PREFACE

ITHEA International Scientific Society (ITHEA ISS) is aimed to support growing collaboration between scientists from all over the world. The scope of the books of the ITHEA ISS covers the area of Informatics including Computer Science. ITHEA ISS welcomes scientific papers and books connected with any information theory or its application.

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Responsibility for papers and books published by ITHEA belongs to authors.

This book maintains articles on actual problems of research and application of information technologies, especially the new approaches, models, algorithms and methods for information modeling of knowledge in: Intelligent NL Processing; Management of computing and information system; Knowledge Engineering; Mathematical Foundation of Artificial Intelligence; Computing; Decision Making; Economics Decision Support Systems; Modern (e-) Learning; Philosophy and Methodology of Informatics.

Papers in this issue are peer reviewed and selected from the XVIII-th International Conference "Knowledge-Dialogue-Solution", Kyiv, Ukraine, 2012 – a part of the ITHEA Joint International Events of Informatics "ITA 2012", Autumn Session.

KDS 2012 has been organized by V.M.Glushkov Institute of Cybernetics of National Academy of Sciences of Ukraine in collaboration with:

- ITHEA International Scientific Society
- Association of Developers and Users of Intelligent Systems (Ukraine)
- Federation of the Scientific - Engineering Unions /FNTS/ (Bulgaria)
- National Academy of Sciences of Ukraine
- Institute of Information Theories and Applications FOI ITHEA (Bulgaria)
- Taras Shevchenko National University of Kiev (Ukraine)
- Kharkiv National University of Radio Electronics (Ukraine)
- Institute of Mathematics and Informatics, BAS (Bulgaria)
- Institute of Mathematics of SD RAN (Russia)

The International Conference "Knowledge-Dialogue-Solution" (KDS) was established as result of the scientific co-operation organized within 1986-1992 by two international workgroups (IWG) researching the problems of data bases and artificial intelligence. As a result of tight relation between these problems in 1990 in Budapest appeared the International scientific Working Group of "Data Base Intellectualization" (IWGDBI) integrating the possibilities of databases with the creative process support tools. Heads of the IWGDBI were V.Gladun (Ukraine) and R.Kirkova (Bulgaria).

In 1992 the "Association of Developers and Users of Intelligent Systems" (ADUIS) had been established. ADUIS was chosen to be the main organization of the KDS international conferences. In the same time the "Institute of information theories and application FOI ITHEA" (ITHEA) started working in Bulgaria.

During the years, in collaboration with ITHEA, KDS had been organized in Ukraine, Poland, Russia, and Bulgaria.

More information about ITHEA International Conferences is given at the www.ithea.org.

We express our thanks to all authors, editors and collaborators.

The great success of ITHEA International Journals, Books and Conferences belongs to the whole of the ITHEA International Scientific Society.

Kyiv-Sofia, September 2012   *V. Velychko, A. Voloshin, Kr. Markov*