

---

**ABSTRACTS**

---

**OPPORTUNITIES TO INCREASE OF ESTABLISHMENT'S  
COMPETITIVENESS APPLYING RESOURCES OF INFORMATION  
LOGISTICS IN THE CONCRETE COMPANY'S ENVIRONMENT**

(pages 1-5)

**Kristína Ignáčová**

TU of Košice, Faculty BERG, Logistics Institute of Industry and Transport, Park Komenského 14, 043 84 Košice,  
Slovakia, kristina.krizanova@student.tuke.sk

**Keywords:** competitiveness, information logistics, information flow, website

**Abstract:** This article solves the problem about ensuring and managing of the information flow by the institution for higher education – the Technical University of Košice (TUKE) and one of its faculty, the Faculty of Mining, Ecology, Process Control and Geotechnology (FBERG). It is paid attention to the university's official website and its complicity. TUKE homepage is chosen for the primary source of information and the article explains the opportunities of its improvement for the purpose of streamlining the information behavior of both organizations. The implementations of concrete solution's offer expects an increasing of organizations's competitiveness that will promote the status and awareness of the organizations in society.

---

**ANALYSIS AND ASSESSMENT OF RISKS ASSOCIATED WITH  
CONSTRUCTION OF THE ROAD INFRASTRUCTURE IN SLOVAKIA**

(pages 7-13)

**Dávid Šimko**

TU of Košice, Faculty BERG, Logistics Institute of Industry and Transport, Park Komenského 14, 043 84 Košice,  
Slovakia, dav.simko@gmail.com

**Keywords:** risks, construction, road infrastructure, Slovak republic

**Abstract:** The article analyzes the risks associated with the process of constructing the road infrastructure. It's showing us how many different types of risks threats this process and what can happen if we ignore them. In the article are these risks divided in different groups according to the place in this process where they arise, they are also singly defined and described. In the end of the article is possible to find different proposals for the elimination of these risks and also there are mentioned a few reasons why is building of the road infrastructure in Slovakia so slow.

---

## PROGRAMMING OF METHODS FOR THE NEEDS OF LOGISTICS DISTRIBUTION SOLVING PROBLEMS

(pages 15-18)

**Andrea Štangová**

TU of Košice, Faculty BERG, Logistics Institute of Industry and Transport, Park Komenského 14, 043 84 Košice, Slovakia, andrea.stangova@gmail.com

**Keywords:** distribution logistics, multicriteria evaluation, allocation, mathematical and geometrical methods, ELODIS program

**Abstract:** Logistics has become one of the dominant factors which is affecting the successful management, competitiveness and mentality of the global economy. Distribution logistics materializes the connection of production and consumer market. It uses different methodology and methods of multicriterial evaluation and allocation. This thesis addresses the problem of the costs of securing the distribution of product. It was therefore relevant to design a software product that would be helpful in solving the problems related to distribution logistics. Elodis – electronic distribution logistics program was designed on the basis of theoretical analysis of the issue of distribution logistics and on the analysis of the software products market. The program uses a multicriterial evaluation methods to determine the appropriate type and mathematical and geometrical method to determine an appropriate allocation of the distribution center, warehouse and company.

---

## INFORMATION LOGISTICS AS MEANS OF INFORMATION SERVICES FOR FREIGHT TRANSPORT NEEDS

(pages 19-26)

**Martin Straka**

TU of Košice, Faculty BERG, Logistics Institute of Industry and Transport, Park Komenského 14, 043 84 Košice, Slovakia, martin.straka@tuke.sk

**Peter Bindzár**

TU of Košice, Faculty BERG, Logistics Institute of Industry and Transport, Park Komenského 14, 043 84 Košice, Slovakia, peter.bindzar@tuke.sk

**Michal Balog**

TU of Košice, Faculty of Manufacturing Technologies, Department of Manufacturing Management, Bayerova 1, 080 01 Prešov, Slovakia, michal.balog@tuke.sk

**Keywords:** information logistics, information system, parking, freight transport

**Abstract:** European parking information center (EPIC) – it will provide unified and detailed information about European parking areas. The EPIC system will receive the data from local information centres. For Slovak republic there will be one provider for traffic data – a National traffic information center (NDIC). The EPIC system is available at <http://truckinform.eu>. Intelligent parking system (IPS) will be linked with NDIC. The aim of the IPS system is to provide information as follows: number of free parking places, services to be used in parking area and so on.

---

## MANNER OF STOCKS SORTING USING CLUSTER ANALYSIS METHODS (pages 27-30)

**Jana Halčinová**

Technical university of Košice, Faculty of Mechanical Engineering, Department of Biomedical Engineering and Measurement, Letná 9, 042 00 Košice, e-mail: jana.halcinova@tuke.sk

**Jozef Živčák**

Technical university of Košice, Faculty of Mechanical Engineering, Department of Biomedical Engineering and Measurement, Letná 9, 042 00 Košice, e-mail: jozef.zivcak@tuke.sk

**Peter Trebuňa**

Technical university of Košice, Faculty of Mechanical Engineering, Department of Industrial Engineering and Management, Němcovej 32, 042 00 Košice, e-mail: peter.trebuna@tuke.sk

**Keywords:** stock, cluster analysis, Ward's method, square Euclidean distance

**Abstract:** The aim of the present article is to show the possibility of using the methods of cluster analysis in classification of stocks of finished products. Cluster analysis creates groups (clusters) of finished products according to similarity in demand i.e. customer requirements for each product. Manner stocks sorting of finished products by clusters is described a practical example. The resultants clusters are incorporated into the draft layout of the distribution warehouse.

---