## 11th International Symposium Occupational Health and Safety SESAM 2023

**MAIN ORGANIZER** 



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

**CO-ORGANIZERS** 





#### **UNDER THE AUSPICES OF**



MINISTRY OF RESEARCH, INNOVATION

AND DIGITALSIATION



ROMANIAN ACADEMY OF TECHNICAL SCIENCES (ASTR)

18<sup>th</sup> October 2023 Novotel City Centre Hotel Bucharest, ROMANIA

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### **AGENDA**

| 08:30 - 09:30                  | Registration and Welcome Coffee  | Foyer   |
|--------------------------------|--|---|
| 09:30 - 10:00                  | Official Opening   | Paris Conference Room   |
| 09:30 – 10:00                  | Welcome Addresses: George Artur Găman - General Director, INCD INSEMEX Petroșani Tudor Prisecaru - State Secretary, Ministry of Research, Innovation and Digitalisation Dantes Nicolae Bratu - General State Inspector, Labour Inspection Sorin Mihai Radu - Rector, University of Petroșani Valeriu Jinescu — President, Romanian Academy of Technical Sciences (ASTR) Cristian Hubati - Executive Board Member, OMV Petrom           |   |
| 10:00 - 10:30                  | Coffee Break   | Foyer   |
|                                |  |   |
| 10:30 - 13:00                  | 1 <sup>st</sup> Plenary Session  | Paris Conference Room   |
|                                | Chairmen: Maria Lazăr, Robert Laszlo   |   |
|                                |  |   |
| 10:30 – 10:40                  | Post-mining risk management and multi-hazard a application Marwan Al Heib, Marie Degas, Amélie Lecomte, Christian  |   |
| 10:30 - 10:40<br>10:40 - 10:50 | application  | Franck Silesian coal basin in the light of n the energy sector  |
|                                | application  Marwan Al Heib, Marie Degas, Amélie Lecomte, Christian  Abandoned mine methane development of the Upper S the new EU Regulation on methane emission reduction is  | Franck Silesian coal basin in the light of n the energy sector Strzemińska  |
| 10:40 – 10:50                  | application  Marwan Al Heib, Marie Degas, Amélie Lecomte, Christian  Abandoned mine methane development of the Upper S the new EU Regulation on methane emission reduction is Jerzy Hadro, Janusz Jureczka, Grzegorz Suszka, Katarzyna S  Development of lignite open pits - challenges and solution   | Franck  Silesian coal basin in the light of n the energy sector  Strzemińska  Ons  isuc-Hojda, Klaus Fissgus  tinational company in Romania                               |
| 10:40 - 10:50<br>10:50 - 11:00 | application  Marwan Al Heib, Marie Degas, Amélie Lecomte, Christian  Abandoned mine methane development of the Upper S the new EU Regulation on methane emission reduction in Jerzy Hadro, Janusz Jureczka, Grzegorz Suszka, Katarzyna S  Development of lignite open pits - challenges and solution Maria Lazar, Florin Faur, Izabela-Maria Apostu, Daniel Mod  Procedural concept for complex risk assessment in a multiple service. | Franck  Silesian coal basin in the light of in the energy sector  Strzemińska  Ons  isuc-Hojda, Klaus Fissgus  tinational company in Romania - Stelea, Madalina Racautanu |

| 11:30 – 11:40 | An exploratory study on new and emerging occupational safety and health risks associated with the digital market  Florina Ghindescu Negura, Mihai Popescu-Stelea, Adrian Toma, Catalin Valentin Dregan,            |  |
|---------------|--|--|
|               | Raluca Cepreaga Moldoveanu   |  |
| 11:40 - 11:50 | Reducing the negative impact on atmospheric air: an overview of economic and administrative and legal tools  Anzhelika Karaeva, Larisa Ivascu, Athanasia K. Tolkou, George Z. Kyzas, Ramona Giurea                 |  |
| 11:50 – 12:00 | Salt exploitation by dissolution – an alternative method to reduce post-closure risks  Daniel Moisuc-Hojda, Maria Lazar, Florin Faur, Izabela-Maria Apostu   |  |
| 12:00 – 12:10 | Environmental risk assessment in coal mining with methane degassing<br>Gregorio Fidalgo-Valverde, Agustín Menéndez-Díaz, Alicja Krzemień, Pedro Riesgo-<br>Fernández, Antonio Luis Marqués Sierra                  |  |
| 12:10 – 12:20 | Computer-aided design at the tailings dump – Livezeni colliery  Adrian Florea, Csaba Lorint, Ciprian Danciu, Diana Marchis, Lorand Bogdanffy   |  |
| 12:20 – 12:30 | Aspects regarding the impact of cloth waste burning in the historical residential areas of the Petroşani municipality  Csaba Lorint, Ciprian Danciu, Eugen Traista, Adrian Florea, Evelina Rezmerita               |  |
| 12:30 – 12:40 | A new research approach regarding the storage of different gaseous products under pressure in the eligible Romanian salt caverns  Sorin Popescu, Sorin-Mihai Radu, Stela Dinescu, Iulian Vladuca, Ana-Maria Obreja |  |
| 12:40 – 12:50 | Control system for suction valves within gas compressors skids located in potentially explosive zones  Cristian Nechifor, Mihaela Roman, Daniel Lale, Remus Stoica, Mirela Vasile                                  |  |
| 12:50 – 13:00 | Reducing the occurrence of occupational diseases in order to make the work of mining personnel more efficient  Laura Marica, Razvan Bogdan Itu   |  |
|               |  |  |

