

Title of the session: New solutions in the area of telecommunications, monitoring and visualization of mine operation - practical experience in coal processing.

Date – 12.04.2019.

Location of organization of the thematic session – KWK BORYNIA

Expected time of presentations – 15 min.

Time: 9.00 – 15.00

Supervisor of the session – Tomasz Cichy tel. 32 756 4540 email: tcichy@jsw.pl

Leader of the session – Dr hab. eng. Antoni Wojaczek POLITECHNIKA ŚL,

Prof. dr hab. eng. Barbara Tora AGH

Description of the session:

Mining infrastructure elements responsible for power supply, communication as well as data transmission are an indispensable element of a safe and effective production process. As part of the session, new solutions and technologies will be presented in the field of power supply, communication and monitoring and control systems of technological processes taking place in mines as well as in the field of systems responsible for the safety of mining staff working underground, with particular emphasis on the practical experience of implementations implemented in JSW S.A

Agenda

- 9:00 – 9:15 Greeting
- 9:15 – 9:45 CZAD as a signpost for the digital transformation of JSW S.A. - Tomasz Cichy, Jacek Kwaśnica, JSW
- 9:45 – 10:00 Integration and modernization of the OT network - Roman Jordan, JSW ITS
- 10:00 – 10:15 Monitoring of machines and devices, automation of technological processes of longwall and adit complexes - Mariusz Dziemdziora, Szymon Skirtun, KWK B-Z-J
- 10:15 – 10:30 Implementation of new telecommunications and IT technologies at the KWK Knurów-Szczygłowice mine - Dawid Tapała, Krzysztof Koj, KWK Knurów-Szczygłowice
- 10:30 – 10:45 Visualization of technological processes including machines and devices at the KWK Budryk mine - Grzegorz Warchoń, KWK Budryk
- 10:45 – 11:00 Coffee break
- 11:00 – 11:15 "Sensitive networks" ... temporarily - development of mine transmission technology networks -Jacek Kuśmirak-Brudnicki, KWK B-Z-J
- 11:15 – 11:30 Visualization of the mine work, monitoring and telecommunications in JSW S.A. KWK Pniówek - yesterday, today and tomorrow - Paweł Bieszczad, Mariusz Lasek, KWK „Pniówek”
- 11:30 – 11:45 Infrastructure of supervisory and control systems of technological processes in JSW in the past and today - development directions - Mieczysław Timler, TIMLER
- 11:45 – 12:00 PORTAS, wireless system of personnel location, materials logistics, anti-collision, alarming, broadcasting, rescue assistance and data transmission - Tomasz Cierpisz, SEVITEL
- 12:00 – 12:15 Digital radio communication in JSW. 16 years of evolution of the Flexcom / Multicom system - Michał Wrasidło, EMITECH

- 12:15 – 12:30 Coffee break
- 12:30 – 12:45 SmartMine - evolution of production and control systems - Karol Bartodziej FAMUR
- 12:45 – 13:00 Modern operation of the coal face with a remote controlled shearer with the SANDVIK AutoMine system - Łukasz Kilan SANDVIK
- 13:00 – 13:15 The use of satellite monitoring to measure vertical displacements of the area - Mateusz Maślanka SATIM
- 13:15 – 13:30 Application of HASO production systems in the field of data collection, monitoring and visualization in JSW SA plants - Andrzej Paszek, HASO
- 13:30 – 13:45 Intrinsically safe EMIR-19 data transmission system- Edward Cieślak ELEKTROMETAL
- 13:45 – 14:00 Session summary
- 14:00 – 15:00 Lunch