

# Reviewer's Assessment of the Competencies for Professor Appointment

**Applicant's Name:** Associate Professor Radoslav Paulen, PhD.

**Applicant's Affiliation:** Institute of Information Engineering, Automation, and Mathematics,  
Faculty of Chemical and Food Technology, Slovak University of Technology in  
Bratislava (FCFT STU), Radlinského 9, 812 37 Bratislava, Slovak Republic

**Field of the Habilitation and Inauguration Proceedings:** Automation

**Reviewer's Name:** Professor Alena Kozáková, PhD.

**Reviewer's Affiliation:** Institute of Automotive Mechatronics, Faculty of Electrical Engineering and  
Information Technology, Slovak University of Technology in Bratislava,  
Ilkovičova 3, 841 04 Bratislava, Slovak Republic

## **Brief summary of application material submitted:**

- Appointment as reviewer in Inauguration Proceedings by Prof. Anton Gatjal, DrSc., dean of FCFT STU in Bratislava, ref. No. 2427/2026, dated March 5, 2026.
- Attachments to the candidate's application: Professional CV, Fulfillment of mandatory and additional criteria, Overview of educational activities, Overview of educational and scientific research activities, Scientific and educational profile (VUPCH), Overview of citations of scientific papers, List of publications, Collection of 10 selected scientific papers, List of successfully defended graduates' final theses supervised by the applicant, Overview of supervised doctoral students, Overview of completed research projects.

### **1. Overall assessment of the applicant**

Associate Professor Radoslav Paulen, PhD. received the MSc. and PhD. from the Faculty of Chemical and Food Technologies of the Slovak University of Technology in Bratislava (FCFT STU) in 2008 and 2012, respectively, graduating with honours from all degrees of his studies. Already as a student, he completed several internships and study abroad programs (University of Lorraine in France, NTNU Trondheim, Norway, and Imperial College London, UK). During 2012-2017, he spent five years at TU Dortmund, Germany as a postdoctoral research fellow. Since 2017, he has been Associate Professor at the Institute of Information Engineering, Automation, and Mathematics at FCFT STU in Bratislava, currently being deputy head of the Department of Information Engineering and Process Control.

His field of research is Process Control with a focus on estimation and optimal control of nonlinear dynamic systems with applications in chemical and biochemical processes, in particular guaranteed and statistical system identification and parameter/state estimation, dynamic optimization, global optimization, and predictive control.

Outstanding academic achievements combined with his experience in cooperation within several international research teams have laid a strong foundation for his successful professional career and established a long-term international collaboration.

### **2. Educational activities**

Associate Professor Paulen has substantial and focused experience in teaching and mentoring students in the field of automation and process control. His wide-ranging teaching activities cover both fundamental and advanced topics, as well as the theoretical and practical aspects of automation, thus enabling to prepare broadly oriented graduates for both professional practice and research. At FCFT STU, he has taught several courses covering both theoretical and practical aspects of automation (control theory, identification, modelling and simulation, process control, predictive control as well as industrial information systems, and operation systems). During his postdoc fellowship at TU Dortmund, he taught

courses on process optimization, process performance optimization, batch process operations, and process dynamics and control.

Mentoring activities of the applicant involve primary supervision of 21 final theses including 14 diploma theses, as well as supervision of a total of 4 doctoral students, one of whom successfully completed his study in 2023. Such extensive teaching activity demonstrates applicant's ability to effectively impart knowledge and support student development at all stages of their academic education.

Assoc. Prof. Paulen has also contributed to the development of teaching materials for the courses taught. He created and provided e-learning materials for a total of 10 courses thus contributing not only to the education of students but also to the overall improvement of teaching at FCFT STU.

### **3. Research and scientific activities**

Applicant's research activities at his workplace at FCFT STU are strongly based on a teamwork within his research group, as well as on cooperation with five major industrial companies in Slovakia. Topics of the long-term international collaboration include membrane process control (collaboration with Corvinus University Budapest, Hungary), control of polymerization reactors (collaboration with University of Lorraine, France), various approaches of advanced estimation and control (collaboration with TU Dortmund, Germany; Imperial College London, UK; ShanghaiTech University, China; IMT School for Advanced Studies Lucca, Italy; University of Pisa, Italy). The results of the joint research published in leading academic journals (30 CC journal publications) and presented at major international conferences (67 conference papers) are characterized by innovation, high theoretical standard, as well as practical focus. The impact of his research findings is evidenced by 371 SCI citations.

Throughout his professional career to date, Assoc. Prof. Paulen was principal investigator of 6 domestic projects (2VEGA, 2APVV, 2VAIA) and 3 international projects (DAAD, Erasmus+, H2020) and a research team member in 15 domestic projects and 4 international projects (ERC, EU FP7, NIL and Horizon).

Associate Professor Radoslav Paulen, PhD. is an internationally recognized expert in the field of process control as evidenced by peer-review work for leading scientific journals and at global automation events. He significantly exceeds the publication criteria for a professor, particularly in terms of high-impact journal publications and an exceptionally high citation impact. For his excellent results he received the STU Rector's Award – Scientist of the Year: Young Researcher 2017.

### **4. Conclusion**

The results of Associate Professor's Paulen scientific research and his work demonstrate that he is a versatile, open-minded, and internationally recognized scholar able to combine theoretical knowledge with practical application and possessing great potential for further development.

Based on the submitted documentation and the criteria for appointment as professor set forth in the relevant regulations, I conclude that Associate Professor Radoslav Paulen, PhD. fully meets and even exceeds all mandatory and supplementary requirements. I recommend to appoint him as a professor in the field of the habilitation and inauguration proceedings "Automation".

April 15, 2026