Curriculum Vitae — Miroslav Fikar

Education

- Slovak University of Technology in Bratislava, Czechoslovakia, 1989: Ing. (MSc)
- Slovak University of Technology in Bratislava, Slovak Republic, 1994 : Dr. Ing. (PhD) (Control of Multivariable Systems. Parametrisation of all Stabilising Controllers)
- Slovak University of Technology in Bratislava, Slovak Republic, 2000: Doc. (Assoc. Professor) (Control of Processes in Chemical Technology Subject to Constraints)
- Slovak University of Technology in Bratislava, Slovak Republic, 2007: Prof (Optimal Constrained Process Control)
- Slovak University of Technology in Bratislava, Slovak Republic, 2009 : DrSc (Optimal Control of Processes with Constraints)

Positions

- 1990 1994 : Assistant lecturer at FCT STU, Bratislava
- 1994 1999: Assistant professor at FCT STU, Bratislava
- 2000 2006: Associate professor at FCFT STU, Bratislava
- 2007 -: Professor at FCFT STU, Bratislava
- 2003 2018: Head of the Department of Information Engineering and Process Control at FCFT STU, Bratislava
- 2006 2019: Director of Institute of Information Engineering, Automation, and Mathematics at FCFT STU, Bratislava
- 2019 2021: Rector, STU, Bratislava
- 1991 1992 : Research at TU Denmark, Lyngby with Prof. S. B. Jorgensen Multivariable constrained predictive control (6 months)
- 1994 1995, 1996: Research at TU Dortmund, Germany with Prof. S. Engell Predictive control, experimental pH control (6 months, 1 month)
- 1996 : Research at ENSIGC Toulouse, France, with Prof. K. Najim Predictive control based on neural networks (1 month)
- 1996 1997: Post. doc. position at LSGC Nancy, France with Dr. M. A. Latifi (CNRS) and Dr. Y. Creff (Elf Aquitaine) Dynamic optimisation and sensitivity analysis of a multi-component distillation (1 year)
- 1998 : Visiting scientist at ETH Zurich, Switzerland with Prof. M. Morari Stability of predictive control (1 month)
- 1999 2000: Alexander von Humboldt Fellow at Ruhr-University Bochum, Germany with Prof. H. Unbehauen Predictive control (1 year)
- 2001 2002: Research at at LSGC Nancy, France with Dr. M. A. Latifi (CNRS) Dynamic optimisation, wastewater treatment (6 months)
- 2004 : Visiting scientist at IST Stuttgart, Germany with Prof. F. Allgower Stability of predictive control (1 month)

Research Interests

- Control (predictive, optimal, adaptive, algebraic, constrained)
- Identification
- Optimisation (static, dynamic)
- Modelling (chemical processes: wastewater, distillation, neutralisation, membrane processes)

Skills

- Programming languages: C/C++, FORTRAN, Basic, Pascal, Python
- Simulation languages: MATLAB/Simulink
- SysAdmin for: Linux, Windows
- WebAdmin for: Moodle
- Languages: Slovak, English(o/w), German(o/w), French(o/w), Russian(o), Spanish(intermediate)

Others

- Married, 2 sons (twins)
- Representative in IFAC (International Federation of Automatic Control) for Slovak Republic (2009-)
- Member of EFCE (European Federation of Chemical Engineers), Working Party on Computer Aided Process Engineering CAPE-WP (2018-)
- Member of EUCA (European Control Association) Council, representative for Slovak Republic (2005-2013)
- Member of the Learned Society of Slovakia (2021-).
- Member of the Slovak committee for scientific degrees (2021-).
- Member of the Accreditation Commission: head for 16: information sciences, automation, and telecommunications, member of 24: mathematics and statistics (2016-2019).
- Chair of the committee for doctoral dissertations (DrSc) in subjects: 020217 measurement techniques, 020218 metrology, 020302 applied informatics, 020309 software engineering, 020310 artificial intelligence, 020311 information systems, 020313 process control, 020314 robotics, 020315 cybernetics (2010-2020)
- Member of the committee for doctoral dissertations (DrSc) in subject: 020504 chemical engineering and process control (Chair: Prof. J. Markoš) (2010-2020)
- Reviewer for Automatica, IEE Proc. Control Theory and Applications, Optimal Control Applications and Methods, Associate Editor at CDC, ECC, ...
- Member of IFAC TC Chemical Process Control
- Member of Research Council of UK BA (2019-), SAV (2019-2021), UNIZA (2019-), TUKE (2019-)
- Member of Research Council of Faculty of Chemical and Food Technology, STU in Bratislava (2008-); Faculty of Applied Informatics, UTB Zlin, CZ (2008-); Czech Institute of Informatics, Robotics and Cybernetics, CVUT, Prague, CZ (2015-).
- Member of the sub discipline commission 5 (Electrotechnics, Automation, and Control Systems) of the Scientific Grant Agency of the Slovak Republic (2008-2016).
- Head of the PhD committee for Automation at STU in Bratislava (2010-2019).
- Member of the PhD committee for Engineering Informatics at UTB in Zlin (2010-2014), Control and Robotics at FEL CVUT Prague (2014-2019), Process Control at FBERG TUKE Kosice (2017-).
- Board member of <u>Processes</u> (2020-); <u>AMCS</u> International Journal of Applied Mathematics and Computer Science (2013-2020).
- Member of Editorial Council of AT&P Journal, SK (2013-), Head: 2016-2018
- Member of MENSA International ! Test yourself!, CsTUG Czech and Slovak TeX User Group
- Translator into of open-source projects into Slovak: Moodle, Libre Office
- Hobbies: Skiing, Cycling, Table-tennis, Cold water swimming, Photography, Bookworm