



“Gheorghe Asachi” Technical University of Iasi, Romania



ENVIRONMENTAL SOUNDNESS OF VIRTUAL SIMULATIONS FOR COAL BED DEGASSING PROCESSES

**Nicolae-Ioan Vlasin*, Constantin Lupu, Emilian Ghicioi, Emeric Chiuzan,
Cristian Tomescu**

*National Institute for Research and Development in Mine Safety and Protection to Explosion – INSEMEX Petroșani, 32-34 G-ral
Vasile Milea Str., 332047 Petroșani, Hunedoara County, Romania*

Abstract

Mining industry, by underground coal exploitations allows the release of important methane quantities in the atmosphere. Methane can be found stored both in coal deposits, as well as in sterile rocks from the proximity of coal beds. By carrying out the degassing process in advance of the exploitation, there can be obtained at least three benefits simultaneously: a new source of fuel for heating devices, methane emissions reduction and ventilation costs reduction.

With the help of computer, simulations of the coal bed degassing process can show in safe conditions the differences between the situations that include this procedure and the situations in which the exploitation is performed without prior degassing of the coal beds.

Key words: ANSYS, degassing, environment, methane, simulation

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* Author to whom all correspondence should be addressed: E-mail: nicolae.vlasin@insemex.ro; Phone: + 40 254541621; Fax: +40 254546277