

ITHEA International Scientific Society



ITA 2023

XXVI-th Joint International Scientific Events on Informatics

September 25 - September 27, 2023
New Bulgarian University, Sofia, Bulgaria

September 28 - October 08, 2023
Internet on-line sessions

www.ithea.org
office@ithea.org

ITA 2023 is organized by:

ITHEA International Scientific Society (ITHEA ISS)

New Bulgarian University, Sofia (Bulgaria)

Institute of Information Theories and Applications FOI ITHEA (Bulgaria)

in tight collaboration with:

- Spanish Network on Biomolecular and Biocellular Computing (Spain)
- National Academy of Sciences of Ukraine (Ukraine)
- FIS Foundations of Information Science (Spain)
- Association of Developers and Users of Intelligent Systems (ADUIS)

- Institute of Mathematics and Informatics of BAS (Bulgaria)
- V.M.Glushkov Institute of Cybernetics of NASU (Ukraine)
- Institute for Informatics and Automation Problems, NAS (Armenia)
- Instituto Aragonés de Ciencias de la Salud (Spain)
- Institute of Mathematical Problems and Systems of NASU (Ukraine)

- National Aviation University, Kyiv (Ukraine)
- Universidad Politecnica de Madrid (Spain)
- Hasselt University (Belgium)
- University of Calgary (Canada)
- Taras Shevchenko National University of Kyiv (Ukraine)
- Ain Shams University of Cairo (Egypt)
- Rzeszow University of Technology (Poland)
- Kharkiv National University of Radio Electronics (Ukraine)
- Ben-Gurion University (Israel)

ITA 2023 Conferences

page

CSAI 2023		VIII-th International Conference Cognitive Science - Approaches and Results towards Artificial Intelligence	5
MeL 2023		XVIII-th International Conference Modern (e-) Learning	7
SoftEngine 2023		XVII-th International Conference Software Engineering	9
MIM 2023		XIII-th International Conference Mathematics of Informational Modeling	11
i-i-i 2023		XIV-th International Conference Information - Interaction – Intellect	12
GIT 2023		XXI-th International Conference General Information Theory	13
i.TECH 2023		XXI-th International Conference Information Technologies	15
NIT 2023		XV-th International Conference Natural Information Technologies	16
KDS 2023		XXIX-th International Conference Knowledge - Dialogue - Solution	18
INFOS 2023		XVI-th International Conference on Intelligent Information and Engineering Systems	19
KEBIDH 2023		X-th International Conference Knowledge Engineering in BioMedical Informatics and Digital Health	20
IM 2023		XIII-th International Conference Informational Modeling	22
CFDM 2023		XV-th International Conference Classification, Forecasting, Data Mining	24
ISSI 2023		XVII-th International Summer School on Informatics	25

Deadlines for ITA 2023

For all conferences:

- August 15, 2023:** submission of **paper** by the ITHEA ISS Submission Web System: <http://ita.ithea.org>
submission of proposals for ISSI **workshops** by e-mail: office@ithea.org
- August 31, 2023:** notification of the **paper acceptance** by the [ITHEA ISS Submission Web System](http://ita.ithea.org)
notification of the workshop **acceptance** to authors e-mail
- August 20, 2023:** submission of proposals for ISSI **doctoral consortium** by e-mail: office@ithea.org
- August 31, 2023:** **reservation of hotel**, submission of **registration forms** and **visa application forms**
by e-mail: office@ithea.org and office@hit-tourism.com

Manuscripts

ITHEA rules for preparing the manuscripts are compulsory.

Responsibility for manuscripts published in ITHEA International Journals and Book Series belongs to authors. Please *get permission to reprint* any copyrighted material.

Not acceptable manuscripts will be returned to authors with recommendations. After authors' editing and refinement, if the manuscripts are reviewed positively, they will be published.

Manuscripts need to be formatted in DOC or TeX formats according the sample sheets given at:

- DOC template: http://www.ithea.org/conferences/ithea_doc_template.doc

- TeX template: http://www.ithea.org/conferences/ithea_tex_template.tex

Accepted manuscripts will be published by ITHEA[®] in the peer reviewed ITHEA International Journals: "Information Theories and Applications" (IJ ITA); "Information Technologies and Knowledge" (IJ ITK); "Information Models and Analyses" (IJ IMA); "Information Content and Processing" (IJ ICP).

The ITHEA International Journals are indexed by DOI, Crossref, Worldcat, ROAD Directory of Open Access scholarly Resources, Google Scholar, CiteseerX, ITHEA, and are planned to be indexed in WoS.

Submission

The camera-ready copy of the manuscript should be received by the ITHEA Conference Submission System (<http://ita.ithea.org>) or by the ITHEA Journal Submission System (<http://ij.ithea.org>); e-mail for questions: office@ithea.org.

Submit registration cards and visa forms to e-mail: office@ithea.org.

<i>Registration Fees (including 20% VAT)</i>			<i>Publication Fees (including 20% VAT)</i>	
	Onsite	Virtual	Fee for one online only published paper	
Author	EUR 50 / BGN 100	Free	Author	EUR 50 / BGN 100
Student (incl. PhD)	EUR 30 / BGN 60	Free	Student (incl. PhD)	EUR 30 / BGN 60
Listener	EUR 30 / BGN 60	Free	Author or Student from NBU	Free
Participant from NBU	Free	Free	Article from ITHEA repository	Free

Registration fee permits *access* to all conference events. Registration fee for student (incl. PhD) permits presentation of one regular paper or one PhD thesis in Doctoral Consortium.

