
ABSTRACTS

*Received: 03 June 2017**Accepted: 17 June 2017***BIOMEDICAL ENGINEERING – PART OF MEDICINE**

(pages 1-6)

Marianna Trebuňová

Technical University of Košice, Faculty of Mechanical Engineering, Department of Biomedical Engineering and Measurement, Letná 9, 042 00 Košice, Slovakia, marianna.trebunova@tuke.sk

Viktória Mezencevová

Technical University of Košice, Faculty of Mechanical Engineering, Department of Biomedical Engineering and Measurement, Letná 9, 042 00 Košice, Slovakia, viktoria.mezencevova@student.tuke.sk

Jozef Živčák

Technical University of Košice, Faculty of Mechanical Engineering, Department of Biomedical Engineering and Measurement, Letná 9, 042 00 Košice, Slovakia, jozef.zivcak@tuke.sk

Keywords: biomedical engineering, TERM, biomechanics, biorobotics, bioinformatics and computational biology

Abstract: Biomedical engineers represent significant multidisciplinary and interdisciplinary interconnection of technical, humanities and natural sciences. By integrating and applying technical, physical science disciplines to the fields of biology and medicine, they enable comprehensive systemic levels of tissues and organisms as a whole to be influenced. The ability of targeted, regulated proliferation, differentiation, tissues / organ / organism reparation enables not only to improve the quality of healthcare but also to improve the quality of life of the injured individual. The goal of biological engineers is to better understand, replace or fix a target system to ultimately improve the quality of healthcare. In this brief, transparent article, we focus on the various areas of biomedical engineering research in the world.

*Received: 04 June 2017**Accepted: 23 June 2017***PROCESS OF THE RFID TECHNOLOGY IMPLEMENTATION INTO THE PRODUCTION**

(pages 7-10)

Kristína Benčíková

TU of Košice, Faculty of Mechanical Engineering, Institute of technology and management, Department of Industrial Engineering and Management, B. Nemcovej 32, 04 200 Košice, kristina.bencikova@tuke.sk

Keywords: RFID technology, process, implementation, production

Abstract: The article deals with RFID technology and its implementation under real conditions. The paper familiarizes reader with RFID technology, functionality of RFID technology and its basic elements. It offers a complete picture about RFID technology. The main focus of this paper is on guideline for smooth and cost effective process of implementation this new technology into the production processes taking into account real conditions. There are defined steps to follow to meet the requirements and obtain all proposed benefits after implementation of RFID technology. This paper helps to avoid complications during process implementation of RFID technology.

*Received: 12 June 2017**Accepted: 28 June 2017***MANUFACTURING SUPPORT OF FLOAT-SINK METHOD USING SIMULATION TOOLS**

(pages 11-15)

ABSTRACTS

Lucia Knapčíková

Technical University of Košice, Faculty of Manufacturing Technologies with a seat in Prešov, Department of Industrial Engineering and Informatics, Bayerova 1,080 01 Prešov, Slovakia, email: lucia.knapticikova@tuke.sk

Svetlana Radchenko

Technical University of Košice, Faculty of Manufacturing Technologies with a seat in Prešov, Department of Automobile and Manufacturing Technologies, Štúrova 31,080 01 Prešov, Slovakia, email: svetlana.radchenko@tuke.sk

Darina Dupláková

Technical University of Košice, Faculty of Manufacturing Technologies with a seat in Prešov, Department of Computer Aided Manufacturing Technologies, Štúrova 31,080 01 Prešov, Slovakia, email: darina.duplakova@tuke.sk

Michal Hatala

Technical University of Košice, Faculty of Manufacturing Technologies with a seat in Prešov, Department of Automobile and Manufacturing Technologies, Štúrova 31,080 01 Prešov, Slovakia, email: michal.hatala@tuke.sk

Keywords: manufacturing, float-sink, simulation, Witness

Abstract: Technological processes are an important part of the production system. Behavior and the functioning of these systems can not be predicted with certainty as they belong to a group of probability-determined systems. If we wanted to know the exact behavior of these systems in advance, we would have to know them mathematically or observe the behavior of the system on a real object. Simulation processes does not prohibit experiments outside the actual object, without real intervention, even without the real existence of the system being investigated. In examining systems it is primarily about gaining new knowledge about their state, structure, behavior, it means obtaining useful information.
