

# 15<sup>th</sup> International Carpathian Control Conference – List of accepted papers

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1.	<b>Anna Filasova, Vratislav Hladky and Dusan Krokavec</b> Static output control design reflecting fuzzy subsystem interactions in TS fuzzy models
2.	<b>Vojtech Vesely and Daniel Vozak</b> Stable model predictive controller design
3.	<b>Mikulas Huba</b> Tuning of a filtered pole assignment controller for an integral plant
4.	<b>Igor Belai and Mikulas Huba</b> Comparison of two approaches to a positional servo control
5.	<b>Dusan Krokavec and Anna Filasova</b> Output PI control of MIMO linear continuous-time systems
6.	<b>Adrian Ilka and Vojtech Vesely</b> Discrete Gain-Scheduled Controller Design: Variable Weighting Approach
7.	<b>Alena Kozáková, Róbert Krasňanský and Vojtech Veselý</b> Switched System Controller Design: the Frequency Domain Approach
8.	<b>David Soós and Mikuláš Huba</b> Experimental performance portrait based optimal controller tuning
9.	<b>Milos Seda</b> From Classical Transportation Problem to Crop Problems with Uncertainty
10.	<b>Stanislav Vrána and Bohumil Šulc</b> Neural Network Inference of Biomass Fuel Moisture During Combustion Process
11.	<b>Ivor Dülk and Tamás Kováčsházy</b> A Computationally Effective Method for Calculating the Exponential Fit
12.	<b>Béla Rima, József Vásárhelyi, János Végh and Jan Turán</b> Mojette Transform implemented in Labview
13.	<b>Dominik Sierociuk and Michal Macias</b> Initial conditions for a recursive constant and variable fractional-order derivative and its verification based on analog model
14.	<b>Alena Vagaská, Peter Michal, Miroslav Gombár, Ján Kmec, Emil Spišák and Miroslav Badida</b> Modelling of the Anodizing Process of Aluminum Using Neural Networks
15.	<b>Karol Kostur</b> Optimization of burner's range of tunnel furnace by simulation
16.	<b>Roman Prokop, Jiří Korbek and Radek Matušů</b> Autotuning for Delay Systems – An Algebraic Approach
17.	<b>Michal Kašpárek</b> Glass window vibrations analysis used for positioning of piezoelectric damping elements
18.	<b>Jiri Otahal and Frantisek Hruska</b> Aspects of electromagnetic interference in range of low frequencies
19.	<b>Jiri Tuma, Miroslav Mahdal, Pavel Šuránek and Marek Babiuch</b> Simulation of the parametric vibration damping
20.	<b>Marcin Węgrzynowski</b> MR damper control in an energy-harvesting vibration reduction system
21.	<b>Magdalena Zawartka</b> Sensitivity analysis of the MR damper model parameters on the vibration transmissibility characteristics
22.	<b>Mateusz Romaszko, Sebastian Pakuła and Jacek Snamina</b> Composite beam's parameters identification based on frequency response

23.	<b>Beáta Stehlíková and Patrik Flegner</b> Possibilities to compare vibration in drilling rock
24.	<b>Marcin Węgrzynowski</b> Electromechanical transducers to supply an MR rotary damper: laboratory testing
25.	<b>G. Serdar Tombul</b> Real Time Control of a Fin Loading System
26.	<b>Igor Podlubny and Bohdan Datsko</b> Recent advances in methods for studying and solving partial fractional differential equations
27.	<b>Leszek Cedro</b> Linearization and Identification a Mathematical Model of an Excavator
28.	<b>Ivo Petras</b> Practical aspects for implementation of fractional-order controllers
29.	<b>Marcela Pavlickova and Ivo Petras</b> A note on time series data analysis using a fractional calculus technique
30.	<b>Monika Žecová, Ján Terpák and Ľubomír Dorčák</b> The Modeling of Heat Conduction Using Integer- and Fractional-Order Derivatives
31.	<b>Michał Sobolewski and Zbigniew Koruba</b> Optimal Control and Stabilization of the Observation- Tracking Device Placed on a Deck Of Unmanned Aerial Vehicle (UAV)