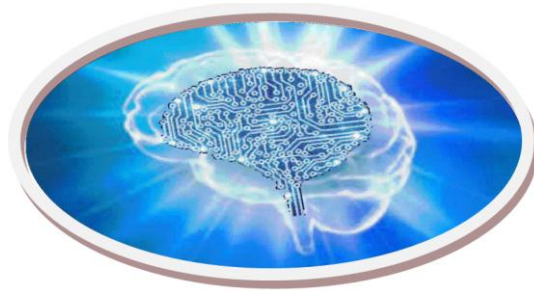
ITHEA repository: Papers submitted in the ITHEA repository, after accepting, will be published for free without priority at the earliest opportunity.

Printed journal issue: One printed exemplar of a journal issue costs **EURO 50**.

Language

The official language of the conference is **English**.

New Bulgarian University and ITHEA[®] International Scientific Society



CSAI 2023

VIII-th International Conference

Cognitive Science - Approaches and Results towards Artificial Intelligence

September 25 - September 27, 2023

New Bulgarian University, Sofia (Bulgaria)

Aims and Scope

The conference is centered on approaches and results obtained through the study of Cognition and Consciousness, their interpretation and application towards Artificial Intelligence.

Topics of interest

Researches, models in Cognitive Science as well as applications are welcomed.

The topics of interest include but are not limited to:

- Mental representations and mental operations
- Learning and Memory
- Perception in humans, animals, and machines (vision and machine vision, auditory perception, etc.)
- Natural language (psycholinguistics, language acquisition, conceptualization, meaning, etc.)
- Natural Language Processing
- Emotions and emotion recognition
- Sentiment analyses
- Cognition and Consciousness
- Social cognition and consciousness
- Rethinking intelligence, including artificial

This large spectrum includes results and models in cognitive science, cognitive neuroscience, biometrics, brain imaging etc. as well as developed applications in neurocomputing, signal processing, pattern recognition, brain-computer interfaces, biometric technologies for human identification, models of society and human behavior etc.

Steering Committee

Velina Slavova, Department of Computer Science, New Bulgarian University, Sofia (Bulgaria)
Krassimir Markov, ITHEA Institute of Information Theories and Applications, Sofia (Bulgaria)

Program Committee

Philip Andonov	Department of Computer Science, New Bulgarian University, Sofia (Bulgaria)
Dimitar Atanasov	Department of Computer Science, New Bulgarian University, Sofia (Bulgaria)
Olena Chebanyuk	Department of Computer Science, New Bulgarian University, Sofia (Bulgaria)
Entcho Gerganov	Department of Cognitive Science and Psychology, New Bulgarian University, Sofia (Bulgaria)
Maurice Grinberg	Department of Cognitive Science and Psychology, New Bulgarian University, Sofia (Bulgaria)
Jenny Benois-Pinaut	UFR Mathematiques et Informatique, Université Bordeaux (France)
Irina Blinnikova	Faculty of psychology, Lomonosov Moscow State University (Russia)
Hichem Sahli	ETRO-Audio-Visual Signal Processing, Vrije Universiteit Brussel (Belgium)
Albert Ali Salah	Department of Computer Engineering, Bogazici University, Istanbul (Turkey)
Vassil Vassilev	School of Computing, London Metropolitan University, London (UK)
Abdel-Badeeh Salem	M. Artificial Intelligence and Knowledge Engineering Research Labs, FCIS, Ain Shams University Abbasia, Cairo (Egypt)

New Bulgarian University and ITHEA[®] International Scientific Society



MeL 2023

XVIII-th International Conference

Modern (e-) Learning

September 25 - September 27, 2023

New Bulgarian University, Sofia, Bulgaria

Aims and Scope

The conference is devoted to discussion of current research and applications regarding the basic directions of Modern (e-) Learning: Philosophy, Methodologies and Technologies.

Topics of interest

Philosophy and Methodology of the Modern (e-) Learning

- Accreditation and Validation of Modern (e-) Learning Materials
- Learning Communities and Virtual Spaces for Modern (e-) Learning Communities
- Copyright Regulations and Intellectual Property
- Evolution in Teacher Roles through Technology
- Experience and Problems of Implementation of Distance Learning Systems
- Informatics of the Modern Learning
- Instructional Design Theories of Modern (e-) Learning
- Institutional Issues on Technology-based Learning
- Interaction of Classical and Modern (e-) Learning
- Knowledge Market
- Modern (e-) Learning Paradigms
- Organizational Problems of Distance Learning
- Pedagogical and Organizational Frameworks of Modern (e-) Learning
- Pedagogical Approaches - Classical and Modern Didactic Principles of Modern (e-) Learning
- Policies on Technology-based Learning
- Psychological and Ergonomic Aspects of Modern (e-) Learning
- Social Aspects of Modern (e-) Learning
- Standardization of the Modern (e-) Learning Materials
- Standards and Quality Requirements for the Certification and Assessment of the Learners' Progress
- Teaching Aspects of Modern (e-) Learning

