3rd International Conference on Control Systems, Mathematical Modeling, Automation and Energy Efficiency

SUMMA2021 CONFERENCE PROGRAM

November, 10-12 2021

Venue: Russia, Lipetsk (VIRTUALLY)

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SUMMA2021 CONFERENCE

The 3rd International Conference on Control Systems, Mathematical Modeling, Automation and Energy Efficiency (SUMMA2021) focuses on the wide range of topics related to Control Systems and Mathematical Modeling, Automation and using advanced knowledge in the Power Industry to solve scientific and practical production problems. Traditionally the conference is jointly organized by V.A. Trapeznikon Institute of Control Sciences RAS and the Department of Automation and Computer Science of Lipetsk State Technical University. The conference is dedicated to the 65 anniversary of Lipetsk State Technical University. Notably that 2021 is proclaimed as the Year of Science and Technology in Russia.

We hope, that the Conference will become a traditional place to discuss special issues of Control Systems and Mathematical Modeling, Automation and using advanced knowledge in the Power Industry to solve scientific and practical production problems.

SUMMA2021 TOPICS

Scientific program includes topics of interest that consist of, but are not limited to:

I. Industrial Applied Mathematics and Modeling *Mathematical Foundations of Control Theory; Control of Organizational and Socio-Economic Systems; Machine Learning*

II. Automation *Industrial Automation and Control Theory applying to Technological Processes; Digitalization in Industrial, Economic and Social Systems; Metals and Mining Industry; Transportation Systems*

III. Industrial and Commercial Power and Power Conversion Systems *Energy Systems and Power Systems Engineering: Electric Machines and Industrial Drives; Power Electronic Devices and Components*

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Wednesday, November, 10 2021

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11:00 – 11:15 (MSK, UTC+3)	Opening Ceremony
	Pavel SARAEV, D.Sc., Prof. *Russia, Lipetsk, Lipetsk State Technical University* Anatoly YAKUTIN *Russia, Lipetsk, Vice Governor of Lipetsk Region* Dmitry NOVIKOV, Corresponding Member of RAS, D.Sc., Prof. *Russia, Moscow, V.A. Trapeznikov Institute of Control Sciences RAS* Sergei CHEBOTAREV, Cand. Sc. *Russia, Novolipetsk Steel*
11:15– 13:15 (MSK, UTC+3)	Plenary Session Chair Prof. Pavel SARAEV
	Stanimir VALTCHEV, Prof. *Portugal, Universidade Nova de Lisboa* Electrical Engineering, Industrial Production and the Future of IEEE
	Maria Cristina RECCHIONI, Prof. *Italy, Università Politecnica delle Marche* A New Dynamic Clustering Approach to Tail-analysis: Application to Portfolio Optimization and Network Centrality
	Alexander KOLESNIKOV, D.Sc., Prof. *Russia, Immanuel Kant Baltic Federal University* Research Prototype of the Cognitive Decision Support System for Information Preparation of Decisions of the Complex Problem of Monitoring Situations and the State of a Control Object in Systems with a High Spatio-temporal Dynamics
13:15 – 14:00 (MSK, UTC+3)	Virtual Coffee Break
14:00 – 16:00 (MSK, UTC+3)	Plenary Session Chair Prof. Stanimir VALTCHEV
	Marek JASINSKI, Prof. *Poland, Warsaw University of Technology* Energy and Information Processing in More Reliable Power Electronics
	Alexander KHOPERSKOV, D.Sc., Prof. *Russia, Volgograd State University* Modeling the Dynamics of Shallow Water for Control Problems of Floodplain Areas
	Anton GLUSHCHENKO, D.Sc., Prof. *Russia, V.A. Trapeznikov Institute of Control Sciences RAS,* *Stary Oskol Technological Institute n.a. A.A. Ugarov (branch) of National Research Technological University "MISIS"* Neural Networks to Control Nonlinear Underactuated Plants with Uncertainties

Thursday, November, 11 2021

9:30 – 12:00 (MSK, UTC+3)	Section Sessions
12:00 – 13:00 (MSK, UTC+3)	Virtual Coffee Break
13:00 – 15:00 (MSK, UTC+3)	Section Sessions
15:00 – 15:30 (MSK, UTC+3)	Virtual Coffee Break
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Friday, November, 12 2021

9:30 – 12:00 (MSK, UTC+3)	Section Sessions
12:00 – 13:00 (MSK, UTC+3)	Virtual Coffee Break
13:00 – 16:00 (MSK, UTC+3)	Section Sessions
16:00 – 16:30 (MSK, UTC+3)	Virtual Coffee Break
16:30 – 17:00 (MSK, UTC+3)	Closing Ceremony

DETAILED PROGRAM

Thursday, November, 11 2021

(Moscow time, UTC+3)

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Please indicate the session you prefer to join

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