

Curriculum vitae: prof.Ing. Radislav Šmíd, Ph.D.

Department of Measurement, Faculty of Electrical Engineering, Czech Technical University in Prague (CTU), Czech Republic

Born 13.12.1969, Professor (23.5.2019), Associate Professor (29.6.2005), Head of Laboratory for Diagnostics and Non-destructive testing, Deputy Head of the Department.

Education:

- Ph.D. Measurement Technology, Czech Technical University, 2000
- Ing. (M.Sc.) Electrical Engineering, Czech Technical University, 1993

Research stays abroad: Technical University Ilmenau, Mikrosystem GmbH, Germany, 1995-96

Teaching: Diagnostics and Testing, Data Acquisition and Transfer

Research projects (principal investigator):

- Advanced fault detection in DC power networks of electric aircraft, Coordinator: Eaton Elektrotechnika s.r.o., CL01000022 (2024-2026) Technology Agency of the Czech Republic

Research projects (mentor):

- Structural health monitoring of aircraft structures using wireless transmission, Coordinator: VZLU, TQ15000233 (2025 - 2026) Technology Agency of the Czech Republic

Past research projects (principal investigator):

- System for Early Prediction of Failure Modes of Electro-mechanical Actuators for Aerospace, Coordinator: Honeywell International s.r.o., TH04010237 (2019-2021) Technology Agency of the Czech Republic,
- Protection against Electrical Arc and Fire Prevention, Coordinator: Eaton Elektrotechnika s.r.o., project EG15_019/0004685 (2017-2019) Ministry of Industry and Trade
- Intelligent industrial system for automated testing of train wheels, Coordinator: STARMANS electronics, s.r.o., project TA02010733 (2012-2015) Technology Agency of the Czech Republic,
- Automated data analysis of air handling unit in commercial buildings towards quality evaluation and estimation of missing sensors values, partner: Honeywell, spol. s r.o., project TA03020284 (2013-2015) Technology Agency of the Czech Republic
- Arrowhead, (2013-2017), ARTEMIS JU Project, EU

Other projects: Grant Agency of the Czech Republic - project GP102/01/D086 (2001), FRV 2601/F1 (2005) and FRV F1a 2303 (2010) University Development Fund. Co-worker: Grant Agency of the Czech Republic - project 102/01/1355, EU Leonardo da Vinci project: Modular Courses on Modern Sensors, Transdisciplinary Biomedical Engineering Research (Ministry of Education of the Czech Republic), Research of Methods and Systems for Measurement of Physical Quantities and Measured Data Processing, Research (Ministry of Education of the Czech Republic).

Reviews: Referee for impacted journals: IEEE Transactions on Instrumentation and Measurement (IEEE), Measurement Science and Technology (IOP), Computer Standards and Interfaces (Elsevier), NDT & E International (Elsevier), Journal of Mechanical Science and Technology (Springer), Composites Part B: Engineering (Elsevier), IET Science, Measurement and Technology (IET), IET Signal Processing (IET), book proposal reviews for John Wiley & Sons, Ltd.

Member of Editorial Review Board: International Journal of Interdisciplinary Telecommunications and Networking, Associate editor of Acta Avionica (2014-2017).

Societies: Member of IEEE, member of Czech National Committee IMEKO (International Confederation of Measurements), member of the International Society for Condition Monitoring.

Organizing Committees: Member of Organizing Committee of Eurosensors2002 Conference (2002), Member of Organizing Committee of 4th International Conference on Advanced A/D and D/A Conversion Techniques and their Applications, 7th European Workshop on ADC Modelling and Testing (2002), Structured session organizer at CM MFPT 2010-2018.

Program Committees: Chairman of International Program Committee - Measurement of Speech and Audio Quality in Networks (2003-2010), Member of International Scientific Advisory Committee of CM MFPT (2010-2019), Member of International Scientific Advisory Committee of World Congress on Condition Monitoring (2017, 2019).

Chairman of the Branch Board: Air Traffic Control within the PhD Study Program: Electrical Engineering and Information Technology at Faculty of Electrical Engineering, CTU (2012-), Aeronautical and Space Engineering at Faculty of Electrical Engineering, CTU (2019-).

Member of the Branch Board:
Electrical Engineering and Communications
Applied Physics

Member of the Scientific Council of the Faculty of Aeronautics at Technical University of Kosice (2013-2017, Slovak republic).

H-index: 11 (VVVS – based on Web of Science data, auto-citations excluded), 11 (Scopus),

Selected publications:

Mekhalfia, M.L.; Procházka, P.; Šmíd, R.; Bonello, P.; Russhard, P.; Maturkanič, D.; Mohamed, M.E.; Tchuisseu, E.B.T. Electromagnetic Excitation for Blade Vibration Analysis in Static Conditions: Theoretical Insights and Experimental Evaluation, IEEE Transactions on Instrumentation and Measurement. 2024, 73 1-8. ISSN 0018-9456.

Šmíd, R. Digital twin for condition monitoring of actuators, In: Nineteenth International Conference on Condition Monitoring and Asset Management. Northampton: British Institute of Non-Destructive Testing, 2023. Invited lecture.

Fidra, O.; Šmíd, R. High-Speed Eddy Current Detection of Welding Artifacts, In: IEEE EUROCON 2023 - 20th International Conference on Smart Technologies. Piscataway: IEEE, 2023. p. 707-711.

Hanuš, O.; Šmíd, R. Non-intrusive Current-based Fault Detection of Electro-mechanical Actuators with Brushed DC Motors, Metrology and Measurement Systems. 2022, 29(3), 505-523. ISSN 0860-8229.

Horyna, V.; Hanuš, O.; Šmíd, R.: Virtual Mass Flow Rate Sensor Using a Fixed-Plate Recuperator In: IEEE Sensors Journal. 2019, 19(14), 5760-5768. ISSN 1530-437X.

Kreibich, O. - Neužil, J. - Šmíd, R.: Quality-Based Multiple Sensor Fusion in an Industrial Wireless Sensor Network for MCM In: IEEE Transactions on Industrial Electronics. 2014, vol. 61, no. 9, p. 4903-4911. ISSN 0278-0046.

Neužil, J. - Kreibich, O. - Šmíd, R.: A Distributed Fault Detection System based on IWSN for Machine Condition Monitoring In: Industrial Informatics, IEEE Transactions on. 2014, vol. 10, no. 2, art. no. 6661382, p. 1118-1123. ISSN 1551-3203.