Modern e-Learning Technologies

- Information Retrieval and Visualization in e-Learning
- Multimedia Educational Systems
- Media for Learning in Multicultural Settings
- Mobile e-Learning Applications
- P2P e-Learning Applications
- Social Aspects in Collaborative e-Learning Systems
- Standardization in e-Learning Technologies (Learning Objects, Designs, Modeling Languages)
- Technology-based Blended, Distance and Open Learning
- Technology-Facilitated Learning in Complex Domains
- Technologies for advanced Teacher Training
- Technology and Human Resource Issues
- Using AI/Semantic Web Technologies for Personalized and Contextual Learning
- Web-based Educational Information Systems

Steering Committee

Olexii Voloshyn (Ukraine)
Koen Vanhoof (Belgium)
Krassimir Markov (Bulgaria)
Oleg Zakusilo (Ukraine)

Program Committee

Alexander Kuzemin (Ukraine)
Alexander Provotar (Ukraine)
Anatoliy Anisimov (Ukraine)
Anatoliy Gupal (Ukraine)
Anatoly Krissilov (Ukraine)
Dmitriy Buy (Ukraine)
Galina Gaivoronskaya (Ukraine)
Grigorii Kudin (Ukraine)
George Totkov (Bulgaria)
Elena Kashpur (Ukraine)
Igor Lyashenko (Ukraine)
Iurii Krak (Ukraine)
Jean Schreurs (Belgium)
Juan Castellanos (Spain)
Krassimira Ivanova (Bulgaria)
Luis Fernando de Mingo (Spain)
Michail Povidaychik (Ukraine)
Natalia Pankratova (Ukraine)
Nikolay Malyar (Ukraine)
Oleh Ilarionov (Ukraine)
Phedor Garashenko (Ukraine)
Tea Munjishvili (Georgia)
Valeriy Grigoruk (Ukraine)
Vasilii Grirorkiv (Ukraine)
Vitaliy Snytuk (Ukraine)
Vitaliy Litvinov (Ukraine)
Vladimir Bugrov (Ukraine)
Yury Zaychenko (Ukraine)



SoftEngine 2023

XVII-th International Conference

Software Engineering

The aim of the conference

The conference is devoted to organize the environment for researches, teachers and students for representing results of research and practical achievements in the “Software Engineering” area.

Conference topics

Theoretical Basics of Software Engineering

- AGILE and Model-Driven Approaches to Software Development
- Approaches to Software Development Life Cycle Processes Improvement
- Business Process Management and Engineering
- Empirical Software Engineering
- Formal Foundations of Software Engineering
- Frameworks and Middleware
- Model-Driven Engineering
- Software Development Technologies
- Software Engineering Standards
- Software Patterns and Refactoring

Applied Aspects of Software Engineering

- Approaches and Models to Estimate Expenses of Future Software Project
- Component-Based Software Engineering
- Requirements Engineering
- Service-Oriented Software Engineering
- Software Designing
- Software Quality
- Software Maintains and Evolution
- Software Testing

Software Engineering Application Domains

- Agent and Multi-Agent Systems
- Biotechnologies and Smart Health Technologies
- Cloud Computing
- Data Bases and Knowledge Bases
- Image Processing and Computer Vision
- Internet
- Security
- Software Development for Mobile Operation Systems
- Real-Time Systems
- Network and Data Communications
- User-Centered Software Engineering

Steering committee

Olena Chebanyuk - National Aviation University, (Ukraine) and New Bulgarian University (Bulgaria)
Abdel-Badeeh M. Salem - Ain Shams, University and Artificial Intelligence and Knowledge Engineering Research Lab (Egypt)
Krassimir Markov - Institute of Information Theories and Applications (Bulgaria)

Program committee

Aykut Karakaya - Bulent Ecevit University (Turkey)
Carlos Cares - Software Engineering Studies Center (CEIS), University of La Frontera, Temuco (Chile)
Gefei Zhang - Hochschule für Technik und Wirtschaft Berlin (Germany)
Ewa Ziemia - University of Economics in Katowice (Poland)
Evellin Cardoso - Federal University of Goias (Brazil)
Hakan Kutucu - Karabuk University (Turkey)
Khaja Mannanuddin - Sumathi Reddy Institute of Technology (India)
Krassimira Ivanova - University of Telecommunications and Post (Bulgaria)
Michael Gr. Voskoglou - Graduate Technological Educational Institute of Western Greece School of Technological Applications (Greece)
Rafael Lahoz Beltrá - Universidad Complutense de Madrid (Spain)
Sedat Akleyek - Ondokuz Mayıs University (Turkey)
Taras Panchenko - Taras Shevchenko National University of Kyiv (Ukraine)
Tetiana Konrad - National Aviation University, Ukraine, and Pedagogical University of Krakow (Poland)
Tea Munjishvili - I. Javakhishvili Tbilisi State University (Georgia)
Vitalii Prykhodniuk - Central Scientific Research Institute of Armament (Ukraine) and Military Equipment of the Armed Forces of Ukraine (Ukraine)
Yuh Wen Chen - Da Yeh University (Taiwan)

Institute of Mathematics and Informatics of BAS and ITHEA[®] International Scientific Society



MIM 2023

XIII-th International Conference

Mathematics of Informatical Modeling

October 02 - October 03, 2023

Institute of Mathematics and Informatics of BAS (Bulgaria)

Aims and Scope

The basic objective of the conference is the formulation and analysis of adequate mathematical models for the description and solution of practical engineering and related problems based on the understanding of their underlying informatical structures, i.e. the mathematical foundation of information science (informatics). It includes Mathematical Logic (for Computer Science), Empirical Engineering, Theory of Algorithms, Information Theory, Coding Theory, Cryptology, Mathematical foundation of network processes and so on.

