

**ABOUT COOPERATION IN THE FIELD OF INFORMATION
TECHNOLOGY AND PUBLISHING**

Larisa Lesko¹, Galina Zorko², Nataliya Shishkina³

¹Leading scientific editor of the journal "Cybernetics and System Analysis", the Institute of Cybernetics named after V. M. Glushkov, Kiev, Ukraine, *kisa-casa@ukr.net*.

²International scientific educational centre of information technologies and systems, Kiev, Ukraine, *red@nonnared.kiev.ua*

³The Institute of Cybernetics named after V. M. Glushkov, Kiev, Ukraine, *nata_shy@voliacable.com*

The international theoretical journal "Cybernetics and System Analysis" (previously "Cybernetics") began its way in February, 1965. 15995 articles of 7730 authors have been published in it for this period. Forty three years ago only few expected that the unique complex of fundamental and applied ideas of cybernetics will develop fruitfully and will bring in the new contribution to scientific and technical progress together with engineering and social fields of people's activity. The idea of an opportunity to study control processes in an alive organism, in machines and then in social sphere from a uniform methodological position allows one to achieve high results in creating technologies of fast processing of the information of big objects. It was cybernetics and computer science that helped to destroy a barrier of preconception in the question of isolated consideration of various processes. The system approach and the created toolkit which consists of intellectual objects of the computer world stimulated scientific and technical progress.

The journal "Cybernetics and System Analysis" reflects on its pages the results of scientific researches and development in the field of cybernetics and computer science, publishes original and review articles, materials of problem and discussion character, reports of conferences and meetings on questions of cybernetics and system analysis, bibliographic reviews, reviews of monographs, informs readers on advanced achievement of home and foreign cybernetics. Articles covering the following sections are published in the journal:

1. CYBERNETICS

Theoretical problems
Designing of Cybernetic System
Problems of artificial intellect.

2. SYSTEM ANALYSIS

Theory of systems and mathematical problems of system analysis
Theory of optimum decisions
Applied methods of system analysis.

3. SOFTWARE-BASED AND TECHNICAL COMPLEXES

Architecture of software technical complexes
Mathematical support and software
New Information technologies in medicine, biology, linguistics, jurisprudence, etc.

**4. NEW MEANS OF CYBERNETICS, COMPUTER SCIENCE, COMPUTING
AND SYSTEM ANALYSIS**

5. DISCUSSION MESSAGES.

One can find the information about journal and instructions for authors on the site www.kibernetika.kiev.ua.

The huge contribution to the formation and development of the journal was made by the founder of the journal and the first editor-in chief Victor Mikhaylovich Glushkov. He managed to interest scientific community in his ideas concerning the integration of cybernetics and computing. He managed to get competent scientists of the Soviet Union, namely, N.N. Bogolyubov, A.A. Dorodnitsyn, M.A. Lavrentyev, A.A. Lyapunov, Yu. I. Zhuravleva, A.N. Tikhonov, A.A. Samarsky, N.N. Moiseev as well as scientists from other countries to take part in the work of the journal.

In 1982 Academician Vladimir Sergeevich Mikhalevich carried on Victor Mikhailovich Glushkov's work, and during 12 years he was at the head of the journal work.

Academician of the National Academy of Sciences of the Ukraine Ivan Vasilyebich Sergeenko has been editor-in chief of the journal since 1994.

Ivan Vasilevich Sergeenko is president of the Ukrainian federation of the computer science, the member of the international organization CEPIS, chairman of the National committee of the Ukraine on the computer science, the first vice-president of the consultative Council on the problems of applying computer science at the Supreme Soviet of the Ukraine, chairman of scientific Councils of the National Academy of Sciences of the Ukraine "Intellectual information technologies" and on the problem of "Cybernetics", the member of the Committee for State prizes of the Ukraine in the field of Science and technology.

Under the direction of I.V. Sergienko in 2004-2005 in the Institute of Cybernetics the family of supercomputers SKIT and 17 information computer technologies for them were developed that enabled one to solve super complex mathematical problems. It concerns the problems connected with problems of market economy, government, development of science itself (computer science, biology, medicine, power engineering, etc). space exploration, defensive complex, protection of the information in computer networks and other fields.

Now the structure of the editorial board of the journal and its editorial council include the following authoritative scientists from different countries who devote much time and effort to improvement of the scientific and organizational processes in the journal:

I.N. Kovalenko, the deputy editor-in chief, Academician of the National Academy of Sciences of the Ukraine

N.S. Furs, the deputy editor-in chief

A.V. ANISIMOV, professor

G.A. DONETS, Doctor of Physical and mathematical sciences

Yu. I. ERMOL'EV, Academician of NASU

M.Z. ZGUROBCKII, Academician of NASU

V.S. KOROLYUK, Academician of NASU

A.A. LETICHEVSKII, Corresponding member of NASU

B.N. RED'KO, Academician of NASU

A.S. ALEKSEEV, Academician of Russian Academy of Sciences

D. BAUM, Professor, Germany

J. BONNIN, Professor, France

A.D. GVIASHVIANI, Professor, Russia

D. GILBERT, Professor, England

F. GLOVER, Professor, USA

V.A. EMELICHEV, Professor, Belarus

YU. I. ZHURAVLEV, Academician of RAS

A.B. KURZHANSKII, Academician of RAS

V.L. MAKAROV, Academician of RAS

E.KH. TYUGU, Academician of the Academy of Sciences of Estonia.

