

Professor JOŽE ČERNELČ – On the Occasion of 45th Anniversary of the Journal *AUTOMATIKA*

Professor Jože Černelč was born in Bistrica ob Sotli, Slovenia on 13 July 1920. He completed his secondary education at secondary school in Celje in 1940. In 1952 he graduated from the Faculty of Electrical Engineering in Zagreb, Department of Low Voltage Current. As a probationer he was employed in head office of the PTT in Zagreb and since 1953 in the company *Rade Končar*. In its Institute of electrical engineering he was director of a Sector for Development of Automatic Control and Nuclear Equipment. There have been developed control devices of D.C. drives, synchronous generators, electric-arc furnaces, ship rudders, nuclear (school) reactors bars according to the highest professional and technological standards.

In 1958/59 the company *Rade Končar* supplied for a proton synchrotron of power of 40 MW installed in CERN, Geneva, twenty quadropol magnetic lenses providing linear increase of magnetic field of a synchrotron within 0,7 to 1,0 seconds. Professor Černelč was engaged in development and on the project, he was in charge of production supervision, mounting and putting into operation of a quadropol lenses system. Controllable source providing electric impulses to magnetic lenses during 0,3 s, is motor-generator plant of power of 320 kW controlled by a transistor amplifier and amplydine (high order system) presenting a top technical realisation at that time.

Since 1959 J. Černelč was a part-time lecturer at Faculty of Electrical Engineering in Zagreb, and from 1966 onwards he was employed regularly. His presence at Faculty made strong impact on the extension of scientific, research and educational activities in the field of control and regulation of electric engines. In the course of study have been introduced control-engineering, electric drives control and a laboratory of electric drives control representing one of educational pillars of electro-mechanical engineering and control.

Through their diploma thesis and seminar papers students design, construct, test and put into operation systems for revolution speed control of electric drives and systems for synchronous genera-

tors voltage control in the electric drives laboratory on the models of aggregates. Subsequently was established a laboratory of electric drives control for which the control system equipment was designed and manufactured by students within their diploma thesis and seminar works. Such an approach to works contributes to development of teaching and engineering methods of design and construction of component parts, assemblies, of devices and of the system. This resulted in a large number of diploma and M.Sc.thesis. The industry, and particularly the company *Končar* have acknowledged professor Černelč such an approach; graduated students were qualified and ready to solve complicated tasks.

As a professor he made remarkable contribution to post-graduate studies of automation and economy and to electrical engineering also. Under his tutorship, 28 masters of science acquired academic degrees. He established and held chair of *Automatics* at High Military Academy of Engineering for Land Forces in Zagreb.

In the period from 1967 until 1969 he was a member of a delegation in the committee for automation at SEV, a member to international committee for control theory at IFAC, editor-in-chief of the journal *Automatika* from 1960 until 1991. Professor Černelč has published many scientific and research papers, authored numerous projects, studies, completed feasibility studies and other. For his works he received state award »Nikola Tesla«, golden medals »Josip Lončar« (Faculty of Electrical Engineering, Zagreb) of the University of Zagreb and the company *Rade Končar*, and has been awarded with Medal for Achievements with Golden Wreath.

During a thirty-year period of publication of *Automatika* professor Černelč devolved his knowledge and experience on his younger associates, and by his persevering and creative leadership his contribution to the maintenance and development of the journal was of great importance.

Professor Gorislav ERCEG, Ph. D.
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