Topics of interest

- Automata theory and models
- Chaos and self-organization models
- Complex systems modeling and complexity of algorithms
- Intuitionistic fuzzy logic and Substructural logic
- Learning and Intelligence algorithms
- Modeling, Simulation, and Emulation: Mathematical theory, Formal verification
- Multisets theory and its applications
- Parallel algorithms, scientific computation and clouds
- Theory of named sets and its applications
- Uncertainty, Intuitionistic fuzzy sets: Theory and Applications
- Cryptographic methods and protocols, Reliable and Secure Telecommunications
- Discrete geometry, Distances and Similarities, Tomography
- Financial mathematics, serious games
- Generalized nets and models
- Connectionism and Neural nets, Wavelet-neurons, and Emerging modeling objects
- Mathematical statistics
- Signal processing

Steering Committee

Zlatinka Kovacheva (Bulgaria)
Stoyan Poryazov (Bulgaria)

Krassimir Atanasov (Bulgaria)
Krassimir Markov (Bulgaria)

Program Committee

Alexander Palagin (Ukraine)
Claus-Peter Ruckemann (Germany)
Dmitro Buy (Ukraine)
Emiliya Saranova (Bulgaria)
Gurgen Khachatryan (Armenia)
Hasmik Sahakyan (Armenia)
Juan Castellanos (Spain)
Jordan Tabov (Bulgaria)
Koen Vanhoof (Belgium)

Leonid Hulyanitskiy (Ukraine)
Levon Aslanyan (Armenia)
Liudmila Cheremisinova (Belarus)
Krassimira Ivanova (Bulgaria)
Natalia Pankratova (Ukraine)
Olena Chebanyuk (Ukraine)
Olexii Voloshyn (Ukraine)
Sergey Krivii (Ukraine)
Yevgeniy Bodyanskiy (Ukraine)



i-i-i 2023

XIV-th International Conference **Information - Interaction - Intellect**

Aims and Scope

The conference is devoted to discussion of current research and applications regarding the intelligent systems development:

Topics of interest

- Artificial Engineering
- Decision Making
- NL Text Processing
- Intelligent Technologies in Control and Design
- Multi-agent Structures and Systems
- Neural Networks

Steering Committee

Krassimir Markov (Bulgaria)
Alexander Palagin (Ukraine)
Olexii Voloshyn (Ukraine)

Program Committee

Anatoliy Gupal (Ukraine)
Ekaterina Solovyova (Ukraine)
Olena Chebanyuk (Ukraine)
Galina Gaivoronskaya (Ukraine)
Krassimira Ivanova (Bulgaria)
Leonid Svyatogor (Ukraine)

Liudmila Cheremisinova (Belarus)
Martin Mintchev (Canada)
Natalia Bilous (Ukraine)
Natalia Kussul (Ukraine)
Orly Yadid-Pecht (Israel)

Sergey Krivii (Ukraine)
Tea Munjishvili (Georgia)
Vassil Sgurev (Bulgaria)
Vitalii Vishnevskiy (Ukraine)
Yevgeniy Bodyanskiy (Ukraine)
Yury Zaychenko (Ukraine)



GIT 2023

XXI-th International Conference **General Information Theory**

Aims and Scope

The conference objective is to present and discuss current achievement in the fields of the General Information Theory.

General Information Theory (GIT) is considered here not only as a pure theoretical discipline. While matter and energy are the foundation of material World, information is the foundation of the mental world as well as of the interactions in alive beings and within their communities. It is the leading factor in evolution and genetics. It is the basis of intellectual activity. Studying intelligence, we should take broader approach discovering the role of information, generally speaking, in life. The time has come to work out more uniform and general, deeper understanding of information processes which support the noosphere.

In this, broader sense, we should again and again turn our attention to the philosophy, interrelations between material and mental, correlate the notion of information in communication, biology, humanitarian areas and the physics of micro world.

We strongly believe that the progress in Artificial Intelligence is tightly tied with our deeper understanding of informational processes, in general. The conference is dedicated to this broad issue.

Topics of interest

Include, but are not limited to the main areas of GIT: (1) Theory of the Information, (2) Theory of the Information Subject (INFOS), and (3) Theory of the Information Interaction (INFORACTION):

Philosophy

- Philosophical background: material and mental – their coexistence and cooperation the role of humanitarian and natural science knowledge
- Creation of paradigms by intellectual systems
- Information and knowledge
- Information and life
- Non-forceful interaction

Cognitology, Gnoseology and Semiotics

- Theory and methodology of World cognition by intellectual systems and communities
- Intellectual instruments of cognition: hypothesis, theories, experimental verification and falsification
- Role of knowledge systems: knowledge, experience, beliefs, conventions, prejudices, religions, myths, formal and metaphorical reasoning consciousness and self-consciousness
- Semiotics of knowledge acquisition and model construction
- Evolution and informational processes

Modern Physics

- Physics of information processes and informational background of physics
- What give quantum mechanics and other theories of micro world to our understanding of information exchange; principle of non locality, “spooky action at a distance”

Noosphere

- Noosphere and its informational component, simulated objects with different noosphere statuses
- AI systems' creation within the frame of integrated interaction with environment and goal-oriented activity

Humanitarian Aspects

- Modeling Informational interaction in Nature and society: physical, social systems (psychology, egregors, sociopsychology) and beyond

