



INSEMEX
NATIONAL INSTITUTE FOR RESEARCH AND DEVELOPMENT
IN MINE SAFETY AND PROTECTION TO EXPLOSION



The 9th BALKAN MINING CONGRESS
BALKANMINE 2025

„SUSTAINABLE MINING – THE KEY OF THE
FUTURE DEVELOPMENT”

BALKANMINE 2025

09 – 10 OCTOBER, 2025, PETROȘANI - ROMANIA

CONGRESS PROGRAM

UNDER THE AUSPICES OF:

ROMANIAN ACADEMY OF TECHNICAL SCIENCES

MINISTRY OF EDUCATION

MINISTRY OF ECONOMY

NATIONAL AGENCY FOR MINERAL RESOURCES

**WEC REPRESENTATIVE AUTHORITY: THE NATIONAL
ROMANIAN COMMITTEE OF THE WORLD’S ENERGY COUNCIL**

ORGANISING COMMITTEE

PERMANENT INTERNATIONAL COORDINATION COMMITTEE OF THE BALKAN MINING CONGRESS

Prof. Dr. Nicolae Iliáš, Romania, president
Academician prof. Dr. Slobodan Vujić, Serbia
Prof. Dr. Tzolo Voutov, Bulgaria
Prof. Dr. Vladimir Malbašić, Republic of Srpska B&H
Dr. Marjan Hudej & Prof. Dr. Jurij Šporin, Slovenia
MSc. Sasho Jovchevski, Northern Macedonia
Prof. Dr. Bayram Kahraman, Turkey
Dr. Miodrag Gomilanović, Montenegro
Prof. Dr. Jani Bakallbashi, Albania
Emeritus prof. Konstantinos Panagopoulos, Greece

NATIONAL ORGANIZING COMMITTEE

Prof. Dr. Sorin Mihai RADU – president
Prof. Dr. Maria LAZĂR, ROMANIA
Ph.D. Iulian OFFENBERG, ROMANIA
Scientific Researcher I George Artur GĂMAN, ROMANIA
Scientific Researcher I Emilian GHICIOI, ROMANIA
Prof. Dr. Dan Codruț PETRILEAN, ROMANIA
Associate Prof. Nicolae PĂTRĂȘCOIU, ROMANIA
Prof. Dr. Roland Iosif MORARU, ROMANIA
Associate Prof. Emilia DUNCA, ROMANIA
Lecturer Daniel MOISUC-HOJDA, ROMANIA
Lecturer Roxana HERBEI, ROMANIA

NATIONAL SCIENTIFIC COUNCIL

Doru Costin DARABONȚ – NIRD-INCDPM Bucharest, ROMANIA
Florin FAUR – University of Petroșani, ROMANIA
Ciprian DANCIU- University of Petroșani, ROMANIA
Andrei ANDRAȘ – University of Petroșani, ROMANIA
Gabriel BĂBUȚ – University of Petroșani, ROMANIA
Camelia BĂDULESCU – University of Petroșani, ROMANIA
Angelica GĂMAN – NIRD INSEMEX Petroșani, ROMANIA
Dacian MARIAN – University of Petroșani, ROMANIA
Ilie ONICA – University of Petroșani, ROMANIA
Vlad PĂSCULESCU – NIRD INSEMEX Petroșani, ROMANIA
Ladislau RADERMACHER – University of Petroșani, ROMANIA
Mihaela TODERAȘ – University of Petroșani, ROMANIA
Ioel VEREȘ – Technical University of Cluj Napoca, ROMANIA