32.	<b>Paweł Drag and Krystyn Styczeń</b> Necessary optimality conditions for optimal control of multistage DAE systems
33.	<b>Cyril Oswald, Viktor Plaček and Bohumil Šulc</b> Advanced Control with Economic - Ecological Optimization for Biomass-fired Boilers
34.	<b>Tomáš Barot and Marek Kubalčík</b> Predictive Control of Non-Minimum Phase Systems
35.	<b>Ondřej Ježek</b> Case study on an event model-based PID control of a thermal process
36.	<b>Miluše Vítečková and Antonín Víteček</b> Dominance of poles for desired model method
37.	<b>Pavol Bistak and Mikulas Huba</b> Constrained Pole Assignment Control of a Two Tank System
38.	<b>Danica Rosinova and Ivan Holič</b> LMI approximation of pole region for discrete-time linear dynamic system
39.	<b>Josef Cernohorsky and Marcel Horák</b> Vertical Climber 2 - design and implementation of control algorithm
40.	<b>Dean Brennan and Jan Kolaja</b> Real Time Location System using Passive UHF RFID tags
41.	<b>Viliam Dolinay, Lucie Pivnickova and Vladimir Vasek</b> Objectivization of traditional otonerological examinations based on Kinect sensor
42.	<b>Alois Krejci, Tomas Popule and Martin Goubej</b> Closing the motion control loops via industrial Ethernet network
43.	<b>Jaroslav Antoš and Martin Bušek</b> Client-Server Application for the operator panel Weintek and the control system Siemens Simotion
44.	<b>Balázs Scherer and Gábor Horváth</b> Microcontroller tracing in Hardware In the Loop tests
45.	<b>Tamás Kovács házy and Bálint Ferencz</b> One-way Delay Measurement System for Local Area Network Delay and Jitter Characterization
46.	<b>Aleksejs Zacepins and Jurijs Meitalovs</b> Implementation of multi-node temperature measurement system for bee colonies online monitoring
47.	<b>Adam Wolniakowski, Piotr Koziol and Kanstanstin Miatliuk</b> Genereting trajectory for 5 DoF serial link CNC machine with kinematic constraints
48.	<b>Oto Haffner</b> Making of environment map using a laser rangefinder and library OpenCV

49.	<b>Miroslav Köver-Dorčo</b> Scada System Creation by Using Java Applications and PLC
50.	<b>Marián Hruboš, Aleš Janota and Rastislav Pirník</b> Road surface measurement and visualization based on data from the laser scanner.
51.	<b>Marian Mrosko, Jozef Skultety and Eva Miklovicova</b> Laguerre Network Implementation in Industrial Control Systems
52.	<b>Ján Piteľ and Mária Tóthová</b> Dynamics of the Pneumatic Muscle Actuator: Measurement and Modeling
53.	<b>Wojciech Lepiarz</b> The vision analysis of a McKibben pneumatic artificial muscle
54.	<b>Dorota Marszałik</b> Application of Haptic Omni Device to Determination of the Setpoint Trajectory
55.	<b>Pavel Šuránek, Miroslav Mahdal and Jiří Tůma</b> Modelling and Simulation of an Active Damped Structure
56.	<b>Václav Řepa and Ondrej Železník</b> Methodological Limitations of Modeling Languages BPMN and ARIS
57.	<b>Erik Kučera and Branislav Hruz</b> Modelling of automated storage systems using Hierarchical Coloured Petri nets
58.	<b>Agata Nawrocka, Karolina Holewa and Kanstantsin Miatliuk</b> Conceptual Design of Brain Computer Interface in the Formal Basis of Hierarchical System
59.	<b>Vladena Baranova, Lenka Landryová and Jozef Futo</b> Application of multivariate planning methods in determining KPI of rock disintegration process
60.	<b>Petr Podešva and David Fojtík</b> Calibration of 2D scanner with nonlinearities
61.	<b>Ivan Svarc</b> Contributions to the Application of Popov and Circle Criterion for Stability Analysis
62.	<b>František Vdoleček</b> Sensor and Control Result
63.	<b>Lenka Landryová and Patrik Urban</b> A Laboratory Stand for Testing the ABS Unit Model
64.	<b>Marek Babiuch</b> .Net Microframework Gadgeteer Measurement Applications Development.