13:00 – 14:00 Buffet Lunch Foyer

| 14:00 - 16:40 2 <sup>nd</sup> P | lenary Session |
|---------------------------------|----------------|
|---------------------------------|----------------|

**Paris Conference Room** 

Chairmen: Mihaela Părăian, Doru Costin Darabont

| 14:00 – 14:10 | Dynamics of harmful factors in inclined road tunnels according to the results of numerical modeling of up to 50 MW fires in terms of natural ventilation  |
|---------------|---|
|               | Omar Lanchava, Nicolae Ilias, Sorin Mihai Radu, Giorgi Nozadze, Giorgi Javakhishvili  |
| 14:10 – 14:20 | Occupational health and safety risk management in the field of laboratory medicine Sophio Gugeshashvili, Omar Lanchava  |
| 14:20 – 14:30 | Photovoltaic system protection against lightning Constantin Beiu, Georgeta Buica, Anca Elena Antonov, Mircea Risteiu  |
|               |   |
| 14:30 – 14:40 | Functional system for experimentation and testing of products for professional use - Professional risk management tool for workers performing industrial activities  Anca Elena Antonov, Georgeta Buica, Constantin Beiu, Remus Dobra |
|               | Anca Elena Antonov, Georgeta Balea, Constantin Bela, Nemas Bobra  |
| 14:40 – 14:50 | Prognosis of ground surface deformation of the Victoria mine – Slănic Prahova saline Ovidiu Marina, Bogdan Postolachi, Dacian-Paul Marian, Ilie Onica   |
| 14:50 – 15:00 | The influence of the exploitation of the XIV horizon on the Stability of the Cantacuzino mine - Slănic Prahova saline   |
|               | Bogdan Postolachi, Ovidiu Marina, Dacian-Paul Marian, Ilie Onica  |
| 15:00 – 15:10 | Modern training methods and technique in the field of occupational safety – a literature review   |
|               | Alina Trifu, Doru Costin Darabont, Vicentiu Ciocirlea, Iulian Ivan  |
|               |   |
| 15:10 – 15:20 | Advantages and disadvantages of the online training system in the field of occupational safety and health   |
|               | Alina Trifu, Doru Costin Darabont, Vicentiu Ciocirlea, Iulian Ivan  |
|               |   |
| 15:20 – 15:30 | The influence of the conditions of use of the protective clothing on its mechanical and comfort characteristics   |
|               | Daniel Onut Badea, Florentina Poruschi  |
| 15:30 – 15:40 | Outlied avaluation of the symfosos of the CuAIDs comples often the test of resistance to  |
| 15:30 – 15:40 | Optical evaluation of the surfaces of the CuAlBe samples after the test of resistance to harsh wear stresses in an explosive atmosphere   |
|               | Romeo Gabriel Chelariu, Nicanor Cimpoesu, Alin Marian Cazac, Mihai Adrian Bernevig,   |
|               | Costica Bejinariu   |
| 15:40 – 15:50 | Work evolution and safety and health at work in Industry 4.0 / Industry 5.0   |
|               | Adriana Milea, Lucian-Ionel Cioca   |

15:50 - 16:00 Comparison between measured and modelled data on occupational exposure to organic solvents in degreasing, varnishing and painting activities performed in a Romanian company Elena-Ruxandra Chiurtu, Maria Haiducu, Iuliana Pamela Scarlat 16:00 - 16:10 Applicative study on work related stress in transport field Raluca Maria Iordache, Viorica Petreanu, Delia Cristina Mihaila Rock splitting with pyrotechnic compositions and secondary propellants 16:10 - 16:20 Petar Shishkov, Nadezhda Stoycheva, Vladimir Penev 16:20 - 16:30 Metabolic syndrome and the 10-year cardiovascular disease risk in urban public transport drivers in the context of occupational risks and workloads Delia Mihaila, Raluca Maria Iordache, Viorica Petreanu 16:30 - 16:40 Workers exposure to synthetic textiles microfibers Iuliana Scarlat, Raluca Stepa, Maria Haiducu, Emilia Visileanu, Marian Catalin Grosu 16:40 - 17:00 **Q&A / CLOSING REMARKS** 

19:30 - 22:30 Gala Dinner

**Paris Ballroom** 

