

Science Book Publishing House, USA
Baku State University, Azerbaijan
Lipetsk State Technical University, Russian Federation
Academy of Federal Security Guard Service of the Russian
Federation, Orel, Russian Federation
Don State Technical University, Rostov-on-Don, Russian
Federation
Vologda State University, Russian Federation

MODERN INFORMATIZATION PROBLEMS IN ECONOMICS AND SAFETY

**Proceedings of the XX-th
International Open Science Conference
(Yelm, WA, USA, January 2015)**



Science Book Publishing House

Yelm, WA, USA - 2015

Modern informatization problems in economics and safety: Proceedings of the XX-th International Open Science Conference (Yelm, WA, USA, January 2015)/ Editor in Chief Dr. Sci., Prof. O.Ja. Kravets. - Yelm, WA, USA: Science Book Publishing House, 2015. – 142 p.

ISBN 978-1-62174-076-6

Proceedings summarizing the results of the XX-th International Open Science Conference "Modern informatization problems in economics and safety", held in November 2014 - January 2015. It contains information within the following areas: information systems and their applications, information systems in economics.

Data gathered within collected papers may be useful to researchers and engineering technicians, whose work involves various aspects of modern society informatization, as well as to postgraduates and students studying subjects related to informatics and computer engineering.

Proceedings Editorial Board:

O.Ja. Kravets, Dr. Sci., Prof. (editor in chief, Science Book Publishing House, USA); **A.A. Aliyev**, Dr. Sci., Prof. (Baku State University, Azerbaijan); **S.L. Blumin**, Honored Scientist of Russian Federation, Dr. Sci., Prof. (Lipetsk State Technical University, Russian Federation); **E.V. Lebedenko**, Dr. (Academy of Federal Security Guard Service of the Russian Federation, Orel, Russian Federation); **A.D. Lukyanov**, Dr. (Don State Technical University, Rostov-on-Don, Russian Federation); **S.L. Podvalny**, Honored Scientist of Russian Federation, Dr. Sci., Prof. (Voronezh State Technical University, Russian Federation); **A.M. Vodovozov**, Prof. (Vologda State University, Russian Federation)

ISBN 978-1-62174-076-6

Ó

Authors, 2015

Preface

Dear Colleagues!

Present proceedings were published to summarize the results of the XX International Open Conference "Modern informatization problems in economics and safety". The conference was held through the joint efforts of Science Book Publishing House (USA), Baku State University (Azerbaijan), Vologda State University, Lipetsk State Technical University, Don State Technical University (Rostov-on-Don), and the Academy of Federal Security Guard Service of the Russian Federation (Orel), in November 2014 – January 2015.

Proceedings contain information within the following areas: information systems and their applications, information systems in economics.

The conference was held to encourage exchange of experience between leading experts in utilization of information technologies in various spheres of science, engineering, and education. The conference followed the traditions established by its predecessors.

Representatives of leading research centers and educational institutions from some countries introduced the audience to the results of their research, which are available not only in this collected works, but on <http://www.sbook.ru/spi>.

Organizing Committee Chair,
Editor in Chief
Dr. Sci., Prof.

O.Ja. Kravets

Author's index

Abramov A.K.	4	Volodin V.M.	122
Achkasov A.V.	7	Vorobyov A.A.	61
Borodulin A.N.	66	Yaitsky A.A.	16
Choporov O.N.	71	Yuzefova S.Yu.	112
Grachev V.V.	4	АКСЕНОВ С.В.	134
Grisyuk V.V.	61	Силич В.А.	134
Doropei V.N.	66	Силич М.П.	134
Drachev D.	80		
Dunaev V.A.	16		
Ivaschenko A.V.	76		
Karpechenka A.	80		
Khoang Zhang	85		
Kondrateva O.V.	93		
Konev V.A.	98		
Kordyukov N.I.	24		
Kosov D.S.	76		
Kravets O.Ja.	7, 43, 85		
Kurkin E.D.	20		
Kutsakin M.A.	103		
Kuzmin V.V.	76		
Kuznetsov V.N.	66		
Lapko A.N.	24		
Lebedenko E.V.	48, 103		
Maltseva Ju.D.	106		
Novikov A.L.	76		
Oleynik P.P.	112		
Nikolenko O.I.	112		
Preobrazhensky A.P.	71		
Rozhkova L.V.	118		
Ryabokon V.V.	20		
Salnikova O.V.	118, 122		
Samigulina G.A.	30		
Samigulina Z.I.	30		
Saraev P.V.	34		
Sokolova Yu.S.	38		
Tchudinova K.V.	43		
Tkachuk V.O.	48		
Trofimenkov A.K.	52		
Trofimenkov S.A.	52		
Trukhanov S.V.	56		
Tushavin V.A.	127		
Vlashchentsev M.R.	16		