Steering Committee

Krassimir Markov (Bulgaria)
Pedro C. Marijuán (Spain)
Yi Xin Zhong (China)
Alexander Palagin (Ukraine)

Program Committee

Anatoliy Gupal (Ukraine)
Ekaterina Solovyova (Ukraine)
Gordana Dodig Crnkovic (Sweden)
Gurgen Khachatryan (Armenia)
Guy A Hoelzer (USA)
Jerry LR Chandler (USA)
Joseph Brenner (Switzerland)
Karl Javorszky (Austria)
Koichiro Matsuno (Japan)
Krassimira Ivanova (Bulgaria)
Christophe Menant (France)
Leonid Svyatogor (Ukraine)
Loet Leydesdorff (Netherlands)
Michel Petitjean (France)
Qiao Tian-qing (China)
Sergey Krivii (Ukraine)
Søren Brier (Denmark)
Stanley N Salthe (USA)
Walter Riofrio (Peru)
Wolfgang Hofkirchner (Austria)
Yevgeniy Bodyanskiy (Ukraine)



i.TECH 2023

XXI-th International Conference **Information Technologies**

Aims and Scope

The conference is aimed to represent research results and development activities in fields of Information Technologies and Software Engineering.

Topics of interest

Information Technologies

- Information Systems
- Mobile and Multimedia Systems
- Distributed and Telecommunication Systems
- Cyber Security

Software Engineering

- Fundamentals of Software Engineering
 - Software Engineering Standards Discussions and Reviews
 - Theoretical Aspects of Software Engineering
 - Domain Analysis and Engineering
 - Software Modeling Standards (UML, BPMN and Others)
 - Patterns in Software Engineering
- Software Life Cycle Management
 - Software Development Life Cycles Processes
 - Tools, Techniques, Algorithms and Methods for Management Software Development Life Cycle
 - AGILE and Model-Driven Development (MDD)
 - Software Product Lines
 - Reverse Software Engineering
 - Software and System Interoperability
- Software Applications and Development
 - Service-oriented Software Engineering
 - Distributed Application Development
 - Mobile Development
 - Software Technologies

Steering Committee

Krassimir Markov (Bulgaria)
Krassimira Ivanova (Bulgaria)

Juan Castellanos (Spain)
Luis Fernando de Mingo (Spain)

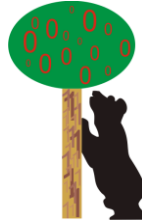
Olena Chebanyuk (Ukraine)

Program Committee

Abdel-Badeeh M. Salem (Egypt)
Alexander Kuzemin (Ukraine)
Alfredo Milani (Italy)
Kannan Rajkumar (India)

Koen Vanhoof (Belgium)
Levon Aslanyan (Armenia)
Martin Mintchev (Canada)
Oleksandr Stryzhak (Ukraine)

Olexii Voloshyn (Ukraine)
Olry Yadid-Pecht (Israel)
Tea Munjishvili (Georgia)
Volodymyr Opanasenko (Ukraine)



NIT 2023

XV -th International Conference

Natural Information Technologies

Aims and Scope

Natural Computing can be broadly defined as the development of computer programs and computational algorithms using metaphorical inspiration from system and phenomena that occur in the natural world. Fundamentals of Natural Computing: Basic Concepts, Algorithms, and Applications present a wide-ranging survey of novel techniques and important applications of nature-based computing.

The goal of NIT International Conference is to offer a platform to critically assess present findings in the field, and to outline future developments in nature-inspired computing.

Original papers describing current research in the areas given below are invited, but other relevant areas also welcome. Papers in application areas of the same fields will also be considered.

Topics of interest

Topics of interest include, but are not limited to:

NATURAL COMPUTING

- Cellular Computing
- DNA Computing
- Evolutionary Computation
- Membrane Computing
- Molecular Computing
- Neural Computing
- Quantum Computing

APPLICATIONS OF NIT

- Bioinformatics
- Data Mining and Knowledge Discovery
- Decision Making and Decision Support Systems
- Evolvable Hardware
- Information Retrieval
- Knowledge Management
- Multi-agent Structures and Systems
- Natural Language Processing
- Robotics
- Synthetic Biology
- Web Intelligence

Steering Committee

Juan Castellanos, Universidad Politécnica de Madrid (Spain)
Levon Aslanyan, Institute for Informatics and Automation Problems (Armenia)
Krassimir Markov, Institute on Information Theories and Applications (Bulgaria)

Program Committee

Abraham Gutierrez - Universidad Politécnica de Madrid (Spain)
Carmen Vidaurre - Berlin Institute of Technology (Germany)
Olena Chebanyuk - National Aviation University (Ukraine)
Erzsebet Csuhaaj-Varju - Hungarian Academy of Sciences (Hungary)
Fernando Arroyo - Universidad Politécnica de Madrid (Spain)
Fivos Panetsos - Universidad Complutense (Spain)
Gheorghe Paun - Romanian Academy (Romania)
Giancarlo Mauri - Università di Milano-Bicocca (Italy)
Hasmik Sahakyan - Institute for Informatics and Automation Problems (Armenia)
José María Sempere - Universidad Politécnica de Valencia (Spain)
Koen Vanhoof - Hasselt University (Belgium)
Krassimira Ivanova - University of Telecommunications and Post (Bulgaria)
Kostas Chrysagis - Center for Technology Research and Innovation - CETRI (Greece)
Luis Fernando de Mingo - Universidad Politécnica de Madrid (Spain)
Marian Gheorghe - University of Sheffield (United Kingdom)
Mario Pérez Jiménez - Universidad de Sevilla (Spain)
Marion Oswald - Hungarian Academy of Sciences (Hungary)
Martyr Amos - Manchester Metropolitan University (United Kingdom)
Pedro Clemente Marijuan Fernandez - Aragon Institute of Health Sciences, I+CS (Spain)
Rudolf Freund - Technische Universität Wien (Austria)
Sandra Gómez Canaval - Universidad Politécnica de Madrid (Spain)
Tasos Bezerianos - University of Patras (Greece)
Victor Mitrană - University of Bucharest (Romania)
Vincenzo Manca - Università di Verona (Italy)
Yevgeniy Bodyanskiy - Kharkiv University (Ukraine)