65.	<b>David Fojtík</b> Measurement of the Volume of Material on the Conveyor Belt
66.	<b>David Fojtík and Petr Podešva</b> The system for measuring deformations during welding
67.	<b>Jolana Škutová</b> A Web Based Application Using Matlab Builder NE for The Analysis of Linear Systems
68.	<b>Petr Podešva, David Fojtík and Jan Gebauer</b> Automation of Measurement and Data Collection for Gas Filling Line
69.	<b>Michal Radecký and Pavel Smutný</b> Evaluating user reaction to user interface element using eye-tracking technology
70.	<b>Jan Nádvorník and Pavel Smutný</b> Remote Control Robot Using Android Mobile Device
71.	<b>Škuta Jaromír</b> The control unit with wireless interfaces for CNC model
72.	<b>Ales Lebeda and Petr Pivonka</b> Comparison of Offline Identification Methods on Bounded AR Polynomial Models
73.	<b>Istvan Oniga and József Sütő</b> Elder people supervision by IoT techniques
74.	<b>Bogdan Sapinski, Wojciech Horak and Andrzej Sioma</b> Experiments on MR Fluid Behaviour in the Squeeze Mode Using the Vision Method
75.	<b>Stanislaw Flaga and Ireneusz Dominik</b>

	Characteristics of the flow control valve with MSMA actuator.
76.	<b>Piotr Micek and Paweł Hammer</b> Control system in the laboratory stand to the continuous casting of aluminum
77.	<b>Marcin Nawrocki and Agata Nawrocka</b> Artificial neural networks for identification in real time of the robot manipulator model parameters
78.	<b>Agata Nawrocka, Andrzej Kot and Marcin Nawrocki</b> Fuzzy logic controller for rehabilitation robot manipulator
79.	<b>Andrzej Kot and Agata Nawrocka</b> Modeling of human balance as an inverted pendulum
80.	<b>Łukasz Nocoń and Zbigniew Koruba</b> Programmed Control of the Flat Track Anti-Tank Guided Missile
81.	<b>Agata Nawrocka and Karolina Holewa</b> Emotiv EPOC neuroheadset in Brain – Computer Interface
82.	<b>Daniel Gapiński and Izabela Krzysztofik</b> The process of tracking an air target by the designed scanning and tracking seeker
83.	<b>Iveta Onderová and Ľudovít Kolláth</b> Testing and verification of selected technological parameters of the parallel kinematic structure
84.	<b>Milada Omachelová, Eva Kureková, Martin Halaj and Ilja Martišovič</b> Theoretical aspects of control of the Tricept type parallel kinematic structure
85.	<b>Cyril Belavý, Filip Vitáloš, Marcel Vlček, Dana Šišmišová and Marek Michalečko</b> Robust Control Synthesis for a Class of Distributed Parameter Systems
86.	<b>Anna Vasičkaninová and Monika Bakošová</b> Control of a heat exchanger using Takagi-Sugeno fuzzy models
87.	<b>Martin Jarčuška, Milan Žalman, Tatiana Mudráková and Pavol Varga</b> Modelling and Effective Controlling of Radial Electromagnetic Bearings
88.	<b>Marian Šofranko and Róbert Zeman</b> Simulation of pipeline transport backfill mixtures
89.	<b>Karol Kostur</b> Mathematical modeling temperature's fields in overburden during underground coal gasification
90.	<b>Marek Laciak, Ján Kačur, Milan Durdan and Patrik Flegner</b> Application of optimization method for optimal control of the steelmaking process
91.	<b>Alena Paulíková and Ondrej Železník</b> Multicriterial Analysis of Factors Considering Intensity and Extent of Floods