We hope that their further work will be aimed for the welfare of the Ukrainian Science.

It would also be desirable to remember the dead members of the editorial board, great scientists in various fields of Cybernetics and computer science who worked in difficult years of the formation of the journal and achievement of the international prestige. The following great scientists are: Juliya Vladimirovna Kapitonova, Academicians of the Academy of Sciences of the USSR Nikita Nikolaevich Moiseev and Boris Nikolaevich Pshemichny, Professor Lev Arkadevich Kaluzhnin, Academician of NASU Naum Zuselevich Shor.

The portfolio of the articles passing the sufficiently strong levels of reviewing is formed as follows: the comment of the separate reviewer, viewing the member of the editorial board according to his speciality, and at last the conclusion of the editorial board. The journal is distributed according to one's subscription in the Ukraine, the countries of the Union. It is issued by the international book-publishing firm Springer in English under the name “Cybernetics and System Analysis” since the moment of its creation. On the site belonging to this publishing house (<http://www.springeronline.com/10559>) it is possible to find all articles of the journal in full, but to tell the truth, one can see them for a certain payment. The journal “Cybernetics and System Analysis” is reviewed or indexed by the agencies ABI Inform, Compumath Citation Index, Current Contents/Engineering, Computing and Technology, ISI Alerting Services, Science Citation Index, Science Citation Index Expanded, SCOPUS.

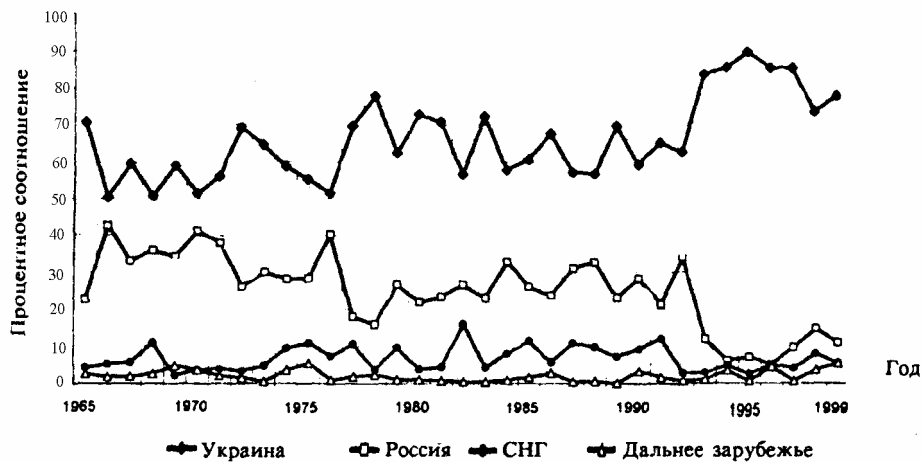
The journal is included in the list of profile editions of the HAC of the Ukraine and is reviewed in Review journal and Databases of VINITI: (8-107-495 155-42-17).

According to the events occurring in the country and the Institute the journal published thematic numbers containing small editorial articles which in the compressed and exact form coordinated the anniversary event to the problems and achievements of cybernetics. These numbers the design of which differed from usual numbers were performed, as a rule, with artistic taste. We shall note some of them, namely, № 2 1969 is devoted to rewarding the Academy of Sciences of the USSR and the Institute of Cybernetics with Lenin's orders, to awarding V.M. Glyshkov the rank of the Hero of socialist work, numbers № 2 1977, ., № 5 1982 and № 6 1997 are devoted to the 20th, 25th and 40th anniversaries of the Institute of Cybernetics, respectively: number № 56 1976 – the 25th anniversary of the home computing number 4, 1975 and 2 1995 – 10th and 30th anniversary of the journal “Cybernetics”, respectively; there was the 100th number of the journal. On pages of the journal some anniversaries of the state value were marked, too. So, for example, number № 2 1985 is devoted to the 40th anniversary of the Victory in the Great Patriotic War. There were also thematic numbers. For example, all articles published in № 2 1979 and № 3 1986 concern the field of an artificial intellect. Numbers 2 and 3 2002 were devoted to the memory of the outstanding scientist in the field of optimization and the theory of games, the member of the editorial board Academician Boris Nikolaevich Pshenichny. № 4 2003 is devoted to the blessed memory of the Academician of the Academy of Sciences of the Ukraine, Academician of the Academy of Sciences of the USSR V.M. Glushkov. № 1 2005 was devoted to the 40th anniversary of the journal “Cybernetics and System Analysis”. № 4 2006 was devoted to the scientific activity of Academician of the NASU I.V.Sergienko, № 5 2007 was devoted to the 50th anniversary of the Institute of Cybernetics of the NASU.

