# KAROL KYSLAN

curiculum vitae

## PERSONAL INFORMATION


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| **Date of Birth** | September 12, 1984 |
| **Address** | Technical University of Kosice, Letna 9, 042 00, Kosice, Slovak Republic |
| **Phone** | +421 55 602 2268 |
| **E-mail** | karol.kyslan@tuke.sk |


## EDUCATION

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| **Ph.D.** | 2012. Technical University of Kosice, Electrical Engineering. |
| **M.Sc.** | 2009. Technical University of Kosice, Electrical Engineering, Electrical Drives. |

## WORK EXPERIENCE

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| **2012 - present** | Assistant Professor, Technical University of Kosice, Slovak Republic.<br>Lecturing: Servodrives.<br>Laboratory excercies: Control of Electrical Drives, Industrial Drives' Systems. |
| **2011 - 2012** | Junior Researcher, Technical University of Kosice, Slovak Republic. |

## EXCHANGES

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| **2011** | 3 months. University of Maribor, Slovenia, ERASMUS exchange programme.<br>Tutor: Prof. Miran Rodič |
| **2015** | 1 month. Technical University of Liberec, Czech Republic. Bilateral Cooperation.<br>Tutor: Prof. Ales Richter. |
| **2018** | 1 month. University of Novi Sad, Serbia. ERASMUS teaching mobility.<br>Tutor: Prof. Vlado Porobic. |
| **2019** | 10 days. University of Novi Sad, Serbia. ERASMUS teaching mobility.<br>Tutor: Prof. Vladimir Katić. |

## REPRESENTATIVE PUBLICATIONS

JOURNALS with Impact Factor


[1] D. Magura; K. Kyslan; S. Padmanaban and V. Fedák, V. Distribution of the Strip Tensions with Slip Control in Strip Processing Lines. ENERGIES, 2019, 12, 3010.

[2] J. Bačík, F. Ďurovský, M. Biroš, K. Kyslan, D. Perduková and S. Padmanaban, Pathfinder – Development of Automated Guided Vehicle for Hospital Logistics, In: IEEE ACCESS, vol. 5, pp. 26892-26900, 2017.

[3] K. Kyslan, M. Rodič, Ľ. Suchý, Ž. Ferková, F. Ďurovský; Industrial Controller-based Dynamometer with Dynamic Emulation of Mechanical Loads, In: ELECTRICAL ENGINEERING, vol. 99, no. 4, 2017.

[4] T. Borovsky, K. Kyslan, F. Durovsky, Material tracking with dynamic torque adaptation for tension control in wire rod mill. In: ADVANCES IN ELECTRICAL AND ELECTRONIC ENGINEERING, vol. 15, no. 2, 2017.

[5] V. Slapak, K. Kyslan, F. Durovsky, Position Controller for PMSM Based on Finite Control Set Model Predictive Control. In: ELEKTRONIKA IR ELEKTROTECHNIKA, vol. 22, no. 6, 2016.

[6] V. Šlapák, K. Kyslan, M. Lacko, V. Fedák, F. Ďurovský, Finite Control Set Model Predictive Speed Control of a DC Motor. In: MATHEMATICAL PROBLEMS IN ENGINEERING, pp. 1-10, 2016.

[7] V. Fedak et. all, HIL Simulator of Drives of an Industrial Robot with 6 DOF. In: ELEKTRONIKA IR ELEKTROTECHNIKA. vol. 21, no. 2, 2015.

[8] K. Kyslan, F. Ďurovský, Dynamic Emulation of Mechanical Loads — An Approach Based on Industrial Drives' Features. In. AUTOMATIKA, vol. 54, no. 3, 2013.

IEEE CONFERENCES

[1] K. Kyslan et. all.; "Feedforward Finite Control Set Model Predictive Position Control of PMSM," 2018 IEEE 18th International Power Electronics and Motion Control Conference (PEMC), Budapest, 2018.

[2] K. Kyslan et. all.; "Design of load torque and mechanical speed estimator of PMSM with unscented Kalman filter — An engineering guide," 2017 19th International Conference on Electrical Drives and Power Electronics (EDPE), Dubrovnik, 2017.

[3] K. Kyslan et. all; "Design and analysis of torque control for load drive with dynamic emulation," 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), Brasov, 2017.

[4] D. Magura, V. Fedák, K. Kyslan and S. Padmanaban, "Practical experience with control of drives of an accumulator in a web processing continuous line," 2016 17th International Conference on Mechatronics - Mechatronika (ME), Prague, 2016.

[5] K. Kyslan et. all, "Cost functions in finite control set model predictive control of permanent magnet DC machine," 2015 International Conference on Electrical Drives and Power Electronics (EDPE), Tatranska Lomnica, 2015.

[6] K. Kyslan et. all; "Dynamic Emulation of Mechanical Loads with Backlash Based on Rapid Control Prototyping"', In: 16th International Power Electronics and Motion Control Conference and Exposition PEMC 2014, Antalya, Turkey, 2014.

## GRANTS PRINCIPAL INVESTIGATOR

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| **2017** | Tatra Banka Foundation. New Technologies in Education of Mechatronics. |
| **2019 - 2022** | Scientific Grant Agency of the Ministry of Education of the Slovak Republic and Slovak Academy of Sciences (VEGA). Dynamic Emulation of Mechanical Loads. |

## OTHER RELEVANT INFORMATION

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| **Journal Reviewer** | IEEE Trans. of Industrial Electronics, Sensors, Applied Sciences (MDPI), Electrical Engineering (Springer), Advances in Mechanical Engineering (SAGE). |
| **Editor** | Associate Editor of Power Electronics and Drives journal, De Gruyter, Print ISSN 2451-0262, Poland. |
| **Chairmen** | Programme Chairmen and member of Local Organizing Committee for EDPE conference series `http://www.edpe.sk`. |
| **Google Scholar** | `https://scholar.google.sk/citations?user=oKO4rhYAAAAJ&hl=sk` |
| **Orcid ID** | `https://orcid.org/0000-0002-1986-4285` |
| **Publons** | `https://publons.com/researcher/1260763/karol-kyslan/` |

## REFERENCES


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| **Prof. Viliam Fedak** | Technical University of Kosice, Slovak Republic, viliam.fedak@tuke.sk |
| **Prof. Miran Rodic** | University of Maribor, Slovenia, miran.rodic@um.si |
| **Prof. Sanjeevikumar Padmanaban** | Aalborg University Esbjerg, Denmark, san@et.aau.dk |
| **Prof. Vlado Porobic** | University of Novi Sad, Serbia, poroba@uns.ac.rs |