BALKANMINE 2025

09 – 10 OCTOBER, 2025, PETROȘANI - ROMANIA

GENERAL PROGRAM **Thursday, 09 October 2025**

- 08:00 – 09:00¹ Welcome and registration – University of Petroșani,
Building A – 1st floor lobby
- 09:00 – 09:15 Opening ceremony – University of Petroșani
Building A – 1st floor, A4 Amphitheater
Maria LAZĂR, Research vicerector, University of Petroșani
Sorin-Mihai RADU, Rector, University of Petroșani
Artur George GĂMAN, General Director, INSEMEX Petrosani
Željko Vukelić - Appointment of a new member of the
Permanent International Coordination Committee Of The Balkan
Mining Congress from Slovenia
- 09:15 – 10:45 Plenary lectures – University of Petroșani
Building A – 1st floor, A4 Amphitheater
- 09:15 – 09:30 **Sorin-Mihai RADU**, University of Petroșani - *In-situ energy
recovery from non-exploitable lignite by classical methods in surface quarries via
underground coal gasification*
- 09:30 – 09:45 **Vladimir Malbašić**, University of Banja Luka, Bosnia and
Herzegovina - *Indicating the existence of a correlation between capital and
operating costs ratio and the limit depth of surface exploitation*
- 09:45 – 10:00- **Sasho Jovchevski**, Mining engineer Dekra airbet, Bitola,
Macedonia - *Method and technology of selecting the most economical equipment
for exploitation of layered deposits (travertine)*
- 10:15 – 10:30 **Carsten Drebenstedt**, Bergakademie Technische Universität
Freiberg – Germany, *Status of Mining and Transformation of the Mining Sector in
Germany*
- 10:30 – 10:45 **Francis Pavloudakis**, University of Western Macedonia - *From
lignite extraction to energy transition: stakeholder views on post-mining land use
in Western Macedonia region*
- 10:45 – 11:00 Coffee break – University of Petroșani
Building A – 1st floor lobby

¹ Bucharest Time

11:00 – 13:00 Parallel sessions
13:00 – 14:00 Lunch break – University of Petroșani
Building A – 1st floor lobby
14:00 – 16:00 Parallel sessions
16:00 – 16:30 Coffee break – University of Petroșani
Building A – 1st floor lobby
16:30 – 18:30 Parallel sessions
19:30 – 23.00 Gala dinner (La Belle Epoque Restaurant, Petroșani)

Friday, 10 October 2025

**Starting at 09:00 – Field trip to marble quarry Ruschita and to the
antic site Sarmisegetusa Ulpia Traiana**



Ruschita marble quarry



Sarmisegetusa Ulpia Traiana



PARALLEL SESSIONS

09.10.2024, 11:00 – 18:00

MINING EXPLOITATION METHODS AND TECHNOLOGIES, EXPLOITATION OF OIL AND GAS, GEOPHYSICS IN MINING, MANAGMENT AND MINING ECONOMICS, MINERAL PROCESSING, MINERAL RESOURCES AND MINE GEOLOGY, ENVIRONMENTAL ENGINEERING, LEGISLATION AND NORMS		
University of Petroșani – Building A – 1st floor, A4 Amphitheater		
Chairpersons: Carsten Drebenstedt - TU-BA Freiberg, Germany Maria Lazăr – University of Petroșani, Romania		
1	<i>Dražana Tošić, Predrag Vučkovic, Duško Torbica, Zorica Ivković and Dejan Dramlić</i> - SELECTION OF THE OPTIMAL UNDERGROUND MINING METHOD USING THE PROMETHEE METHOD: A CASE STUDY OF OKRUGLI BRIJEG, TOMISLAVGRAD, BOSNIA AND HERZEGOVINA	11:00 – 11:15
2	<i>Francis Pavloudakis, Christos Roumpos, Constantinos, Pilalidis, Spyridon Pyrtses and Georgios Kaltermtzis</i> - EXPEDITED DEVELOPMENT OF NEW LIGNITE BENCHES AT A SURFACE MINE: EQUIPMENT AND OPERATIONAL ADJUSTMENTS AMID THE ENERGY TRANSITION	11:15 – 11:30
3	<i>Robert Laszlo, Ghicioi Emilian, Ilici Stefan, Simon Bogdan and Florea Daniel</i> - DEVELOPMENT OF EFFECTIVE TECHNIQUES FOR ELIMINATING HOMEMADE EXPLOSIVES	11:30 – 11:45
4	<i>Firat Atalay</i> - PIONEERING GRAPH ATTENTION NETWORKS FOR MINERAL RESOURCE ESTIMATION: A CASE STUDY ON A COPPER DEPOSIT	11:45 – 12:00
5	<i>Ljiljana Tankosić, Suzana Gotovac Atlagić, Branka Šolaja and Alexandru Mihai</i> - TAILINGS DISPOSAL AT THE JEZERO LANDFILL IN OMARSKA MINE AND THE POSSIBILITY OF TESTING SLUDGE AS A TECHNOLOGICAL RAW MATERIAL	12:00 – 12:15
6	<i>Ioannis Kapageridis, Agni Patra, Argyro Asvesta, Ioannis Sinatkas, Francis Pavloudakis and Stefanos Sykiotis</i> - PRETRAINED NEURAL NETWORKS – THE KEY TO TRANSFORMING MINERAL RESOURCE MODELS INTO DIGITAL TWINS	12:15 – 12:30