92.	<b>Ján Terpák, Pavel Horovčák, Miloš Horváth and Monika Žecová</b> The proposal of web service for support of specific thermochemical calculation
93.	<b>Igor Leško, Patrik Flegner, Pavel Horovčák, Beáta Stehlíková and Zuzana Sabova</b> Some Problems in Control of the Quality of the Process of Rotary Drilling of Rocks by Using Suitable Visualization of Concurrent Vibrations
94.	<b>Matúš Tatarko, Ján Tóth, Ľuboš Ovseník, Ján Turán and József Vásárhelyi</b> FSO availability estimation from measurements on TUKE experimental system
95.	<b>Pavol Liščinský and Vladimír Serbák</b> Fault detection based on Linear Quadratic control performance in nonlinear systems
96.	<b>Tomáš Mravec and Peter Vestenický</b> Increasing Objects Localization Precision by Determination of Inertial Sensor Calibration Constants Using Differential Evolution Algorithm
97.	<b>Michal Kocúr, Stefan Kozak and Branislav Dvorscak</b> Design and Implementation of FPGA - Digital Based PID Controller
98.	<b>Peter Valach and Danica Rosinova</b> Switched system robust control: pole-placement LMI based approach
99.	<b>Ján Ďurech, Emília Bubeníková and Mária Franeková</b> Security solutions of intelligent transportation system's applications with using VANET networks
100.	<b>Jan Halgas, Aleš Janota, Rastislav Pirník and Peter Holečko</b> Creating a 3D parking area design via a mobile measurement platform

101.	<b>Dariusz Grzybek</b> Piezoelectric generator for the power supply of the monitoring system
102.	<b>Michal Rost, Josef Smolka, Matej Mojzeš and Miroslav Virius</b> Feature Space for Statistical Classification of Java Source Code Patterns
103.	<b>Ivo Formánek, Radim Farana and Aleš Galuška</b> Multidrive Systems in Continual Rolling Mills
104.	<b>Miroslav Vavroušek</b> Pneumatic rotational engine behavior investigation and suitable control structure analysis
105.	<b>Lucie Pivnickova, Viliam Dolinay and Vladimír Vasek</b> Evaluation of static posturography via the Wii Balance Board
106.	<b>Radim Farana, Bogdan Walek, Michal Janošek and Jaroslav Žáček</b> Fuzzy-Logic Control in Fast Technological Processes
107.	<b>Bogdan Walek, Jiří Bartoš, Cyril Klimeš and Radim Farana</b> Fuzzy tool for conducting information security risk analysis
108.	<b>Bogdan Walek, Michal Janošek, Jaroslav Žáček and Radim Farana</b> Adaptive Fuzzy Control of Thermal Comfort in Smart Houses
109.	<b>Jaroslav Žáček and Michal Janošek</b> Optimized Heating for Systems with Long Time Delays: A Case Study
110.	<b>Milan Javůrek and Ivan Taufer</b> Rigorous Using of Calibration
111.	<b>Jiří Horák, Igor Ivan and David Fojtík</b> Large scale monitoring of public transport accessibility in the Czech Republic
112.	<b>Jiri Holik and Lenka Landryová</b> Control of a general distribution system
113.	<b>Lacezar Licev, Marek Babiuch and Jan Tomecek</b> Object Recognition for Industrial Image
114.	<b>Dusan Teichmann, Michal Dorda, Jakub Vitek, Vladimír Michalik and Vladimír Smrz</b> Unmanned Aerial Vehicles Routing Problem
115.	<b>Michal Rusek and Filip Lorenz</b> Simulation model for regular operation of section
116.	<b>Tomáš Kot, Václav Kryš, Vladimír Mostýn and Petr Novák</b> Control System of a Mobile Robot Manipulator
