COMBUSTION AND EXPLOSION Issue 5

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The volume contains 64 brief communications presented at the scientific conference on combustion and explosion organized by the Department of Combustion and Explosion of Semenov Institute of Chemical Physics dedicated to the 70th anniversary of the Department.

The scope of the communications includes such areas of fundamental research as physics of combustion and explosion, applied mathematics, gas dynamics, thermodynamics, thermochemistry, nanotechnology, chemical technology, power engineering, propulsion, etc.

The materials of the conference are grouped into four parts:

- combustion and detonation of gases;
- combustion and detonation of heterogeneous systems;
- combustion and detonation of condensed systems;
- Panel discussion "Challenging problems, processes, and research objects in combustion and explosion."

Presented in addition are two articles in heading "Scientific Journalism," namely, the article by D.Sc. S. Tsyganov "Strategical Regulation of Scientific Research Through the System of State Science Foundations" and the article by D.Sc. V. Arutyunov and Ph.D. L. Strekova "On Perspectives of Science in Russia."

The volume is prepared as a reference for researchers, scientists, and practicing engineers in the fields of combustion and explosion and can be used as an advanced graduate level text on the corresponding disciplines.