





# **WEBINAR**

on

# "ADVANCEMENTS IN UNDERGROUND MINING"

jointly organized by

## GIG RESEARCH INSTITUTE, KATOWICE (POLAND)

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THE MINING, GEOLOGICAL, METALLURGICAL INSTITUTE OF INDIA, KOLKATA (INDIA)

in association with

Honorary Consulate of the Republic of Poland in Kolkata (India)

> **Date:** Thursday, 10<sup>th</sup> March, 2022 **Time:** 1330 – 1500 Hrs. (CEST) / 1800 – 1930 Hrs. (IST)

> > Zoom Link: CLICK HERE

**Meeting ID:** 838 9778 9378 • **Password:** 212136

## **Program Schedule**

## **Introduction & Opening Remarks:**

Mr. Joydeep Roy, Chief Consular Officer, Honorary Consulate of Poland in Kolkata

### **Welcome Address:**

- Mr. P. M. Prasad, President MGMI
- Prof. Dr. hab. inż. Stanisław Prusek, Director GiG

#### **Presentations:**

#### **Method of Extraction:**

Dr. Wojciecj Masny, Ph.D

#### **Strata Control & Ventilation in Deep Mines:**

- Dr. Janusz Makówka, PhD
- **Dr. Phu Minh Vuong Nguyen**, PhD (presentation on Strata Control)
- **Dr. Henryk Kopton**, PhD (presentation on Ventilation in Deep Mines)

## **Q&A Session**:

**Summary & Concluding Remarks: Mr. Joydeep Roy** 

Vote of Thanks: Mr. Ranajit Talapatra, Hony. Secretary - MGMI

## **SPEAKER PROFILES**

## Dr. Wojciecj Masny



**Dr. Wojciecj Masny** is currently the Assistant Professor in the Department of Extraction Technologies, Rockburst and Mining Support, Central Mining Institute, Katowice. He holds a Diploma and PhD in Mining & Engineering Geology from the Silesian University of Technology. He also has a M. Sc and Engineering Degree in Mining with specialisation in Occupational Health and Safety.

At GiG he specializes in: a) Rock Mechanics (with numerical modelling); b) Rock bolts & c) Gobs Reconsolidation.

#### Dr. Janusz Makówka



**Dr. Janusz Makowski** is presently the Associate Professor and Head of Rock Burst and the Rock Mechanics Laboratory at Central Mining Institute, Katowice. He holds a Diploma and Doctor of Science (Habilitation) in Mining & Engineering Geology; Diploma & Doctor of Philosophy in Mining and Engineering Geology; Certificate of Management Postgraduate Studies (*based on MBA program*) from Warsaw School of Economics and Central Mining Institute in Katowice; Ecole Nationale Superieure des Mines de Nancy (training within CESMAT - CESTEMIN providing with a Diploma of Engineer Expert issued by Institute National Politechnique de Lorraine); M. Sc & Engineer Degree in Mining (Specialisation: Mine Planning and Constructions) from Academy of Mining & Metallurgy in Cracow Mining Faculty.

At GiG, he specializes in: a) Rock Mechanics (with numerical modelling); b) Rockbursts in coal mines (coal bumps) and copper mines – analysis, prognosis and prevention; c) Rock stress measurement; d) Hydraulic fracturing application in underground mines; e) methane drainage stimulation methods.

# Dr. Phu Minh Vuong Nguyen



**Dr. Phu Minh Vuong Nguyen** is the Researcher, Department of Extraction Technologies, Rockburst and Risk Assessment at Central Mining Institute, Katowice, Poland. Prior to GiG, he was a Researcher/ Post-Doctoral Researcher at Faculty of Physical and Mathematical Sciences, Advanced Mining Technology Center (AMTC) - University of Chile. He holds a Master's Degree and PhD in Mining and Geoengineering from AGH University of Science & Technology, Cracow.

