ABSTRACTS

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THE ROLE OF EMPOWERING LEADERSHIP IN ENHANCING THE ADAPTIVE PERFORMANCE OF EMPLOYEES

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Keywords: empowering leadership, adaptive performance of employees, Al-Iraqia University - Baghdad Governorate.
Abstract: The main objective of this research is to explore the effect relationship of two main variables: (empowering leadership and adaptive performance of employees), by surveying the opinions of a number of employees at Al-Iraqia University – Baghdad Governorate. The researcher used the simple random sample method and distributed the questionnaire to a sample of employees amounting to their number is (148) in the various departments and sections of the faculties. After sorting and checking the questionnaires, the number of valid questionnaires for statistical analysis reached (141) out of the number of (143) retrieved questionnaires. Statistical analysis of the collected data was carried out using the program (SPSS v.22). The research reached to accept the main hypothesis, and concluded that the principals at Al-Iraqia University in the study sample are interested and have a great orientation towards empowering leadership, which in turn enhances the adaptive performance of employees. The results of the current research are, to the best of the researcher's knowledge, a first attempt in the context of reducing or bridging the knowledge gap between the variables of empowering leadership and adaptive performance.

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ANALYSIS, PRACTICAL APPLICATION AND POSSIBLE INTERCONNECTION OF INDUSTRIAL ENGINEERING METHODS AND KEY PERFORMANCE INDICATORS

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Keywords: improvement methodology, industrial engineering, industrial engineering methods, Key Performance Indicators (KPIs), Industry 4.0.
Abstract: In connection with applying the principles of Industry 4.0, the industrial practice also requires the consistent application of industrial engineering methods to improve process performance. The transformation of society into digital affects almost all areas of industry, public administration, healthcare and all walks of life. The implementation of Industry

4.0 is very important in the automotive, engineering and electrical engineering industries. It is the move towards Industry 4.0, the collection of large amounts of data and the decision-making based on the data obtained that provide the ideal basis for using more complex industrial engineering methods and better process evaluation.
The paper's main goal is to analyse and identify the use of industrial engineering methods and key performance indicators of companies in industrial practice in Slovakia, where practice shows a lower acquaintance with these methods, especially among medium-sized companies. The paper deals with the issue of industrial engineering methods aimed at improving process performance in the context of key performance indicators. The paper contains some results of a questionnaire survey aimed at gathering information on improvement methods and identifying the use of key performance indicators in industrial practice. Which results will bring us closer to which types of methods are most used in Slovak practice and why?

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TOTAL PRODUCTIVE MAINTENANCE IN LAB SET UP OF EDUCATIONAL SYSTEM – CASE STUDY

(pages 13-22)

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Keywords: equipment effectiveness, Total Productive Maintenance (TPM), lab set up, daily maintenance.
Abstract: Total productive maintenance (TPM) is used to evaluate the performance of equipment used within the manufacturing facility, lab set up etc. TPM Concept used to improve the efficiency of machinery by undergoing serious maintenance activities every day based on the usages. Productivity is defined as maintaining the workplace and surrounding facilities neat and clean. Equipment used for performing work is said to be monitored every time continuously. Due to the continuous observation about the performance of the equipment will help us to note down the conditions of equipment also suitable remedies to further increase its effective usages. In this paper, an attempt has been made to use TPM concepts (Total Productive Maintenance) in the lab to set up the environment within the technical education institution in south India. The case study is conducted to study the quality and effectiveness of lab instruments with the help of TPM concepts used in real-time applications.

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MINIMIZING OF RISKS IN THE WORKPLACE USING SIMULATION SOFTWARE

(pages 23-26)

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Keywords: risk assessment, manufacturing, injection moulding, simulation software.
Abstract: The purpose of risk assessment is to provide information for decision-making. It compares the resulting risk obtained from the analysis with the risk criteria based on the legislation. If the level of risk is undesirable, the organization must take measures under the legislation to reduce or eliminate the risk. There are also cases where the risk assessment

leads the company to a repeated analysis and the decision to terminate the investigation due to negligible, resulting risk. The paper focuses on using simulation as a supportive tool to minimize the risk in the workplace of injection moulding plants. It was eliminated bottlenecks and designed suitable injection moulding arrangements to ensure the safety and health of workers at work.

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INFLUENCE OF BALL TO POWDER RATIO AT MECHANICAL MILLING ON THE COERCIVITY OF SOFT MAGNETIC COMPOSITES

(pages 27-32)

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Keywords: soft magnetic materials, soft magnetic composites, mechanical milling, coercivity, compaction.
Abstract: Soft magnetic composites (SMCs) represent specific and useful class of materials with expanding application range. They are intensively studied to reveal its large potential for their properties improvement. These soft magnetic compacted powdered materials are used in a variety of electromagnetic applications such as computer, relay, disk drive, printer, hearing aid devices and others. The aim of this work was determination the coercivity of iron based SMCs prepared from iron particles, which were milled with different intensity.