Contents

Preface	3
1. Information systems and their applications	4
Abramov A.K., Grachev V.V. Option of keyboard spies classification.....	4
Achkasov A.V., Kravets O.Ja. Features of creation, development and optimization of the information system constructed on distributed database	7
Dunaev V.A., Yaitsky A.A., Vlashchentsev M.R. Analysis of modern graphic editors: problems and prospects of development.....	16
Kurkin E.D., Ryabokon V.V. Automation undeclared compatibility software testing	20
Lapko A.N., Kordyukov N.I. Comparative characteristic of the most widespread DBMS.....	24
Samigulina G.A., Samigulina Z.I. Development of an intelligent component-oriented software for complex objects management system	30
Saraev P.V. Problems of construction and interpretation of neuro-fuzzy models for large data amounts	34
Sokolova Yu.S. Cluster ensembles' development on the base of SVM-algorithm	38
Tchudinova K.V., Kravets O.Ja. Program mechanisms of efficiency mathematical and the software research of intermodular interaction management for large-scale information systems with nonstationary topology.....	43
Tkachuk V.O., Lebedenko E.V. Methods of comparative evaluation for open licensed software of functional completeness.....	48
Trofimenkov A.K., Trofimenkov S.A. Algorithm of file formats identification.....	52
Trukhanov S.V. Using fuzzy linear regression in hyperspectral removal data classification algorithms.....	56
Vorobyov A.A., Grisyuk V.V. Research of possibility of using video surveillance systems based on virtualization technology in mobile situational centers .	61
2. Information systems in economics	66
Borodulin A.N., Doropei V.N., Kuznetsov V.N. Information technology of the coordinated optimization at the enterprise	66
Choporov O.N., Preobrazhensky A.P. The features of construction of the automated workplace for the manager that accepting the applications	71
Ivaschenko A.V., Kuzmin V.V., Kosov D.S., Novikov A.L. A Multi-Agent technology for situational planning of activities of railway dispatchers	76
Karpechenka A., Drachev D. Testing of business idea.....	80
Khoang Zhang, Kravets O.Ja. Identification and the characteristic of data-centers operational loads on the basis of the computing paradigm oriented on throughput	85

Kondrateva O.V. Qualimetric approach to calculating generalized quality indicator of erp users support.....	93
Konev V.A. An adequate tools selection for data analysis of heterogeneous type	98
Kutsakin M.A., Lebedenko E.V. Information systems and technologies in a field of the security organizations activity	103
Maltseva Ju.D. Using of the software in hotel management system	106
Oleynik P.P., Yuzefova S.Yu., Nikolenko O.I. Designing and implementation an information system for fast food restaurants	112
Salnikova O.V., Rozhkova L.V. Information and communication technologies in foreign economic activity.....	118
Salnikova O.V., Volodin V.M. Enterprise information security: combination of technology and economy	122
Tushavin V.A. Evaluation of the IT processes quality using randomized indicators	127
Силич М.П., Аксенов С.В., Силич В.А. Анализ влияния факторов на энергоэффективность территориальных образований.....	134
Author's index	140

Scientific publication

**MODERN INFORMATIZATION PROBLEMS
IN ECONOMICS AND SAFETY**

Proceedings of the XX-th International Open Science Conference

Issue is published in author's edition

Cover designed by Sofia A. Kravets

Assigned to print 10.01.2015. Format 60x84 1/16.
CPP 9,0. Order 2015011002. Circulation 500.

Science Book Publishing House
17200 153rd Ave SE, Yelm, Washington, 98597 USA
<http://www.sbook.us/>