At GiG, he specializes on Geomechanics, Underground construction, Geotechnics, Mining technology & Rock mechanics. He teaches about Rock mass modelling methods and their applications. His work on Rockburst and Risk Assessment deals with underground workings design, mining support and reinforcement design, open pit and underground excavation

optimization & stability analysis, numerical modelling (FLAC2D / 3D, PHASE2 / RS3, UDEC / 3DEC).

#### Dr. Henryk Kopton



**Dr. Henryk Kopton** is an Assistant Professor in the Department of Aerology and Head of the Mining and Ventilation Department in the Experimental Mine "Barbara". He holds a M. Sc. Eng. in Mining with a specialization in Designing & Construction of Mines. Additionally, he holds a Doctor of Technical Sciences in Mining and Engineering Geology. From being an underground trainee to becoming the Head Ventilation Engineer, he is able to combine science and experiences gained through his work in the gassy coal mine "**Bielszowice**".

He is an author of the new method of forecasting absolute methane emissions into the roadway workings driven by the means of heading machines in the hard coal mines. Coauthor of several research projects and many research works in the domain of gas and

fire hazard control. Author & Co-Author of several publications, that are mostly focused on methane hazard prevention and control. He often provides training for the staff of coal mines in domain of ventilation and gas hazard combating. Member of ISO TC263 (Coalbed methane) and Polish PKN TC 275 (Natural Hazards in Mining).

### Central Mining Institute (GiG), Katowice, Poland

The Central Mining Institute (GiG) has been connected with the mining industry and with the Upper Silesia region since 1945. The Experimental Mine "**Barbara**" set-up in 1925 is a part of this Institute. GiG's activities are focused on issues concerning work safety, modern technologies, mining techniques as well as environmental protection against the effects of industrial activity, primarily "mining". The results of scientific and research works conducted in the Institute constitute the basis for modern and safe Polish mining industry, with many of them being applied elsewhere in the global mining industry.



The key activities of GIG include: mining engineering, environmental engineering, problems relating to quality, education and training. GIG is one of the most sought after "Partner" in the area of waste management, raw materials recycling, energy audits, modernization of energy economy of municipalities & enterprises, optimization of water supply, environmental monitoring, cleaner production program, sustainable development of municipalities (rural districts) and regions. Institute is a leading research organization working in clean-coal technology fields such as coal-bed methane, underground coal gasification, carbon capture and storage, shale gas. GIG's success lies in the usage of modern management methods, scientific potential as well as highly qualified staff consisting of professors, persons with a post-doctoral degree, doctors and engineering workers.



## The Mining, Geological, Metallurgical Institute of India (MGMI), Kolkata (India)

MGMI was established in 1906 with the object of promoting "the study of all branches of mining methods and of mineral occurrences in India, with a view to disseminating information to facilitating the economic development of mineral industries in the country". Prior to Independence, the Government of India used to seek suggestions / comments from the institute on wide ranging issues from "induction of safety measures in underground mines to "income tax" slabs for small scale mines. This practice is still being continued.



The Institute consists of 3000+ members representing professionals in different fields of mineral based industries, including – technocrats, planners & policy makers (private and public sector) at State / Central levels; experienced managers in different sub-disciplines ranging from evaluation of resources to their eco-friendly exploitation; academicians / research workers and students from geology, mining and metallurgy stream; CEO's of most of the organisations related to 'Mines and minerals' in India. MGMI is now recognised as one of the preferred professional societies for qualified personnel associated with the study / practices of the minerals & energy industries in India.

MGMI is represented in the Coal Advisory Council, Govt. of India; Mineral Advisory Board; Central Geological Programming Board (apex body which annually approves the total exploration programmes across the country); Bureau of Indian Standards; National Safety Council; Selection Committee for "National Mineral Award" (highest level national award in the field of geology-mining-metallurgy). It also organizes regular Conferences & Programs – both at Global and National level on a regular basis. MGMI has been chosen as the **Advisory Expert** in assisting the Government of West Bengal for organizing the **Mining Session** at the Bengal Global Business Summit (BGBS) 2022 – taking place in Kolkata next month.

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