KDS 2023

XXIX-th International Conference

Knowledge - Dialogue - Solution

Aims and Scope

The Conference continues the series of annual international KDS events organized by V.M. Glushkov Institute of Cybernetics of National Academy of Sciences of Ukraine and Association of Developers and Users of Intelligent Systems (ADUIS).

Topics of interest

- Applied Information Systems
- Data Mining and Knowledge Discovery
- Decision Making
- Intelligent information technology
- Interdisciplinary Scientific Research
- Logical Inference
- NL Text Processing
- Neural and Growing Networks
- Mathematical methods research of complex systems
- Modern (e-) Learning and intelligent systems
- Philosophy and Methodology of Informatics
- Problems of Computer Intellectualization

Steering Committee

Ivan Sergienko (Ukraine)	Krassimir Markov (Bulgaria)
Alexander Palagin (Ukraine)	Olexii Voloshyn (Ukraine)
Natalia Pankratova (Ukraine)	Volodymyr Romanov (Ukraine)

Program Committee

Abdel-Badeeh M. Salem (Egipt)	Tea Munjishvili (Georgia)
Albert Voronin (Ukraine)	Vassil Sgurev (Bulgaria)
Alexander Reznik (Ukraine)	Vitaliy Lozovskiy (Ukraine)
Anatoly Krissilov (Ukraine)	Vitaliy Snituk (Ukraine)
Anatolii Gupal (Ukraine)	Vladimir Donskoy (Ukraine)
Galina Gaivoronskaya (Ukraine)	Vladimir Jotsov (Bulgaria)
Ekaterina Solovyova (Ukraine)	Vladislav Shelepov (Ukraine)
Krassimira Ivanova (Bulgaria)	Yevgeniy Bodyanskiy (Ukraine)
Leonid Hulianytskyi (Ukraine)	Yury Zaychenko (Ukraine)



INFOS 2023

XVI-th International Conference **Intelligent Information and Engineering Systems**

Aims and Scope

The conference is devoted to the discussion of current research, development and applications of the knowledge-based intelligent information and engineering systems.

Topics of interest

Theoretical foundations:

Genetic Algorithms and Evolutionary Computing
Expert Systems, Hybrid Intelligent Systems
Fuzzy Techniques and Systems
Intelligent Agents and Multi-Agent Systems
Data Mining, Knowledge Acquisition
Knowledge Discovery, Knowledge-Based Systems
Knowledge Representation and Management
Natural Language Processing, Speech Understanding
Neural Networks, Machine Learning
Software Engineering and Computing Techniques

Intelligent Applications:

Artificial Intelligence in Modeling and Simulation
Bioinformatics using Intelligent and Machine Learning
Business Intelligence Systems
Human-Robot Interaction, Image Processing
Industrial Control and Monitoring
Intelligent Agents Applications
Intelligent Manufacturing Systems
Intelligent Natural Language Systems
Intelligent Robots
Intelligent Tutoring Systems
Intelligent Web Mining and Applications
Medical and Diagnostic Systems
Mobile Computing and Systems
Multi-Media Intelligent Information Systems

Steering Committee

Galina Setlak - Rzeszow University of Technology (Poland)
Krassimir Markov - Institute on Information Theories and Applications (Bulgaria)

Program Committee

Alexander Trousov, IBM Research (Ireland)	Luis Fernando de Mingo Lopez (Spain)
Alfredo Milani (Italy)	Marek Orkisz (Poland)
Feliks Stachowicz (Poland)	Marian Wysocki (Poland)
Jacek Kluska (Poland)	Martin Mintchev (Canada)
Juan Penuella Castellanos (Spain)	Olena Chebanyuk (Ukraine)
Koen Vanhoof (Belgium)	Olexii Voloshyn (Ukraine)
Krassimira Ivanova (Bulgaria)	Olry Yadid-Pecht (Israel)
Krzysztof Kubiak (Poland)	Volodymyr Stepashko (Ukraine)
Leon Bobrowski (Poland)	Xavier Blanco (Spain)
Leonid Lubchik (Ukraine)	Yevgeniy Bodyanskiy (Ukraine)
Levon Aslanyan (Armenia)	Yuriy Zaichenko (Ukraine)



KEBIDH 2023

X-th International Conference

Knowledge Engineering in BioMedical Informatics and Digital Health

Organized by:

Prof. Dr. Abdel-Badeeh M. Salem

Head of Bio-Medical Informatics & e-health Group
Artificial Intelligence & Knowledge Engineering Labs
Faculty of Computer and Information Sciences
Ain Shams University, Cairo, Egypt

Contact: absalem@cis.asu.edu.eg ; abmsalem@yahoo.com
<http://www.shams.edu.eg/staff/profile.php?action=show&pid=8256>



Aims and Scope

KEBIDH 2023 will bring researchers, practitioners, developers, and users to present their latest ideas and research and in all areas of neuroinformatics, bioinformatics, medical informatics, bioengineering, machine learning and artificial intelligence in all areas of digital health and life sciences.

