Control and Cybernetics

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Editorial

In recent years an increasing scientific activity in the field of theoretical and applied cybernetics can be observed in Poland as well as in the other countries. Polish Academy of Sciences has come to a decision of publishing a new journal "Control and Cybernetics". The journal is to be edited by the Institute for Organization, Management and Control Sciences, Polish Academy of Sciences — Ministry of Science, Higher Education and Technology.

The main objective of the journal is to stimulate the development of cybernetical sciences by publishing the most interesting papers. Cybernetical sciences in the broadest sense refer to a collection of general concepts, principles, theories, tools, problems, methods and techniques associated with control and information in the various systems (e.g. physical, technical, biological, social). The results of the following areas of research will be published:

A. Theoretical areas of cybernetical research.

1. 1. General control theory, in particular: models and identification of system parameters, systems analysis, optimization techniques and optimum systems, adaptive systems and stochastic problems in control systems, large scale systems, development systems.

2. Information theory.

3. Computer sciences.

4. Operational research.

5. Reliability.

6. Learning systems.

B. Applied area of cybernetical research.

1. Application of system analysis approach to the ecological, economic, industrial and social systems.

2. Control and management of complex organizations.

3. Complex automation of large industrial systems.

4. Application of information theory and computer sciences to the problems of data transmission in technical, economic and management systems.

5. Modelling the biological and ecological systems, artificial organs and artificial intelligence.

6. Construction of technical systems based on the new physical, chemical and biological phenomena.

It is being hoped that "Control and Cybernetics" will also stimulate and encourage the interdisciplinary cooperation between the specialists in technical, social and biological sciences.