7	<i>Maria Sinche Gonzalez, Raul Mollehuara Canales and Nelly Mollehuara Canales</i> - EVALUATION OF PHOSPHATE RECOVERY AS A CRITICAL RAW MATERIAL FROM A LOW-GRADE COMPLEX CARBONATE-PHOSPHATE ROCKS	12:30 – 12:45
8	<i>Patrick Penkalla</i> – COMPANY PRESENTATION - DÜCHTING PUMPEN MASCHINENFABRIK GMBH & CO. KG	12:45 – 13:00
Lunch break – University of Petroșani – Building A – 1st floor lobby		13:00–14:00
Chairpersons: Francis Pavloudakis - University of Western Macedonia, Greece Ilie Onica – University of Petrosani, Romania		
1	<i>Shahin Baramaj</i> - MINING METHOD FOR EXTRACTION OF CHROME ORE RESERVES FROM PROTECTIVE PILLARS IN BATRA DEPOSIT.	14:00 – 14:15
2	<i>Gustavo Sammy, Huerta Valer and Badara Diallo</i> - ADVANCED EDGE BLASTING TECHNIQUES AND DIGITAL SIMULATION TO REDUCE MATERIAL SPILLAGE AND OPTIMIZE MINING EFFICIENCY	14:15 – 14:30
3	<i>Laurentiu Stefan Popescu, Ilie Onica and Dacian Paul Marian</i> - STRUCTURAL ASSESSMENT OF THE TROTUȘ MINE IN TÂRGU OCNA USING GROUND PENETRATING RADAR: GEOLOGICAL CORRELATIONS AND RISK ZONES	14:30 – 14:45
4	<i>Adrian Matei, Alexandru Cămărășescu, Razvan Dragoescu and Emeric Chiuzan</i> - DETERMINING OPTIMAL PARAMETERS FOR LOCAL DEGASSING SYSTEM	14:45 – 15:00
5	<i>Željko Vukelić and Jurij Šporin</i> - PROHIBITION OF HYDRAULIC FRACKING FROM THE ASPECTS OF HYDROCARBON SELF-SUFFICIENCY AND ENVIRONMENTAL IMPACTS	15:00 – 15:15
6	<i>Claudio Acuña-Pérez, Alex Campos and Fernando Espergues</i> - ENHANCING FINE PARTICLE RECOVERY IN COPPER-SILVER TAILINGS USING HYDROPHOBIZED GLASS BUBBLE (HGB) CARRIER FLOTATION	15:15 – 15:30
7	<i>Joel Eriksson, Thomas Lagerström and Peter Reinder</i> - LEAD-FREE DETONATORS BASED ON NON-PRIMARY EXPLOSIVES DETONATOR TECHNOLOGY	15:30 – 15:45
Coffee break – University of Petroșani – Building A – 1st floor lobby		15:45–16:15

