ABSTRACTS

# ABSTRACTS

doi:10.22306/al.v4i4.52

*Received:* 15 Nov. 2017 *Accepted:* 26 Nov. 2017

# FEATURES OF FUNCTIONING OF TECHNOPARKS IN RUSSIA AND EU COUNTRIES

(pages 1-6)

### Nataliia Shaidurova

Votkinsk branch of FSFEI HE, Izhevsk state technical university named after MT Kalashnikov, Shuvalova 1, Votkinsk 427433, Russia, shaydurovans@gmail.com

### Zhanna Mingaleva

Perm National Research Polytechnic University, Komsomolsky prospect 29, Perm 614990, Russia,

#### mingal1@pstu.ru Ivan Davvdov

Votkinsk branch of FSFEI HE, Izhevsk state technical university named after MT Kalashnikov, Shuvalova 1, Votkinsk 427433, Russia, davyd85@mail.ru

## Galina Livenskaya

Votkinsk branch of FSFEI HE, Udmurt State University, Raskovoyst 1A, Votkinsk 427438, Russia, livenskaya2009@yandex.ru

*Keywords:* technology parks; authorities and administrations, sustainable development, innovative development, efficiency of activities

*Abstract:* The article is devoted to the analysis of the issues technoparks development in Russia and the EU countries. Method of system analysis; formal-logical method; method of comparative analysis; method of structural analysis is applied in the research. The study found that technology parks should maintain close ties with state agencies of all levels to achieve high efficiency. In turn, state structures can support the science park in many ways, as a founding partner, sponsor, service provider or client. The roles and responsibilities assumed by public authorities and administrations at various levels depend on their interest in the economic development of their territories, on the functional features and the management of technology parks. All these points must be taken into account by investors when they make a decision to participate in the technology park in a particular area.

doi:10.22306/al.v4i4.63

Received: 20 Nov. 2017 Accepted: 03 Dec. 2017

# CASE STUDY OF OPTIMISATION MATERIAL REPLENISHMENT SYSTEM VIA PRINCIPLES OF LOGISTICS

(pages 7-10)

Peter Ignácz

CEIT Pro, s.r.o., Univerzitná 8413/6, 010 08 Žilina, Slovakia, peter.ignacz@student.tuke.sk

*Keywords:* logistics, replenishment, material, standard work, inventory, supplying *Abstract:* The system of supplying production cells, production lines, warehouses are an inherent process without which it could not be produced. It is precisely for the responsibility and importance of this process that in practice, logistic processes are over-sized or efficient, but with a great deal of waste, just for safety, so that production is not compromised. There are a number of supply systems and principles, even almost fully automated, but they are still relatively inaccessible to many businesses. Therefore, this article approaches how the supply system can be simplified and streamlined.

ABSTRACTS

doi:10.22306/al.v4i4.66

Received: 09 Dec. 2017 Accepted: 19 Dec. 2017

# PROJECT OF INFORMATION SYSTEM FOR THE NEEDS OF LOGISTIC CONFERENCES ORGANIZED BY DEPARTMENT OF LOGISTICS

(pages 11-14)

#### Petra Plešková

VOLKSWAGEN SLOVAKIA a.s., Priemyselná 1/9042, 03861 Martin, Slovak Republic, petra.pleskova@student.tuke.sk

Keywords: information logistics, conference, projecting, internet conference system, programming

*Abstract:* In the modern world, there is a huge demand for exchange and sharing of information. Members of Department of Logistics at Technical University of Kosice are therefore participating in many international conferences. In order to be able to create and organize scientific conference they needed to create a web conference system. This information system combines the advantages of available conference systems and the requirements of Department of Logistics. It incorporates features such as information elements, sections for the purpose of advertising, marketing and propagation and elements for financial flows. Web conference system with the name ConfUL solves the difficulties that have appeared within organization of scientific conferences and ensures optimal informational and financial flows. Users of ConfUL system are allowed to add and share scientific articles, search for instructions and information about the upcoming conferences and many more. In this article, we present the basic functions of web conference system ConfUL.

doi:10.22306/al.v4i4.70

*Received:* 08 *Dec.* 2017 *Accepted:* 22 *Dec.* 2017

# THE DEVELOPMENT OF SELECTED INDUSTRIAL INDICATORS IN SLOVAKIA IN 2006-2016

(pages 15-21)

### Martina Vasilková Kmecová

Department of Earth Resources, Faculty of Mining, Ecology, Process Control and Geotechnology, Park Komenského 19, 042 00 Košice, Slovakia, phone.: +421 55 602 2436, e-mail: martina.vasilkova.kmecova@tuke.sk

### Lucia Domaracká

Department of Earth Resources, Faculty of Mining, Ecology, Process Control and Geotechnology, Park Komenského 19, 042 00 Košice, Slovakia, phone.: +421 55 602 2984, e-mail: lucia.domaracka@tuke.sk

#### Marcela Taušová

Department of Earth Resources, Faculty of Mining, Ecology, Process Control and Geotechnology, Park Komenského 19, 042 00 Košice, Slovakia, phone.: +421 55 602 2966, e-mail: marcela.tausova@tuke.sk

Keywords: mining industry, Slovakia, underground mining, surface mining, development

*Abstract:* The export industry belongs in Slovakia among industries that are at the start of the industrial chain. Its primary task is to provide raw materials for other industries [1]. In the 1990s there was a decline in mining. The decline was mainly due to the drop in coal, ore and salt mining. As a result of the liquidation of the mines, the unemployment rate was rising rapidly. However, surface mining did not show a sharp decline. The aim of the article is to point out the development of the mining industry in Slovakia at present. The development of the mining sector in the years 2006-2016 was monitored by industry indicators such as the evolution of mining, sales, inflation rates, the number of employees, average nominal wages, and so on.

ABSTRACTS

doi:10.22306/al.v4i4.76

Received: 05 Dec. 2017 Accepted: 29 Dec. 2017

# **OPTIMIZATION OF MATERIAL FLOW BY SIMULATION METHODS**

(pages 23-26)

#### **Adam Drastich**

VSB - Technical University of Ostrava, 17. Listopadu 15, 708 33 Ostrava-Poruba, Czech Republic, EU, adam.drastich@vsb.cz

Keywords: simulation, logistics, material flow, KANBAN, loss

*Abstract:* In the sphere of production area, methods of simulation of production processes and logistic processes are increasingly used. These methods are mainly used in planning, optimization and operational management of production flows and technologies. Material flow simulation methods are closely linked to information technologies and related statistical disciplines. The combination of these disciplines allows the creation of efficient methodologies for generating material flow through simulation models and related algorithms. Logistic dependencies found through these models are then ideally applicable to serial production lines.