

Serdecznie zapraszam na seminarium międzynarodowe, na którym dr inż. Karol Kyslan z Technical University of Košice, Faculty of Electrical Engineering, Slovak Republic, przedstawi wykład pt: Selected problems in methods for dynamic emulation of mechanical loads and in methods for sensorless control of PMSM

Seminarium odbędzie się 23.11.2021r o godzinie 9:15 w formie hybrydowej, dla doktorantów W5 zarezerwowano miejsce w Sali 312 A5, pozostali uczestnicy udział zdalny – link poniżej.

Zoom meeting.

Topic: Seminarium międzynarodowe - Selected problems in methods for dynamic emulation of mechanical loads and in methods for sensorless control of PMSM

Time: Nov 23, 2021 09:00 AM Warsaw

Join Zoom Meeting

<https://pwr-edu.zoom.us/j/97283250150?pwd=QUFLZ1RrQ1N6ampBcUhHSTRQdkNaUT09>

Meeting ID: 972 8325 0150

Passcode: uYtgKr

Selected problems in methods for dynamic emulation of mechanical loads and in methods for sensorless control of PMSM

Short abstract:

The lecture will be divided into two separate parts. The first part will introduce an approach called dynamic emulation of mechanical loads. This method is suitable for testing electrical drives by an electrical dynamometer. The reference torque for the dynamometer is generated in a way that a mathematical model of mechanical load to be emulated is included in the control structure. Various methods will be presented together with experimental results obtained by emulation of selected mechanical loads. The second part of the lecture will deal with sensorless control of permanent magnet synchronous machines. The classification of the sensorless control methods and selected problems in sensorless control for medium and high-speed PMSM drives will be presented and discussed.

Karol Kyslan was born in 1984 in Humenné, Slovak Republic. He received the MSc. and PhD. degrees in electrical engineering from Technical University of Košice, Faculty of Electrical Engineering, Slovak Republic, in 2009 and 2012.

In 2011, he spent 3 months with University of Maribor under tutoring of Dr. Miran Rodič.

In 2015, he spent 1 month with Technical University of Liberec under tutoring of prof. Aleš Richter. In 2017 he spent 1,5 month with University of Novi Sad under tutoring of Dr. Vlado Porobić on ERASMUS+ teaching and training exchanges, respectively. In 2020, he received habilitation degree from the Technical University of Košice and since then, he has been working as Associate Professor at the Department of Electrical Engineering and Mechatronics, teaching courses on electrical drives and servodrives.

His research interests include dynamic emulation of mechanical loads, control of electrical drives, sensorless and predictive control of PMSM drives and hardware-in-the loop systems. He has published 28 scientific papers in refereed conference proceedings and journals and he holds one national patent. He is a programme chairmen of conference series Electrical Drives and Power Electronics (EDPE) and member of IEEE.