Chairpersons: Željko Vukelić - University of Ljubljana, Slovenia Emilian Ghicioi - INSEMEX Petrosani, Romania		
1	<i>Carsten Drebenstedt</i> - USE OF DIGITAL TECHNOLOGIES IN MINING EDUCATION – CASE STUDY TU BERGAKADEMIE FREIBERG	16:15 – 16:30
2	<i>Sam Evans, Ben Taylor and Mick Brayshaw</i> - SUBTEK™ 4D™: OPTIMISED UNDERGROUND BLASTING PERFORMANCE THROUGH IMPROVED ENERGY DISTRIBUTION AND CONTROL	16:30 – 16:45
3	<i>Eugen Traista, Camelia Traista and Maria Lazar</i> - ALTERNATIVE SOURCES FOR RARE METALS AND RARE EARTHS: THE POTENTIAL OF CONCENTRATES FROM GRAVEL PLANTS	16:45 – 17:00
4	<i>Wojciech Kostowski, Erwin Maciak, Daniel Adamecki, Grzegorz Gluszek, Kamil Barczak, Zbigniew Opilski, Radosław Rolf, Janusz Pietruszewski, Wojciech Grzegorzek and Paweł Szufleński</i> - MEASURING THE LINEAR DISPLACEMENT OF PIPELINE EXPANSION JOINTS USING COMBINED OPTICAL AND MECHANICAL METHODS	17:00 – 17:15
5	<i>J.A. Kreivi and J.S.C. Marijnissen</i> - WIRELESS BLASTING SOLUTIONS IN EUROPEAN MINING OPERATIONS	17:15 – 17:30
6	<i>Tanja Miladinović and Josip Išek</i> - ANALYSIS OF PHYSICAL AND MECHANICAL PARAMETERS OF FLY ASH FOR INDUSTRIAL USE	17:30 – 17:45
7	<i>Suleyman Yasin Killioglu</i> - FAULT MODELLING BY EVALUATING THE IRREGULARITIES ON DIGITAL TOPOGRAPHY MODEL FOR AN OPEN PIT COAL MINE IN CENTRAL TURKEY	17:45 – 18:00



PARALLEL SESSIONS

09.10.2024, 11:00 – 17:45

MINING MACHINES AND EQUIPMENT, MINING SAFETY AND SURVEY, RENEWABLE AND UNCONVENTIONAL RESOURCES, RESPONSIBLE CONSUMPTION AND PRODUCTION, ROCK MECHANICS, MASSIF CONTROL AND SLOPE STABILITY, SUSTAINABLE MINING, YOUNG RESEARCHERS IN THE MINING FIELD – Phd students		
University of Petroșani – Building A – 1st floor, A1 Amphitheater		
Chairpersons: Sorin Mihai Radu – University of Petroșani, Romania Andrzej Wilk - Silesian University of Technology		
1	<i>Mehmet Suphi Ünal</i> - A PROPOSAL FOR ESTABLISHING A NATIONAL MINING R&D AND TRAINING CENTER IN TURKIYE: A MODEL INSPIRED BY SIMTARS	11:00 – 11:15
2	<i>Maria Daniela Stochitoiu and Ilie Utu</i> - THE ANALYSIS OF RENEWABLE ELECTRICITY SOURCES OPERATION IN THE PRESENCE OF CONVENTIONAL SOURCES	11:15 – 11:30
3	<i>Nikolaos Argiropoulos, Athina Papadopoulou, Ioanna Liakou, Vasileios Papathanasiou, Eleni Trikoilidou, Evangelos Karlopoulos, Ioannis Kapageridis and Francis Pavloudakis</i> - FOSTERING PUBLIC TRUST IN RESPONSIBLE MINING: BEST PRACTICES AND POLICY INSIGHTS	11:30 – 11:45
4	<i>Felipe Acuña, Diego Acevedo, Rodrigo Dockendorff and Lauriane Bouzeran</i> - COMPARATIVE MODELING OF TOPPLING FAILURES: EXPLICIT VS. IMPLICIT DISCONTINUITY APPROACHES IN SLOPE STABILITY ANALYSIS	11:45 – 12:00
5	<i>María Valencia-Vera, Marta Palma, Diego Acevedo, Kimie Suzuki and Lauriane Bouzeran</i> - PREDICTIVE MODELING OF STOPE STABILITY IN SUBLEVEL STOPING USING SURROGATE MODELS	12:00 – 12:15
6	<i>Mircea Saracut</i> - CASE STUDY ON IMPROVING OSH ON CONSTRUCTION SITES	12:15 – 12:30

