
TOPICAL ISSUE



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On February 3, 2023, an outstanding mathematician and a wonderful person, Boris Teodorovich Polyak passed away. For a long time he headed Laboratory 7 of the Institute of Control Sciences, RAS, and was a generator of bright scientific ideas for decades, so we decided to arrange a special issue of the journal Automation and Remote Control, dedicated to his memory. The articles in this collection are mostly authored by the members of our lab, and the publication of this issue is not devoted to the sad anniversary of the death of Boris Teodorovich, but to his birthday on May 4, 1935.

The range of scientific interests of Prof. Polyak is striking in its diversity, as can be seen from the list of research papers which he authored and which we present in our issue. It is also worth mentioning that, in addition to the breadth of interests of Boris Teodorovich, this bibliography list testifies to a large number of his co-authors, — he has always generously shared his ideas with both students and younger followers and older colleagues.

Of course, within the framework of one issue, it is impossible to cover all areas of research interest of Boris Teodorovich, but we tried to collect articles on the topics that interested him most in recent years. These include the optimization theory, which he loved since his youth, and the methods of the classical theory of automatic control, robustness and rejection of exogenous disturbances, linear matrix inequalities, superstability, applied problems of energy systems research, and the peak effect. Due to the limitations on the volume of one issue, some of the submitted articles were transferred to the 6th issue of the journal.

Next year we plan to publish another special issue dedicated to the 90th anniversary of Prof. Polyak; the circle of authors is expected to be much wider.

*On behalf of all members of lab. 7 of the Institute of Control Science,
Editor of the issue,
P.S. Shcherbakov*