

## TABLE OF CONTENTS

Preface .....	3
Table of Contents .....	5
Index of Authors.....	7
 <b>Benchmark of Pso-DE Using Bbob 2010</b>	
<i>Nuria Gómez Blas, Luis F. de Mingo</i> .....	9
 <b>Intelligent P-systems</b>	
<i>Alberto Arteta , Angel Luis Castellanos, Jose Luis Sanchez</i> .....	15
 <b>Communication Lateness in Software Membranes</b>	
<i>Miguel Angel Peña, Jorge Tejedor, Juan B. Castellanos, Ginés Bravo</i> .....	23
 <b>A Bounded Algorithm Based on Applicability Domains for the Application of Active Rules in Transition P-systems</b>	
<i>F. Javier Gil, Jorge A. Tejedor, Luis Fernández</i> .....	29
 <b>Collision Detection and Treatment Using 2D Reconfigurable Hardware</b>	
<i>Alejandro Figueroa, Gustavo Méndez, Francisco J. Cisneros, Adriana Toni</i> .....	39
 <b>Bacterial Technology to Build Computers: a Survey</b>	
<i>Paula Cordero, Sandra Gómez, Rafael Gonzalo</i> .....	48
 <b>Chain Split of Partially Ordered Set of k-Subsets</b>	
<i>Hasmik Sahakyan, Levon Aslanyan</i> .....	55
 <b>Upper Bound on Rate-Reliability-Distortion Function for Source with Two-Sided State Information</b>	
<i>Mariam Haroutunian, Arthur Muradyan</i> .....	66
 <b>Using the Group Multichoice Decision Support System for Solving Sustainable Building Problems</b>	
<i>Filip Andonov, Mariana Vassileva</i> .....	74
 <b>Influence Analysis of Information Technologies on Progress in Control Systems for Complex OBJECTS</b>	
<i>Boris Sokolov, Rafael Yusupov, Michael Okhtilev, Oleg Maydanovich</i> .....	78
 <b>Flood Risk Assessment Based on Geospatial Data</b>	
<i>Nataliia Kussul, Sergii Skakun, Andrii Shelestov, Yarema Zyelyk</i> .....	92
 <b>Large VLSI Arrays – Power and Architectural Perspectives</b>	
<i>Adam Teman, Orly Yadid-Pecht and Alexander Fish</i> .....	102

**System Approach to Estimation of Guaranteed Safe Operation of Complex Engineering Systems***Nataliya Pankratova* ..... 115**Soa Protocol with Multiresulting***Michał Plewka, Roman Podraza* ..... 129**Calculating of Reliability Parameters of Microelectronic Components and Devices by Means of Virtual Laboratory***Oleksandr Palagin, Peter Stanchev, Volodymyr Romanov, Krassimir Markov, Igor Galelyuka, Vitalii Velychko, Oleksandra Kovyriova, Oksana Galelyuka, Iliya Mitov, Krassimira Ivanova* ..... 134**Optimizing Routing Process with a Kinetic Method***Alexandr Kuzomin, Ievgen Kozlov* ..... 144**Methods of Analysis for the Information Security Audit***Natalia Ivanova, Olga Korobulina, Pavel Burak* ..... 152**On Measurable Models of Promotion of Negentropic Strategies by Cognition***Pogossian Edward* ..... 161**Systemological Classification Analysis in Conceptual Knowledge Modeling***Mikhail Bondarenko, Nikolay Slipchenko, Kateryna Solovyova, Viktoriia Bobrovska, Andrey Danilov* ..... 169**Search and Administrative Services in Iconographical Digital Library***Desislava Paneva-Marinova, Radoslav Pavlov, Maxim Goynov, Lilia Pavlova-Draganova, Lubomil Draganov* ..... 177**The Influence of the Computer Game's Virtual Reality upon the Human Psychology***Helen Shynkarenko, Viktoriya Tretiyachenko* ..... 188**EDUkit: Info-Educational Platform Enabling to Create Websites for Secondary Schools***O.Y. Stepanovsky, S.O. Ryzhikova, D.P. Nechiporenko, B.S. Elkin, O.B. Elkin, I.V. Garyachevska, O.M. Dyachenko, D.V. Fastova* ..... 197