

85th Anniversary of Prof. Stoyan Tzonkov, D.Sc. Honorary Chief Editor of the International Journal Bioautomation



Prof. Stoyan Tzonkov was born in March 1939. He graduated from the Technical University of Sofia in 1966 with a master's degree in Plant Electrical Equipment and Automation. He defended his Ph.D. thesis at the Technical University of Sofia in 1972 and his D.Sc. thesis at the Central Laboratory of Bioinstrumentation and Automation – Bulgarian Academy of Sciences (CLBA – BAS), Sofia in 1984. In 1974, Stoyan Tzonkov became an associated professor, and since 1987 he has been a full professor at the Central Laboratory of Bioinstrumentation and Automation – Bulgarian Academy of Sciences. In the period 1994-2009, prof. St. Tzonkov was a Head of Department of Modelling and Optimization of Bioprocess Systems at the Centre of Biomedical Engineering “Prof. Ivan Daskalov” – BAS.

Prof. St. Tzonkov has worked in the field of modelling and control of bioprocess systems, analysis and synthesis of control systems with variable structure, control systems for objects with distributed parameters, control of complex systems, methods and tools for control and automation of technological and biotechnological processes. The research achievements of prof. Tzonkov are published in more than 400 scientific articles and about 35 books.

Prof. Tzonkov's scientific and research achievements have distinguished him as a founder and a leader in the area of bioinstrumentation in Bulgaria. He has laid the groundwork of this scientific direction in the Unified Centre of Biology – BAS and has guided for many years the development and industrial realization of a series of scientific and laboratory devices as a result of scientific investigations in CLBA – BAS.

Under the guidance of prof. Tzonkov, the following inventions have been realized: a system of elements with variable structure (SEPS), a system of microprocessor modules for control and automatization, a family of laboratory bioreactors with microprocessor control (ABR) – introduced to practice for the first time in Bulgaria.

Prof. Tzonkov has been a leader and a member of more than 50 national and international research projects. He is an inventor of 14 patents and innovations and 2 registered software packages. For those achievements prof. Tzonkov has been honored with the awards “For a Contribution of the Technical Progress”, “Honored Inventor”, etc.



Prof. Tzonkov has been a supervisor of 19 successfully defended Ph.D. students, some of whom have established themselves as leading scientists in Bulgaria and abroad. He has 45 years in students' training as a professor in the Technical University of Sofia, Trakia University – Stara Zagora, St. Cyril and St. Methodius University of Veliko Tarnovo, Moscow State University of Economics, Statistics and Informatics – Branch Sofia, etc. The main lecture courses of prof. Tzonkov are on Control of Large-scale Systems, Bases of Automatic Control of Biotechnological Processes, Automation of Technical Processes, Management and Control of Ecosystems, Planning of Systems for Control, Strategic Control etc. He has also been invited as a guest-lector in IH-Leipzig.

During his scientific career, prof. Tzonkov has been a member and a scientific secretary of the National Scientific Board of Automation and System Control to the High Attestation Commission, the Academic Council of the Technical University – Sofia, the Faculty Council of the Faculty of Automatics of the Technical University – Sofia, and many other scientific councils. Prof. Tzonkov is a member of the *Union of Automation and Informatics* and the *Union of Scientists in Bulgaria*.

Prof. Tzonkov has been a member of the editorial boards of national and international journals, among which *Biotechnology and Chemistry*, *Biotechnology and Biotechnics*, *Biotechnology and Biotechnological Equipment*, and *Scientific Appliances* – Warsaw, Poland. In 1984 he founded the journal *Bioavtomatika*, which has continued since 2004 as *International Journal Bioautomation*.

***This Special Issue of the International Journal Bioautomation
is dedicated to the scientific area to which prof. Stoyan Tzonkov has devoted
his research career and supervising activities.***

***The Journal Editorial Board congratulates
prof. Stoyan Tzonkov with his 85th anniversary
and wishes him a lot of health and further achievements!***