



Curriculum Vitae of Prof. Oleg A. Malafeev

Oleg A. Malafeev is a specialist in the field of modeling of the socio-economic systems, author of over 200 scientific publications. After graduating in 1967 from the Mathematics and Mechanics Faculty of St.Petersburg State University, Russia, in the department of mathematics, he enrolled in graduate school, and during this period of time he developed the axiomatic of nonlinear dynamical systems with conflict control, based on which he proved the existence of equilibrium Cournot - Nash for the antagonizing case when the current active participants of the process, while choosing their actions are independent of each other and have the full information about the current process. In case of the dependencies between agents' activities it is shown how the asymmetry in their awareness allows to restore the equilibrium of the process.

Since 1969, in parallel with theoretical studies he directs at the Faculty of "Applied Mathematics - control processes" executing of the contractual research works of the conflict type within the major topics in the section of Applied Problems of the Academy of Sciences. The processes of the conflict type occurring in the socio-economic sphere, are, as a rule, not antagonistic, and of the multilateral nature, which does not preclude the pursuit of active participants to achieve the similar goals. For such processes in the 70- 80s, during the development of previous studies O.A.Malafeev managed, within the developed by him approximate formalization, to strengthen and to generalize a number of well-known results of Cournot, Zermelo-von Neumann,-Nash,-Harsanyi,-Debre.

Since the early 90s, being the Head of the Department of the modeling of socio-economic systems and leading the laboratory of the competitive and synergistic systems, he, together with Academician S. Merkuriev, directs the section " Mathematical modeling of socio-economic processes " of the national program "The peoples of Russia ." In 1995, commissioned by the Baltic Financial Agency organized by PromStroyBank, he constructed a stock index of St. Petersburg. Since 1980 he is member of the American Mathematical Society, and participates in the work of specialized doctoral and master's councils.

Besides the works of general theoretical nature O.A.Malafeev co-wrote and performed separately the applied research on the optimal allocation of resources in conflict control processes for the construction and analysis of dynamic Cournot oligopoly analogues, including one-sector model of the economy, consisting of firms interacting on the basis of an oligopoly Cournot. Malafeeva O.A. published more than 200 scientific publications, including 10 books.

Teaching activities:

Over the past 5 years Malafeev O.A. read the following courses:

The Theory of the qualitative dynamical systems;

Mathematical modeling of systems;

The Theory of games and operation's study;

The dynamic process conflict managed and solution stability for the multi-criteria tasks;

The Theory of games and mathematical economics;

Modeling of the competitive processes in economics and finance, a special course

Fundamentals of the theory of decision-making in the economy, a special course

Management in the conflict systems, a special course

Theses:

- Thesis for the degree of Candidate of Physical and Mathematical Sciences in 1971 on the theme "Dynamic games with complete information.", Supervisor: Professor Petrosyan L.A., Professor Kirillova F.M.,

professor Barinov N.G., Lead organization : Institute of Mathematics of the Lithuanian SSR , Vilnius.
- Thesis for the degree of Doctor of Physical and Mathematical Sciences in 1989 on the theme " Conflict controlled processes with many participants ." Oficial : Professor Nicholas M.S., Professor Kirillova F.M., Professor Kononenko A.F., Lead organization : Institute of Cybernetics, USSR Academy of Sciences , Kiev.

Topics theses:

1. Multiperiodic competitive model in the futures market (Baldin I.S., 2003)
- 2 . Game-theoretic model of entering on the market Cournot of two firms (Yershova T.A., 2003)
- 3 . Price dynamics in a system of interconnected enterprises (Radchenko A.Y., 2004)
- 4 . Dynamic model of management of investment projects in construction company (Drobyshevskiy A.S., 2004)