Preface to the Thematic Issue of the Journal

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This issue of the Journal offered to the reader contains selected articles, which have been reported within the scopes of IV International Symposium “Generalized Solutions in Control Problems.”

International Symposium “Generalized Solutions in Control Problems” (GSCP–2008) was spent in Republic Buryatiya, June 23–28, 2008. As the main organizer of a Symposium has acted Buryat State University (BSU). In the organization of a Symposium participated East-Siberian State Technological University (ESSTU), Ulan-Ude. The Symposium has been held at the financial support of the Russian Foundation for Basic Research (project no. 08-01-06063-g) and the BSU. The Organizing Committee of the Symposium included employees of Institute of Mathematics and Computer Science BSU and Faculties of Applied Mathematics ESSTU.

Symposium GSCP-2008 was the fourth in a series of the symposiums spent by the period of two years. The first International Symposium on “Generalized Solutions in Control Problems” (GSCP) has been organized in 2002 by the Institute of Program Systems (IPS) of RAS under the initiative and under direction of professor V.I. Gurman. The Symposium has been lead under aegis of the International Federation of Automatic Control (IFAC), and has received wide recognition in circles of experts in the field of control problems.

The objective of Symposiums consists in discussion of the advanced theoretical and applied directions and results in the field of mathematical research of the generalized solutions in control problems: discontinuous solutions, impulse and sliding modes, minimizing sequences for the systems with the concentrated and distributed parameters.

Among the directions of the Symposium are presented: the unlimited controlled systems; the generalized solutions in the controlled distributed systems; the degenerate and abnormal optimum problems; the sufficient conditions of optimality for the generalized solutions; the estimates of the sets of attainability and controllability; numerical methods; applied problems and information systems.

There were 18 plenary and 49 sectional reports in the scientific program of the IV Symposium. In the work of Symposium participated more than 80 specialists of six countries, including 16 of the Mongolia, 4 of China. The majority of reports was made by Russian participants from Vladivostok, Ulan-Ude, Irkutsk, Novosibirsk, Ekaterinburg, Moscow, and Pereslavl-Zalesskii. Proceedings of the Symposium has been published [1].

Symposium GSCP-08 was dedicated to the 80-anniversary of the academician of RAS V.A. Il'in, chairman of Program Committee.

REFERENCES

1. *Generalized Solutions in Control Problems (GSCP-08), Proc. IV Symp. dedicated to the 80-anniversary of the academician of RAS V.A. Il'in*, Ulan-Ude: Buryat. State Univ., 2008.

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