KEBIDH 2023 will provide a forum for the exchange of ideas between knowledge engineers, biologists, physicians and computer scientists. Papers related to methodologies, techniques and applications in bioinformatics, medical informatics, telemedicine, and Health care are especially solicited.

Topics of interest

The topics of interest include, but are not limited to:

- Health Care Information Systems
- Clinical Information Systems
- Medical Image Processing and Techniques
- Medical Intelligent Systems for different medical tasks
- Medical Expert Systems
- Applications in Medical and Health Sciences
- Bioinformatics and Biostatistics
- Telemedicine Software, Portals, Devices and Telehealth
- Web-based and Remote Medicine
- Data Mining and Knowledge Discovery in Medicine
- Machine Learning-based Medical Systems
- Artificial Intelligence Techniques in Health Sciences
- Medical Databanks, Databases, and Knowledge Bases
- Neurocomputing in Medicine
- Ontology and Medical Information Science
- Bioethics and Health informatics

Steering Committee

Christina Siontorou - University of Piraeus (Greece)
Francesco Sicurello - University of Milan Bicocca (Italy)
Isabelle Ellis - Department of Health and Human Services, University of Tasmania (Australia)
Klaus Kayser - University of Berlin (Germany)
Nataliya Pankratova - National Technical University of Ukraine (Ukraine)
Nikitchenko Mykola - Taras Shevchenko National University of Kyiv (Ukraine)
Roumen Kountchev - Technical University of Sofia (Bulgaria)
Sarma Cakula - Vidzeme University of Applied Sciences, Valmiera (Latvia)
Yukako Yagi - Harvard Medical School, Boston, MA (USA)

Program Committee

Andreea Ionica - University of Petrosani (Romania)
Arzu Baloglu - Faculty of Engineering, Computer Engineering, Marmara University (Turkey)
Elena Nechita - Vasile Alecsandri University, Bacau (Romania)
Hassan Ghazal - Moroccan Society for Telemedicine and eHealth (Morocco)
Hisham S. Katoua - King Abdulaziz University, Jeddah (Kingdom of Saudi Arabia)
Jeanne Schreurs - Faculty of Economic Sciences, Hasselt University (Belgium)
Kateryna Solovyova - Kharkiv National University of Radioelectronics (Ukraine)
Ketevan Gochitashvili - Ivane Javakhishvili Tbilisi State University (Georgia)
Kidiyo Kpalma - National Institute of Applied Sciences of Rennes, Rennes Cedex (France)
Tatjana Zrimec - Univ of Primorska (Slovenia)
Klimis Ntalianis - Technological Educational Institute of Athens (Greece)
Krasimira Stoilova - Bulgarian Academy of Sciences, (Bulgaria)
M. Madheswaran - Muthayammal Engineering College (India)
Mariam Manjgaladze - Ivane Javakhishvili Tbilisi State University (Georgia)
Marina Gorunescu - University of Craiova (Romania)
Mohamed Roushdy - Ain Shams University (Egypt)
Monica Leba - University of Petrosani (Romania)
Nouhad Rizk - University of Houston (USA)
Roumiana Kountcheva - Technical University of Sofia (Bulgaria)
Sharon Condon - Rural Clinical School, University of Tasmania (Australia)
Smaranda Belciug - Faculty of Sciences, University of Craiova (Romania)
Svitlana Chebanyuk - Research and Practical Centre of Endovascular Neuradoisurgery at NAMS (Ukraine)
Todor Stoilov - Bulgarian Academy of Sciences (Bulgaria)
Valérie Monfort - SOIE Tunis, Univ. Paris1 Panthéon Sorbonne (Tunisia)
Veska Georgieva - Technical University Sofia, Faculty of Telecommunications (Bulgaria)
Xiao-Zhi Gao - School of Electrical Engineering, Aalto University (Finland)



IM 2023

XIII-th International Conference **Informational Modeling**

Aims and Scope

The conference is devoted to the representing of current research in the fields of concepts, methods, languages and tools of Informational Modeling and Simulation and their applications. The aim of the Conference is exchanging the ideas and expertise among researches in industry, science and education and not formal coordination of their efforts.

Topics of the conference

1. AGILE and Model-Driven Development
 - Processing and Analysis of Software Models
 - Modeling Languages and Tools
 - Software Model Checking and Verification
 - Model-Driven Engineering
 - Model Execution and Simulation
 - Metamodels and Metamodeling
2. Informational Modeling and Simulation (IM&S) - Concepts, Paradigms, Approaches and Languages
 - Modeling and Simulation (M&S) Body of Knowledge
 - Knowledge Based IM&S. IM&S languages
 - IM&S Heterogeneous Structures and Scalability. High Level Architecture (HLA), Agent Base IM&S
3. IM&S Efficiency Enhancements
 - Methods for Efficiency Estimation, Comparison and Enhancement, Cooperative, Parallel and Distributed IM&S Efficiency
 - Accuracy enhancement and simulation speeding Simulation Experiments Design
 - Real and IM&S Information Storage and Transmission Formats Data Analysis and Comparison Methods
 - Data Mining
 - Dynamic Adaptation and Personalization of the Human–Computer–Model Interaction
4. IM&S Efficacy Estimation and Life Cycle Management
 - Meta-modeling. Econometrical Meta-models M&S Efficacy Indicators
 - M&S Detailness and Life Cycle Optimization in respect of Designed Product Life Cycle
 - Management, Emergency Cases
 - Verification and Validation in IM&S Life Cycle.
5. IM&S Application Development Methods and Best Practices in Industry, Education and Science
 - IM&S Impact in Industry
 - IM&S in Science and Technology (S&T), Specifics in Information and Communication S&T
 - IM&S in and for Education
 - IM&S in Knowledge Market & Business Informatics

