

У среду, 21. фебруара 2024. год. у 10:30 часова ће на Факултету техничких наука у Чачку ће бити одржано стручно предавање на тему:

## "The time minimal position control process in servo systems with DC motor"

<u>Abstract:</u> Position control method proposed in presentation is bases on nonlinear model of DC/DC switching transistor converter that take into account the square shape of voltage supplying DC motor. It was observed and noticed, that DC/DC converter output voltage consists of many voltage steps. As the consequence, signals of motor position, motor speed and motor current are the composition of many step responses to supply motor voltage steps after every switching process. In addition, information that motor supply voltage is limited and constant between switching processes directly leads to possibility to planning the time optimal control process. Using dynamic programming method, on the basis of the motor position, speed, current step responses the new fully time optimal position control of DC motor servo drive is obtained.

Предавач: проф. др Андреј Андрејевски, Bialystok University of Technology, Poland

Short Bio: Andrzej Andrzejewski - Ph.D. Eng. in Electrical Engineering, specialty: Control of Electric Drives. Tutor. Research interests: electrical machines, microcomputers and microcontrollers, mechatronics, power electronics, robotics, electrical and mechanical energy generation, conversion, utilization and storage. Personal interests: traveling, culture of countries, trumpet, pan flute, gym, swimming, yoga, salsa.



Среда 21. фебруар 2024. год. у 10:30ч, свечана сала 232 Улаз је слободан.