PREFACE

Intelligo ut credam!

The International Journal "Information Technologies and Knowledge" (IJ ITK) has been established in 2007 as independent scientific printed and electronic media. IJ ITK is edited by the Institute of Information Theories and Applications FOI ITHEA in collaboration with the leading researchers from the: Institute of Cybernetics "V.M.Glushkov", NASU (Ukraine); Institute of Mathematics and Informatics, BAS (Bulgaria); Institute of Information Technologies, BAS (Bulgaria); University of Hasselt (Belgium); Natural Computing Group (NCG) of the Technical University of Madrid (Spain); Astrakhan State Technical University (Russia); Taras Shevchenko National University of Kiev (Ukraine); University of Calgary (Canada); VLSI Systems Centre, Ben-Gurion University (Israel).

The main scope of the IJ ITK covers but is not limited to the theoretical research, applications and education in the area of the Information Technologies for:

- Knowledge Collecting and Accumulation;
- Knowledge Discovery and Acquisition;
- Knowledge Level Modeling;
- Knowledge Management, Transfer and Distributing;
- Knowledge Market;
- Knowledge Representation and Processing;
- Knowledge Utilization;
- Knowledge-based Society;
- Knowledge-based Systems.

Many scientific and practical areas are connected to the topics of interest of IJ ITK: Business Informatics: e-Management, e-Finance, e-Commerce, e-Banking, Business Intelligence: Methodology, Tools and Technologies, Analytics and Statistics; Cognitive science; Competitive Intelligence; Data Mining; Decision Making; e-Management in Governmental and Municipal Structures: Models, Systems, e-Government, etc.; Information Technologies in Biomedicine; Intelligent Communication Technologies and Mobile Systems; Intelligent Robots; Intelligent Systems; Intelligent Technologies in Control and Design; Modern (e-) Learning Information Technologies; Multimedia Semantic Systems; P2P e-Learning Applications; Planning and Scheduling; Socio-cognitive engineering; Technology and Human Resource Issues; Technology-based Blended, Distance and Open Learning; Web-based Technologies and Systems, Al/Semantic Web.

More information about the IJ ITK rules for preparing and submitting the papers as well as how to take out a subscription to the Journal may be obtained from www.foibg.com.

The International Journal "Information Technologies and Knowledge" (IJ ITK) continues the series of international scientific events, which were initiated more than fifteen years ago. It is originated owing to initiative of ADUIS - Association of Developers and Users of Intelligent Systems (Ukraine) and Institute of Information Theories and Applications FOI ITHEA, (Bulgaria), which have long-term experience of collaboration.

Only for two years, IJ ITK became as well-known international journal. Till now, including this volume, more than 150 papers have been published. IJ ITK authors are widespread in 20 countries all over the world: Azerbaijan, Belarus, Belgium, Bulgaria, Canada, Egypt, Finland, France, Germany, India, Iran, Ireland, Israel, Japan, Jordan, Romania, Russia, Spain, Ukraine, and USA

Volume 2/2008 of the IJ ITK contains 82 papers written by 194 authors from 15 countries (marked in italics above), selected from several international conferences, seminars and workshops organized or supported by the Journal. At the first place, the main source for selection were the ITA 2007 Joint International Events on Informatics, (June 17- July 8, 2007, Varna, Bulgaria)

- XIII-th International Conference "Knowledge-Dialogue-Solution" (KDS 2007);
- V-th International Conference "Information Research and Applications" (i.TECH 2007);
- Second International Conference on Modern (e-) Learning (MeL 2007);
- International Conference on e-Management & Business Intelligence (eM&BI 2007);
- VI-th International Workshop on General Information Theory (GIT 2007);
- Second Int. Workshop on Cyber Security (CS 2007).

Several papers were selected from the pool of papers directly submitted to IJ ITK.

The success of IJ ITK belongs to the whole of the ITHEA International Scientific Society. Due to great interest to IJ ITK this Volume 2 contais one complementary issue - Number 5.

We express our thanks to all authors, editors and collaborators who had developed and supported the International Journal on Information Technologies and Knowledge.

Congratulations to Prof. **Volodimir Donchenko** (Ukraine) who was awarded by the International Prize "ITHEA" for the year 2007. The "ITHEA" Prize has been established in 1995. It is aimed to mark the achievements in the field of the information theories and applications.

Krassimir Markov

IJ ITK Founder and Editor in chief



International Prize "ITHEA"

Awarded Scientists till 2007:

| 1995 | Sandansky | K. Bankov, P. Barnev, G. Gargov, V. Gladun, R. Kirkova, |
|------|--------------|---|
| | | S. Lazarov, S. Pironkov, V. Tomov |
| 1996 | Sofia | T. Hinova, K. Ivanova, I. Mitov, D. Shishkov, N. Vashchenko |
| 1997 | Yalta | Z. Rabinovich, V. Sgurev, A. Timofeev, A. Voloshin |
| 1998 | Sofia | V. Jotsov |
| 1999 | Sofia | L. Zainutdinova |
| 2000 | Varna | I. Arefiev, A. Palagin |
| 2001 | St.Peterburg | N. Ivanova, V. Koval |
| 2002 | Primorsko | A. Milani, M. Mintchev |
| 2003 | Varna | T. Gavrilova, A. Eskenazi, V. Lozovskiy, P. Stanchev |
| 2004 | Varna | B. Kokinov, T. Vamos |
| 2005 | Varna | L.F. de Mingo, M. Dobreva |
| 2006 | Varna | J. Castellanos, G. Totkov |
| 2007 | Kiev | V. Donchenko |