Steering Committee

Olena Chebanyuk (Ukraine)
Krassimir Markov (Bulgaria)

Program Committee

Alexander Palagin (Ukraine)
Anatoliy Krissilov (Ukraine)
Benoa Depaire (Belgium)
Galina Gaivoronskaya (Ukraine)
Gurgen Khachatryan (Armenia)
Hasmik Sahakyan (Armenia)
Igor Galeluca (Ukraine)

Juan Castellanos (Spain)
Koen Vanhoof (Belgium)
Krassimira Ivanova (Bulgaria)
Leonid Hulyanitsliy (Ukraine)
Levon Aslanyan (Armenia)
Natalia Kussul (Ukraine)
Natalia Pankratova (Ukraine)

Olexii Voloshyn (Ukraine)
Olga Kalynychenko (Ukraine)
Tea Munjishvili (Georgia)
Vira Golyan (Ukraine)
Vladimir Romanov (Ukraine)
Vladimir Shelestov (Ukraine)
Yurii Zaichenko (Ukraine)



CFDM 2023

XV-th International Conference

Classification, Forecasting, Data Mining

Aims and Scope

The conference is devoted to the current research and applications in the fields of Classification, Clustering, Pattern Recognition, Forecasting, Features Processing, Transformations, Data Mining, and Knowledge Discovery.

Topics of interest

Pattern Recognition and Forecasting
Machine Learning
Data Mining
Classification and Clustering
Inductive Modeling
Features Processing and Transformations Applications
Image, Speech, Document and Signal Analysis
Knowledge-Based Decision Support Systems

Steering Committee

Levon Aslanyan (Armenia)
Gurgen Khachatryan (Armenia)
Krassimir Markov (Bulgaria)
Ivan Sergienko (Ukraine)

Program Committee

Abdel-Badeeh M. Salem (Egipt)
Anatoliy Gupal (Ukraine)
Hasmik Sahakyan (Armenia)
Juan Castellanos (Spain)
Krassimira Ivanova (Bulgaria)
Luis Fernando de Mingo (Spain)
Natalia Bilous (Ukraine)
Petro Stetsyuk (Ukraine)
Vladimir Shylo (Ukraine)
Vladimir Norkin (Ukraine)
Volodymyr Stepashko (Ukraine)



ISSI 2023

XVII-th International School on Informatics

Aims and Scope

The International School of Informatics is devoted to discussion of current researches, applications and education regarding the basic directions of information technologies, and business informatics:

- **Theoretical Foundations of Informatics:** Conceptions, Modern approaches of Software Development, and Advanced Information Technologies;
- **Tools and Applications:** Tools for Information Modeling, Applied Systems for Information Service, Information Access Methods and Collaboration Tools, Information Security and Reliability, New customer engagement models enabled by Informatics Tools;
- **Informatics of/in Education (IE):** IE Conceptions, including relation to other/traditional fields of study, Computer Aided IE, Methodology of IE.

Steering Committee

Abdel-Badeeh M. Salem (Egypt)
Olena Chebanyuk (Ukraine)
Hasmik Sahakyan (Armenia)
Krassimir Markov (Bulgaria)

Juan Castellanos (Spain)
Koen Vanhoof (Belgium)
Krassimira Ivanova (Bulgaria)
Levon Aslanyan (Armenia)

Lyudmila Kirichenko (Ukraine)
Luis Fernando de Mingo (Spain)
Olexii Voloshyn (Ukraine)

Languages

The official languages of the Summer School are English and Russian.

Certificates

After passing finally tests successfully listeners of workshops will obtain *certificate* about training.

Doctoral consortium

Doctoral consortium proposes to PhD student opportunity to represent research results to ITHEA scientific council reviewers and discuss them in warm friendly atmosphere.

Also you may obtain constructive advices about fundamental research, relating to your PhD topic. It will allow you to improve your research ground to adopt it for collaboration of modern tools and environments variety.

To participate at doctoral consortium event prepare paper, reflecting main results of your PhD. It should be from 8 to 10 pages. Rules for preparing paper manuscript are the same as preparing papers to journals.

Manuscript should be submitted before 30 days to starting of ITA 2023. Then it will be resend to three council members, having experience both in fundamental research and aquanting with achievement in industry for detail aquaintes. Then author has to present his work at ITA 2023 during 30 minutes. After this, the constructive notes from the reviewers will be discussed.

After presenting and polishing, manuscript may be published in ITHEA International Journals.

After presenting scientific results author obtain ITHEA certificate about approbation of his work.

ITHEA reviewers that participate at PhD consideration also obtain certificate for consideration of scientific work in Internation doctoral consortium.