
ABSTRACTS

*doi:10.22306/atec.v4i1.31**Received: 07 Feb. 2018**Accepted: 20 Mar. 2018***MEANS OF USING LOW-POTENTIAL GEOTHERMAL ENERGY FOR RECREATIONAL PURPOSES IN THE KOŠICE REGION**

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Keywords: heat pump, geothermal energy, hydrogeology**Abstract:** The authors focused on the possibility of using low-potential energy from groundwater by means of heat pumps in the Košice region for recreational purposes as an alternative to geothermal energy obtained from large depths. The article deals with the hydrogeological suitability of the Košice region territory for the use of water-water heat pumps, suitable technical works in the digging of wells as prepare exploitation well and re-injections well, and outputs, while also trying to point out the economics benefits of using low-potential energy from groundwater against to geothermal energy obtained from large depths.

*doi:10.22306/atec.v4i1.33**Received: 25 Mar. 2018**Accepted: 30 Mar. 2018***INVESTIGATION OF PRESSURE REGULATOR REPLACEMENT BY TURBO EXPANDER IN HUNGARIAN GAS TRANSFER STATIONS**

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Keywords: turbo expander, transmission system, energy efficiency, natural gas, power production**Abstract:** The "Strategy for a stable and adaptable energy union and a forward-looking climate policy", developed by the European Commission and endorsed in 2015, states that "... our goal is to make the energy union a long-term sustainable carbon-free and climate-friendly economy" [1]. As a result of the above, we have been looking for the conditions and the technical solutions under which the necessary pressure regulation at the gas transfer stations can use the pressure energy economically.

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BIOMEDICAL ENGINEERING AND PROTEOMICS

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Keywords: proteomics, proteins, genes

Abstract: The term "proteomics" was created in 1997, by analogy of genomics, genome studies. "Proteom" refers to a mixture of proteins and genome and was created by Marcom Wilkins in 1994. Proteomics is the large-scale study of proteins, particularly their structures and functions. Proteins are vital parts of living organisms, as they are the main components of the physiological metabolic pathways of cells. After genomics and transcriptomics, proteomics is the "next step" in the study of biological systems. It is more complicated than genomics because an organism's genome is approximated by the constant, whereas the proteome differs from cell to cell and from time to time. Distinct genes are expressed in different cell types, which means that even the basic set of proteins that are produced in a cell needs to be identified.