7	<i>Aristotelis Triantafillidis, Francis Pavloudakis, Panagiotis Grammelis and Nikolaos Koukouzas</i> - PHYTOREMEDIATION OF SOILS AND RECOVERY OF SECONDARY RAW MATERIALS FROM WASTE DUMPS OF SURFACE LIGNITE MINES	12:30 – 12:45
Lunch break – University of Petroșani – Building A – 1st floor lobby		13:00–14:00
Chairpersons: Amaia Nebreda Ruiz – ITASCA Roland Moraru – University of Petrosani, Romania		
1	<i>Dragan Milošević and Jasmina Nešković</i> - QUANTITATIVE ASSESSMENT OF COAL PRODUCTION AND CONSUMPTION	14:00 – 14:15
2	<i>Mircea Saracut</i> - IMPROVING WORK SAFETY ON CONSTRUCTION SITES IN EUROPE FOR WORKERS FROM ASIAN COUNTRIES	14:15 – 14:30
3	<i>Mikael Svartsjaern, Joel Andersson and Lauriane Bouzeran</i> - USING COUPLED CONTINUUM- DISCONTINUUM MODELS FOR GROUND SURFACE DEFORMATION PROGNOSIS AND PILLAR DESIGN	14:30 – 14:45
4	<i>Krzysztof Labus, Małgorzata Labus and Rafał Moska</i> - ASSESSMENT OF THERMAL PARAMETERS OF ROCKS FROM DEEP BOREHOLES IN POLAND FOR GEOTHERMAL PURPOSES	14:45 – 15:00
5	<i>Adrian Florea, Maria Lazar, Ion Dosa, Florin Faur and Izabela Apostu</i> - USE FOR ENERGY PURPOSES OF THE LAKES FROM THE REMAINING VOIDS OF THE LIGNITE OPEN PITS IN OLTENIA	15:00 – 15:15
6	<i>Cristian Tomescu, Doru Cioclea, Ion Gherghe, Adrian Matei and Corneliu Boanta</i> - METHANE INFLOW AND OUTFLOW IN UNDERGROUND MINING WORKINGS – CASE STUDY: LIVEZENI MINE, ROMANIA	15:15 – 15:30
7	<i>Pietro Belba, Gafur Muka and Thoma Korini</i> - UNDERGROUND MINING AND ITS INFLUENCE ON THE SURFACE SUBSIDENCE IN THE CHROME MINE OF BULQIZA	15:30 – 15:45
Coffee break – University of Petroșani – Building A – 1st floor lobby		15:45–16:15

Chairpersons: Mehmet Suphi Ünal - Hacettepe University, Turkey Doru Cioclea – INSEMEX Petrosani, Romania		
1	<i>Justyna Blocka, Jonny Sjöberg, Amaia Nebreda, Staffan Risberg and Annika Korhonen</i> - HYDROGEOLOGICAL NUMERICAL MODELLING OF TERRAFAME KUUSILAMPI PIT AS AN INPUT FOR THE SLOPE STABILITY ASSESSMENT	16:15 – 16:30
2	<i>Andrzej Wilk and Daniel Adamecki</i> - WAY TO INCREASE THE EFFICIENCY OF DEWATERING PUMPS FOR DEEP MINES	16:30 – 16:45
3	<i>Doru Cioclea, Cristian Tomescu, Ion Gherghe, Răzvan Drăgoescu and Alexandru Cămărășescu</i> - ANALYSIS OF THE VENTILATION NETWORK TO REDUCE ENERGY CONSUMPTION AT THE TÂRGU OCNA SALT MINE	16:45 – 17:00
4	<i>Daniel Adamecki and Andrzej Wilk</i> - SINKING OF THE NEW LARGE-SIZED SHAFT AT COAL MINE IN POLAND - AN OVERVIEW	17:00 – 17:15
5	<i>Bogdan-Cristian Popoviciu, Sorin Mihai Radu and Adrian Jean Manole</i> - EVALUATION OF THE MAIN INDICATORS OF OPERATIONAL RELIABILITY FOR A ROLLER BELT CONVEYOR FROM THE ROSIA POIENI QUARRY	17:15 – 17:30
6	<i>Jasmina Nešković, Pavle Stjepanović, Josip Išek, Veselin Anđelković and Jelena Isailović</i> - THE INFLUENCE OF MOISTURE ON THE TRANSPORT CHARACTERISTICS OF COPPER CONCENTRATE	17:30 – 17:45



IN PARTNERSHIP WITH:

Hunedoara County Council

Petrosani City Hall

ALUMNI Association of the University of Petrosani

University of Petrosani CDPM Union



MEDIA PARTNERS:

