Anniversary

The 80th Birthday of Academician Stanislav Vasilievich Emelyanov

On May 18, 2009 the worldwide famous Russian scientist, founder of several important directions in the theory of automatic control, author of a great number of scientific works, monographs and inventions, completed the jubilee 80 years.

His first steps in science he took under the guidance of academician B. Petrov, one of the greatest specialists in the field of automatic control initially in the Moscow Aviation Institute and after that as Ph.D. student in the institute of Automatics and Telemechanics. There he created the Theory of Variable structure systems (VSS). This theory later became a central topic and allowed a qualitative jump in nonlinear feedback theory. VSS gave a chance for the development of many perspectives in order to be solved a lot of pivotal problems in the control theory and practice under uncertainties.

It is important to note that from mathematical point of view the new theory offers systematical methods for synthesis in conditions of nonlinear differential equations which solutions have predefined properties.
The theory of VSS, created by him and later developed by his scientific team, gained academician Emelyanov world fame in the scientific society.

In the seventies, under academician Emelyanov's leadership and based on the theory of VSS, a complex of technical tools for local information - control systems, namely KTS-LIVS-SUPS, have been elaborated and introduced.

In the 80-ties he developed a principally new approach for designing of automatic control systems by the introduction of a new type of coordinate-operative feedback.

At present academician Emelyanov is one of the leading figures in the world of science. He guided more than 25 doctors of sciences and 70 PhD students, most of which later became prominent scholars of science and technology, academicians and associative members of the Russian Academy of Sciences, as well as heads of well-known institutes and large organizations. Academician Emelyanov is a founder of different departments in many topical trends of science of technology, among which the department of engineering cybernetics at the Institute of Steel and Alloys, the department of nonlinear dynamical systems and control at the Lomonosov State University (Moscow), and the department of system analysis at the Institute of Physics and Technology (Moscow). These departments have provided a good start for hundreds of highly qualified specialists.

Academician Emelyanov is an active scientist. Nowadays he is:

- the scientific guide of two large Institutes;
- a member of the Russian State Reception Committee;
- the chief editor of the journal "Information Technologies and Computing Systems";
- a member of the Editorial Boards of the Annals of the Russian Academy of Sciences and academic journals "Differential Equations" and "Automation and Remote Control", International Electronic Journal "Bioautomation";
- the chairman of the Council of Mathematics, Russian Ministry of Education;
- a member of Scientific and Academic Councils of the Institute of System Analysis and Moscow State University.

In the recent years S. Emelyanov has obtained important results in on robust stability, control of chaotic dynamics and localization of unstable cycles.

Since 1972 academician Emelyanov is a founder and leader of the International team of the scientists concerned with control problems (Moscow). After that this team has been renamed International Scientific Institute of Control Problems, which filial in Bulgaria was led by Prof. Hinko Hinov.

He has a great desert about the development of the Bulgarian Science and the formation of the national school on the control systems with variable structure.

Academician Stanislav Emelyanov's scientific achievements are highly esteemed by the scientific community. He was awarded the:

- Andronov prize for his contributions to the theory of nonlinear dynamical systems, 2000;
- Lomonosov prize in Science for his developments in mathematical methods of qualitative analysis of complex dynamical systems, 2002;
- Lenin prize;
- USSR State Prize;
- prize of the USSR State Council of Ministers;
- Russian State prize;
- orders of Russia, Bulgaria, and Poland.

We wish him a strong health and success in his scientific work.

Prof. Stoyan Tzonkov, D. Sc.

Editor-in-Chief