

## Preface

Between September 13 and 14, 2011 at the Institute of Mathematics and Computer Science (IMCS) of Academy of Sciences of Moldova (ASM) the first edition of the International Workshop on Intelligent Information Systems (IIS-2011) took place. It was organized by the IMCS of the ASM with support of the Supreme Council for Science and Technological Development (Republic of Moldova), National Authority for Scientific Research (Romania) and Union of Scientific and Technical Societies of Moldova (Republic of Moldova).

A special session of the workshop was dedicated to celebrating the 70th anniversary of Corresponding member Constantin Gaidric.

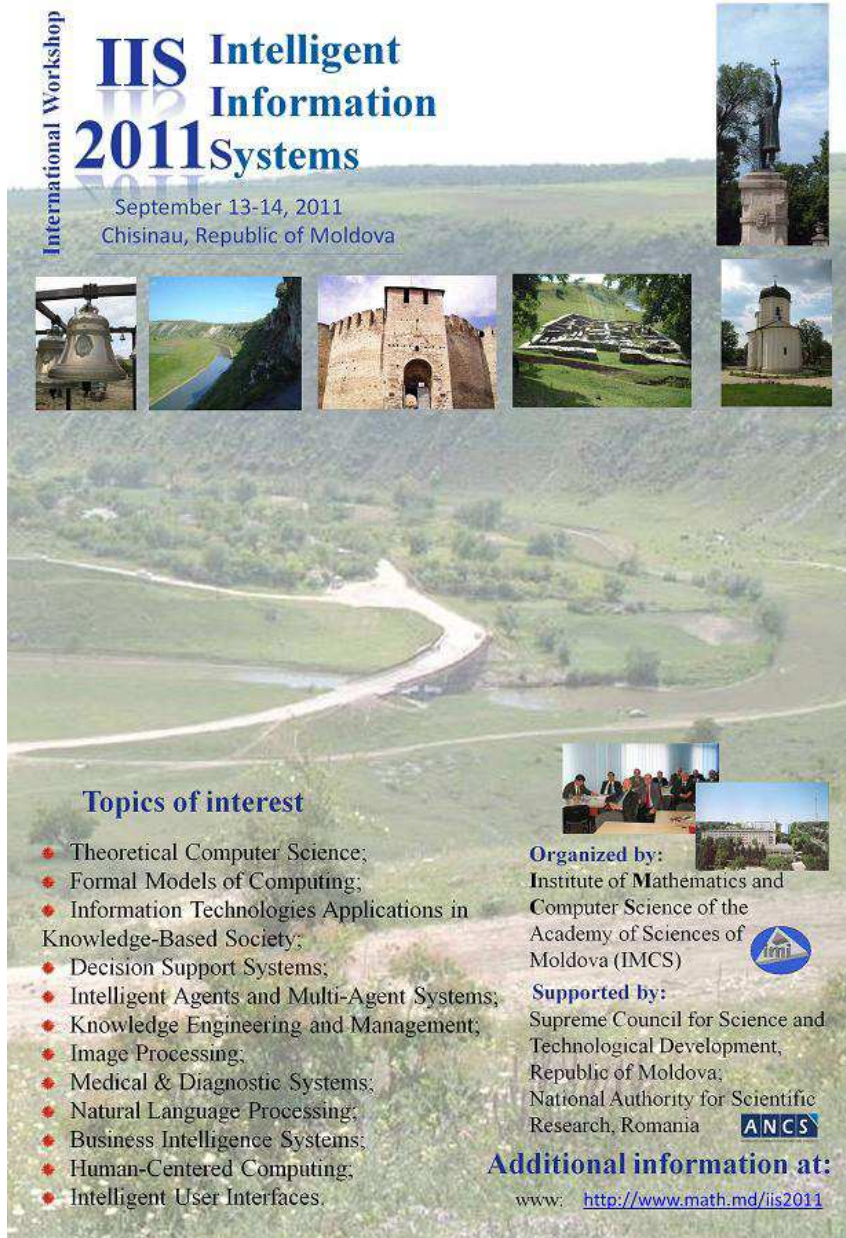
Objective of the workshop was meeting of experts in the field and people taking their first steps in research, to make a review of current trends and applications related to the main directions of development of intelligent systems: knowledge processing, natural language processing, decision making, formal models of computation, etc.



Figure 1. Plenary session

Experience exchange took place, new ideas were promoted and various forms of collaboration were established.







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**International Workshop**

# IIS Intelligent Information Systems 2011


September 13-14, 2011  
Chisinau, Republic of Moldova




**Topics of interest**

- Theoretical Computer Science;
- Formal Models of Computing;
- Information Technologies Applications in Knowledge-Based Society;
- Decision Support Systems;
- Intelligent Agents and Multi-Agent Systems;
- Knowledge Engineering and Management;
- Image Processing;
- Medical & Diagnostic Systems;
- Natural Language Processing;
- Business Intelligence Systems;
- Human-Centered Computing;
- Intelligent User Interfaces.

**Organized by:**  
Institute of Mathematics and Computer Science of the Academy of Sciences of Moldova (IMCS)



**Supported by:**  
Supreme Council for Science and Technological Development, Republic of Moldova;  
National Authority for Scientific Research, Romania



**Additional information at:**  
www: <http://www.math.md/iis2011>

The following scientists attended plenary session of the workshop and made communications which have aroused interest and provoked interesting debates: Academician Florin Gheorghe Filip (Romanian Academy) with „Designing and Building Modern Information Systems; A Series of Decisions to be Made”; Professor Antoni Wiliński (Faculty of Computer Science and Information Technology, West Pomeranian University of Technology of Szczecin, Poland) with „Prediction Models of Financial Markets Based on Multiregression Algorithms”; Professor Dan Cristea (University “A.I.Cuza”, Iasi, Romania) with „Romanian Linguistic Resources On Very Large Scale”; Corresponding member Horia-Nicolai Teodorescu (Romanian Academy) with „Modelling Behavior in Social Networks under Disagreement, in Various Logistics”. Also, the value of communication made by Professor Gennaro J. Mafia (Department of Chemical Engineering, Manhattan College, USA) ”Analysis and Modeling of Vapor Distillation Using ASPEN, HYSYS Recompressive”, was not diminished by thousands of miles away, where he had been, as it was successfully done online.

The workshop offered researchers the opportunity to meet with colleagues to share and discuss news and trends of intelligent systems development, with special emphasis on their applicability.

In the framework of the workshop 6 scientific sessions worked: Information systems and technologies, Theory of computing, Image processing, Image processing in medicine, Language technologies, Students’ session. There were published and presented as reports 48 papers of authors from Republic of Moldova, Romania, Ukraine, Russia, Poland, Finland and the USA. More than 98 scientists attended the workshop.

A special session for young researchers was organized. Current and future problems of information society development were discussed, as well as applying new information technologies, natural language processing, decision support systems and medical diagnostic systems.

The participants appreciated the high level of organization of the event and specially mentioned that presented scientific results are valuable, particularly those of young researchers, expressing hope that this forum will have continuity, becoming a traditional meeting.

This volume of Computer Science Journal of Moldova contains the





Figure 2. Invited speakers: H.-N. Teodorescu, A. Wiliński, F.G. Filip, D. Cristea



Figure 3. Session for young researchers

peer-reviewed articles that were presented at International Workshop on Intelligent Information Systems – 2011, published in Proceedings IIS-2011 and selected and revised for publication in this edition of CSJM.

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