Now we give some results of our scientific researches realized on the basis of the journal. As a whole for 35 years up to 2000 6207 authors published 113 brief messages. Among the authors there are 176 Academician, 185 corresponding members, 1383 Doctors of Sciences, 2727 Ph.D. and 2097 the scientist without any scientific degrees. 2547 authors are workers of the Institute of Cybernetics, 880 work at institutes of the Academy of Sciences, 1775 work at the Universities. 1005 work were from the research Institutes, 4110 authors live in the Ukraine, 1553 live in Russia, 421 in other republics of the Soviet Union, 123 live abroad. Citizens of Austria published 2 articles, of Bulgaria published 9 articles, of Great Britain published 4 articles, of Hungary published 26, of Vietnam – 13, of Germany – 19, of Greece – 1, of Italy – 1, of Canada – 4, of China – 1, of Morocco – 2, of Mongolia – 1, of Netherlands – 6, of Poland – 9, of the USA – 10, of Turkey – 5, of France – 2, of Czechoslovakia – 4, of Switzerland – 2, of Yugoslavia – 2.

The following diagrams show the distribution of authors according to their places where they live. In 1966 the number of Russian authors sharply increased in relation to 1965 and the number of Ukrainian authors respectively decreased.

Further there are not any changes, and the articles written by Russian authors decreased down to 10% and becomes commensurable with the number of articles written by authors from Distant and Near foreign countries. The number of articles published by Ukrainian authors increased.



Percentage, Ukraine, Russia, CIS, Distant countries, Year

The given researches were carried out by the workers of the Institute of Cybernetics namely, S.N. Berestova and Z.V. Knyaz'kova under the direction of Yu.V. Kapitonova and were published in № 1 2001.

Alongside the journal of "Cybernetics and System Analysis" in the Cybernetic centre of the NASU as well as the journal of "Problems of control and computer Science" is published.

It is the only journal where fundamental and applied scientific works on the problems of automatic control and computer science have been published for 50 years. The editor in chief of the journal is the honorable director of the Institute of space researches of the NASU, the President of the Ukrainian association on automatic control, Academician of the NASU Vsevolod Mikhaylovich Kunzevich. The following deputies editor-in chief are: Nonna Vasilevna Turo-Verova and Yury Georgievich Krivonos. The editorial board of the journal consists of the scientists of many nationalities, and they are scientist who are well-known in the field of computer science and automatic control.

The following members of the editorial board are:

- U. BIGELL (USA)
- S.N. VASILIEV (Russia)
- F.G. GARASHCHENKO
- V.V. GRITSYK
- V.F. GUBAREV
- M.Z. ZGUROVSKY
- P. IOANNOU (USA)
- V.B. LYCHAK
- R. ORTECA (France)
- Yu. I. SAMOYLENKO
- I.V. SERGIENKO
- V.V. SKOPETSKY
- M.TOMA (Germany)
- A.A. CHIKRY
- R.M. YUSUNOV (Russia)

The address of the editorial board is the following:

03680 GSP Kiev 187

Prospect Academician Glushkov, 40, korpus 4/1

Institute of Space researches of the NASU and NKA of the Ukraine

Phone: +38(044)

526 22 29

+38(044)

522 58 46

E-mail: red@nonnared.kiev.ua

The basic thematic directions are the following: problems of dynamics of controlled systems; methods of identification and adaptive control; optimum control and methods of optimization, mathematical modeling and research of complex controlled systems; the general problems of research of space; control of physical objects and technical systems; control and optimization of systems with distributed parameters; methods of control and estimation in conditions of uncertainty; qualitative methods in the theory of controlled systems; methods of processing of the information; space information technologies and systems; technical means for measuring and controlling; space monitoring, economic and administrative systems; control in biological and natural system; robots and systems of the artificial intellect; problems of protection of the information, works of scientific conferences and seminars are regularly published in journals on automatic control.

Ukrainian Association on automatic control takes creative part in publishing the journal National space agency of the Ukraine, academical scientific institutes, the leading high schools of the Ukraine and the countries of the CIS, scientists and experts of the countries of distant foreign countries also take part in publishing the journal.

The journal “Problems of control and Computer science” is in full published in English by book-publishing firm Begell House, Inc. (USA) under the name “Journal of automation and information science” (www.begellhouse.com).

The journal “Problems of control and computer science” is included in the list of profile editions of HAC of the Ukraine, and also in the International list of journals which are taken into account in determining the index of citing. The information about the journal is included in the following journals: The catalogue of periodicals of the Ukraine on a subscription of 2008.

The catalogue of the Agency “Rospechat” for 2008;

The export catalogue for 2008

Index 74002.

Further plans of the journal are connected with the expansion of subjects and geography of authors. Nowadays, the authors from all over the world are published in the journal. The preference is given to the works in which fundamental results of Cybernetics, computer sciences and their application in economics, engineering, and humanitarian fields of the activity of a person are set out. Forty four volumes of important ideas of our authors are incorporated in the base of Cybernetics and computer Science.