

Title of the session: „The “Fourth industrial revolution” in the technique and technology of shafts sinking - practical aspects

Date: 12.04. 2019.

Location of organization of the thematic session – JSW Innowacje Katowice ul Paderewskiego 41.

Time: 9:00 – 13:00

Expected time of presentations – 15 min

Supervisor of the session – Andrzej Palarczyk, tel. 606988539, e-mail apalarczyk@jsw.pl

Leader of the session – Prof. dr hab. eng. Piotr Czaja Akademia Górniczo – Hutnicza w Krakowie
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Description of the session:

The problem of maintaining the level of coal mining in Polish mines, after years of stagnation of investing in the construction of new mines and the development of new extraction levels, found a barrier to the efficiency of hitherto existing shafts. The rapid construction of shafts for newly designed mines and the deepening of exploited shafts in existing mines becomes a challenge for the market of companies performing such mining works. One of them is Przedsiębiorstwo Budowy Szybów (Shaft Construction Company) S.A.- a company with over seventy years of tradition in this type of work. At the conference, she will present 12 papers in which she will present her modern solutions applied in practice in drilling, deepening, building mining shaft hoists, innovative development of areas for the drilling of new shafts and specialized works of horizontal excavations.

List of topics planned to be delivered:

1. Przedsiębiorstwo Szybowy Szybów (Shaft Construction Company) - from deepening shafts to building mines
2. Modern land development for the needs of the construction of the shaft "Grzegorz"
3. The technology of the diaphragm wall and the freezing of the rock mass as an improvement of the works related to drilling the shaft "Grzegorz"
4. The rope reinforcement model for the "1Bzie" shaft
5. Large-scale shaft entries and their equipment in the aspect of their technology and future functionality
6. An innovative method of stabilizing the glassware extraction vessels with a rope guide at the intermediate level.
7. Reconstruction of the Paderewski shaft in the "Wieliczka" Salt Mine without the use of a mining shaft hoist.
8. Short time of mobilization, design and development of basic equipment for particularly responsible work performed in windshields without a functioning mining shaft hoist - the case of the "Marklowice II" shaft.
9. Deepening of the "Pniówek IV" shaft and perspectives of extending next shafts guaranteeing the development of the mine.
10. Overview of specialist mining works performed for the task related to the launch of the "Budryk I" shaft.
11. PBS is not only Silesia ... (LWB, Czech Republic, Germany).
12. Horizontal works in PBS - current status and perspectives