

Slobodan N. Vukosavic graduated with honours at the Electrical Engineering Department, University of Belgrade. He got his diploma in Power engineering in 1985, and his diploma in Electronics in 1986. He defended the magisterial thesis entitled "Control algorithms for the voltage source inverters" in 1987. The doctoral dissertation "Adaptive digital control of induction motors" is defended 1989. with the same University.

Since 1985, he worked as an R/D engineer with "Nikola Tesla" Institute in Belgrade, engaged with research, development and design of static power converters, electrical drives and digital control systems for industrial and

military applications. Relevant projects were closely related with his magisterial thesis, PhD thesis, and his first papers. In 1988, he joined Electronic Speed Control Division of Emerson-Electric in St. Louis, where he developed and patented sensorless controller for brushless permanent magnet motors in HVAC applications. He also developed asymmetrical switched reluctance machines and original power converter topology for SRM supply. Invited by Vickers-Electric, manufacturer of hydraulic actuators, he joined their new R/D team, developing electric actuators for industrial robots. Leading the R/D with Vickers Electric, and later on with MOOG-Electric, he developed motion control products for the car manufacturers and automotive industry in Europe.

He started teaching at the Electrical Engineering Department, University of Belgrade part-time in 1993. and full time from 1995. He was elected associate professor in 1998. and full professor in 2003. In 2003, he was elected adjunct professor at the North Eastern University, Boston. In cooperation with Imperial College, London, he developed a new curriculum in Mechatronics. He established two R/D laboratories: Laboratory for digital control of electrical drives and Laboratory for electrical vehicles. In cooperation with other universities and companies, the laboratories completed 13 international and 20 national R/D projects. He mentored 74 diploma thesis, 17 magisterial thesis, 12 master thesis and 12 PhD thesis.

He conducted research and design of motion control algorithms, servo-amplifiers and servo motors for production automation and industrial robots. As the team leader in R/D departments of Vickers-Electric and Moog, he conducted design and deployment of motion control solutions and several original methods and devices. Developments include one of the first multi-axis servo-amplifiers with proprietary algorithms for the suppression of the mechanical resonance and torsional oscillations, the algorithms for trajectory optimization and the control laws that reduce the losses and increase the energy efficiency. His motion control products and devices are mainly used at European car manufacturers, accounting for more than 80.000 servo axis. Large power, high reliability servo-amplifiers developed in cooperation with Moog are widely used for running the flight simulators and high-pressure injection molding machines.

- S. N. Vukosavic published over 250 papers, 50 of them in journals on JCR list. He wrote 10 books, including *Digital Control of Electrical Drives*, "<u>电机</u>" (Electrical motors), *Electrical Machines* μ *Grid-Side Converters Design and Control* published by Springer. According to Scopus, his papers were cited 2127 times (excluding self citations) with μ = 27.
- S. N. Vukosavic is an associate member of the Serbian Academy of Sciences and Arts. He is also a member of Academy of Engineering Sciences of Serbia and Senior member of the IEEE and member of Atiner institute for education and research.

He is associate editor of *IET Electric Power Applications*, of *IEEE Transactions on Energy Conversion*, member of editorial board and guest editor of international journal *Electronics*, member of editorial board of international journal *Facta Universitatis: Electronics and Energetics*. S. N. Vukosavic is member of program boards of *International Symposium on Industrial Electronics* (INDEL) and *International Symposium on Power Electronics*. He is also member of the Advisory Editorial Board of International Journal of Electrical Power & Energy Systems.