117.	<b>Zora Jančíková, Pavel Košťál, Ondřej Zimný, Marian Kubliha, Stanislav Minárik, Marcel Poulain and Messaoud Legouera</b> The neural network analysis of optical glasses transmittance
118.	<b>Ivo Špička, Milan Heger and Ondřej Zimný</b> Programmable Logic Controllers and Transient Heat Models
119.	<b>Darja Noskievičová, Kateřina Brodecká and Miroslav Mahdal</b> SW Support for CCC and CQC Control Charts
120.	<b>Vladislav Vancura, Lukas Otte, Roman Danel and Dagmar Letavkova</b> Mine gas monitoring data analysis
121.	<b>Dagmar Letavkova, Simona Matuskova and Vladislav Vancura</b> Airport Effectiveness Modelling
122.	<b>Boris Jobbágy, Ján Karchňák and Dušan Šimšík</b> Rehabilitation robotics and wearable sensors as trends of home rehabilitation
123.	<b>Pavel Staša, Filip Beneš, Jiří Švub, Zdeněk Neustupa and Zdeněk Neustupa Jr.</b> Monitoring and evidence of cars in private objects
124.	<b>Martin Bušek</b> The problem of measuring the radial cam grinder BRV 300 - CNC
125.	<b>Domokos Kiss and Gábor Tevesz</b> A Steering Method for the Kinematic Car using C*CS Paths
126.	<b>Krzysztof Hryniów and Konrad Markowski</b> Parallel digraph-building algorithm for polynomial realisations

<b>127.</b>	<b>Sebastian Pakuła and Jerzy Michalczyk</b> Determination of the Probabilistic Characteristics of the Coefficient of Restitution, with an Application of Acoustic Measurements
<b>128.</b>	<b>Konrad Stefański, Marta Grzyb and Łukasz Nocoń</b> The analysis of homing of aerial guided bomb on the ground target by means of special method of control
<b>129.</b>	<b>Olga Andrianova</b> On a state feedback anisotropy-based control problem for linear discrete-time descriptor systems
<b>130.</b>	<b>Arkadiy Kustov</b> Anisotropy-based analysis and synthesis problems for input disturbances with nonzero mean
<b>131.</b>	<b>Ján Vachálek, Michal Bartko and Ján Bizub</b> Long-run On-line Identification with Hybrid Regularized Exponential Forgetting Method
<b>132.</b>	<b>Stella Hrehova and Erika Fechova</b> Gain knowledge of selected properties of artificial muscles using tools of Matlab.
<b>133.</b>	<b>Nurdan Bilgin and Metin U. Salamci</b> Determination of Optimal Feedback Gain Matrix for a Class of Nonlinear Systems
<b>134.</b>	<b>Peter Ľapák and Mikuláš Huba</b> Comparing 2DOF PI and DO-FPI controllers for the first-order plants
<b>135.</b>	<b>Anton Pytel and Štefan Kozák</b> Modelling and effective predictive control of gas turbine process
<b>136.</b>	<b>Jan Cigánek, Filip Noge and Stefan Kozak</b> Trajectory tracking with variable sampling using fuzzy logic controller
<b>137.</b>	<b>Mikuláš Huba, Tomáš Malatínek, Patrik Hudačko and Vladimír Popelka</b> Laboratory model helicopter control using a lowcost Arduino hardware
<b>138.</b>	<b>Vladimír Popelka</b> A self stabilizing platform
<b>139.</b>	<b>Tomáš Miklušák and Aleš Janota</b> How to Predict Location in Smart Environment and for What to Use It?
<b>140.</b>	<b>Tomáš Mravec and Peter Vestenický</b> Increasing Objects Localization Precision by Determination of Inertial Sensor Calibration Constants Using Differential Evolution Algorithm