ultra-high-speed photography and videography brings together many different disciplines, such as optics, control and electronics. It is essential that such expertise is available within a single person, as is the case of dr. Stasicki. Furthermore, to make such a system work, that is a system of which no prototype yet exists, requires an academic approach that is capable of combining all the expertise.

I would qualify the achievements of Dr. Stasicki as unique in its kind. The field of high-speed-videography is primarily on an academic engineering level. This also means that the achievements of the research is mainly documented in patents and in conference proceedings, rather than in a very large number of scientific publications. The patents filed by dr. Stasicki are impressive. Thus, I rate the number of publications in accordance with a scientist that is active as an academic engineer. Such a qualification is common in my institution for researchers at a similar level in their career. I would like to add however, that the developments of scientific equipment by him

have always been done in close collaboration with other scientists. Hence, the developments have clearly been driven by the applications at hand.

Dr. Stasicki has achieved a significant impact in the research field. I should actually note that there are only few people in the world who have such an expertise. The research is of a highly specialized nature, which means that the area of direct impact is limited. However, the area of applications for ultra-high-speed videography are widespread; in recent years we have seen an substantial expansion of new technology and an interest for high-speed videography as a results of inexpensive hardware that becomes available for the consumer market. Yet, the work of dr. Stasicki has been influential. Also, his patented technologies have also found their way to commercial activities and products. However, the prime focus has been the academic challenges.

I would like to add that currently a review on high-speed photography and ultra-high-speed videography is in preparation for Experiments in Fluids. In this work, the author highlights the achievements and pioneering efforts of Dr. Stasicki in the field.

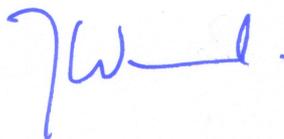
Dr. Stasicki has also obtained experience with teaching and supervision of students. However, given his position at DLR rather than at a university, it cannot be expected that this number os very high. Through the DLR courses I know Dr. Stasicki as an enthusiastic and careful instructor. His explanation and demonstrations of ultra-high-speed videography are very well appreciated. In his documentation I also found that he has supervised a number of students or was partly involved as a co-supervisor.

In conclusion, I think that dr. Stasicki has demonstrated to be world leading in the area of the development of ultra-high-speed videography, where he has been responsible for many innovations on an academic engineering level, enabling scientific progress in many areas. He has also demonstrated his academic skills in teaching and supervision of students. His innovations have also led to several patents.

With his work Dr. Stasicki has significantly contributed to the field of knowledge in the technical sciences and electronics.

Please do not hesitate to contact me if you require further information.

Sincerely,



Prof.dr.ir. J. Westerweel
Chair of Fluid Mechanics