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## ABSTRACTS

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### MONTE CARLO METHOD AND APPLICATION IN @RISK SIMULATION SYSTEM

(pages 1-6)

**Gabriela Ižarišková**

TU of Košice, Faculty of Mechanical Engineering, Institute of Special Technical Sciences, Department of Applied Mathematics and Informatics, Letná 9, 042 00 Košice, e-mail: gabriela.izarikova@tuke.sk

**Peter Trebuňa**

TU of Košice, Faculty of Mechanical Engineering, Institute of Technology and Management, Department of Industrial Engineering and Management, Nemcovej 32, 042 00 Košice, e-mail: peter.trebuna@tuke.sk

**Keywords:** simulation model, Monte Carlo method, simulation system, design

**Abstract:** The article is an example of using the software simulation @Risk designed for simulation in Microsoft Excel spread sheet, demonstrated the possibility of its usage in order to show a universal method of solving problems. The simulation is experimenting with computer models based on the real production process in order to optimize the production processes or the system. The simulation model allows performing a number of experiments, analysing them, evaluating, optimizing and afterwards applying the results to the real system. A simulation model in general is presenting modelling system by using mathematical formulations and logical relations. In the model is possible to distinguish controlled inputs (for instance investment costs) and random outputs (for instance demand), which are by using a model transformed into outputs (for instance mean value of profit). In case of a simulation experiment at the beginning are chosen controlled inputs and random (stochastic) outputs are generated randomly. Simulations belong into quantitative tools, which can be used as a support for a decision making.

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### LAYOUT AND DESIGN OF ELECTROMOBILE CHARGING STATIONS AS URBAN ELEMENTS

(pages 7-12)

**Tomáš Chovan**

Institute of Logistics, Faculty of Mining, Ecology, Process Control and Geotechnology, Technical University of Košice, Park Komenského 14, 043 84 Košice, Slovak Republic, tomas.chovan1@gmail.com

**Martin Straka**

Institute of Logistics, Faculty of Mining, Ecology, Process Control and Geotechnology, Technical University of Košice, Park Komenského 14, 043 84 Košice, Slovak Republic, martin.straka@tuke.sk

**Keywords:** electromobile, charging station, urban elements, design, layout

**Abstract:** The contribution is dedicated to the processing of the problems of the insufficient charging for the electric vehicles within the concrete urbanistic centre. It brings a different perspective on the mobility, which is shown in the form of electric energy as the alternative for the needs of urbanization of the cities. It analyses electromobility, new technologies in the field of electric vehicles and the charging stations as the elements of the urbanism. In terms of the solution, the contribution is focused on the Košice city and the location of the public charging stations. Košice do not have sufficient amount of the public charging stations and until the 2014 there was only one public charging station. The contribution is focused on the designing of the parking places with the charging station placed on the appropriate parking places. The resulting design is created in the CAD system, it brings the view of the layout of the charging station at the shopping centre in the open space and in the parking house.

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## HOURLY STABILITY ANALYSIS AS THE KEY PARAMETER OF LEAN MANUFACTURING AND LOGISTICS

(pages 13-16)

**Petr Besta**

University of Entrepreneurship and Law, Michálkovická 1810, 710 00 Ostrava, Czech Republic, petr.best@vspp.cz

**Kamila Janovská**

University of Entrepreneurship and Law, Michálkovická 1810, 710 00 Ostrava, Czech Republic, kamila.janovska@vspp.cz

**Petr Prosický**

VSB - Technical University of Ostrava, Ostrava, Czech Republic, EU, petr.prosicky.st@vsb.cz

**Lukáš Hula**

VSB - Technical University of Ostrava, Ostrava, Czech Republic, EU, lukas.hula.st@vsb.cz

**Keywords:** production, costs, logistics, price, wasting

**Abstract:** Lean manufacturing belongs to the basic philosophies originating in automotive industry. It was originally based on a number of elementary principles and methods. Companies from other industrial areas have also been gradually trying to apply these principles. This leads to the incorporation of other tools from various areas into this concept. The fundamental techniques of lean manufacturing include the hourly stability (output) analysis. This method can be applied in a wide variety of manufacturing fields. The aim is a stable working worker, not a worker working rapidly and with large fluctuations. Speed and sudden changes mean inaccuracy, poor quality and problems to the manufacturing companies. The research has also carried out the hourly stability analysis in a company manufacturing components for a variety of global car manufacturers. The objective of this article is to evaluate the research of hourly stability for the selected workplaces.

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## MANAGING INNOVATION PROJECTS USING DISTRIBUTION LOGISTICS

(pages 17-20)

**Erika Loučanová**

Department of marketing, trade and world forestry, Technical University in Zvolen, T.G. Masaryka 24, 960 53 Zvolen, Slovak Republic, loucanova@tuzvo.sk

**Keywords:** innovation, project management, innovation management, distribution logistics, logistics

**Abstract:** A significant part of innovation projects management is the distribution logistics. From the point of view of time and material content, the properly chosen way of distribution is one of many factors for success of the project and innovation creation itself. The paper points out the fundamental basis of innovation management in the stage of its realization referring to the importance of distribution logistics in this part of innovation project management. Distribution logistics in the project management provides comprehensive solutions to efficiency of tangible relocating processes in all connections and mutual relations of project in order to maintain compliance between economy and business when implementing innovations.

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## CONDITIONS FOR IMPLEMENTING ORGANIZATIONAL CHANGES (pages 21-24)

**Renata Winkler**

Cracow University of Economics, Faculty of Management, Department of Organizational Behaviours,  
ul. Rakowicka 27, 31-510 Cracow, Poland, renata.winkler@uek.krakow.pl

**Keywords:** change management, resistance to change

**Abstract:** Changes are one of the most typical phenomena experienced by contemporary organizations and are an inherent element of their functioning. The change introduction process is complex and it is often accompanied by a phenomenon of resistance to change on the part of the employees in an organization, which is considered as the main cause of failure in the change implementation process. The purpose of the article is to discuss the basic conditions for implementing changes related both to their adequate defining and overcoming resistance to change.

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