

**10<sup>th</sup> International Symposium  
Occupational Health and Safety**

# **SESAM 2021**

## **SYMPOSIUM PROGRAM**

*MAIN ORGANIZER*



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

**CO-ORGANIZERS**



**LABOUR INSPECTION**

**UNDER THE AUSPICES OF**



**MINISTRY OF RESEARCH, INNOVATION  
AND DIGITALSIATION**

**18<sup>th</sup> October 2021  
Online Edition  
PETROSANI, ROMANIA**

## Program Committee

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Dumitru Banici	Nicolae Ioan Vlasin
Adina Harbagiu	Mihaela Dalea
Marius Darie	Ligia Ioana Tuhuț

# Program Overview

Monday, 18th October 2021

- 08<sup>30</sup> – 09<sup>00</sup> \***      **SESAM 2021 On-line Opening Ceremony connection**
- 09<sup>00</sup> – 09<sup>30</sup>**      **Opening Ceremony**  
Link: <https://zoom.us/j/91642300304?pwd=QmZNdHh2TUhCNUIYcnlLeU1OQ0NaQT09>  
Meeting ID: 916 4230 0304      Passcode: opening1
- 09<sup>30</sup> – 10<sup>30</sup>**      **Break / SESAM 2021 On-line Sessions connection**
- 10<sup>30</sup> – 13<sup>00</sup>**      **Morning Parallel Sessions**
- Session 1**  
    Link: <https://zoom.us/j/98165499266?pwd=d29tLzJqdIcyZTMrb1B0bjRTeVVEZz09>  
    Meeting ID: 981 6549 9266      Passcode: session1M
- Session 2**  
    Link: <https://zoom.us/j/92253160968?pwd=dnU4d0VWcUFkM2xPS2hXczcxeUczUT09>  
    Meeting ID: 922 5316 0968      Passcode: session2M
- Session 3**  
    Link: <https://zoom.us/j/96399468407?pwd=bkplcmRCMXBuQjNodHRGWmNOMXVhdz09>  
    Meeting ID: 963 9946 8407      Passcode: session3M
- Session 4**  
    Link: <https://zoom.us/j/95237189363?pwd=TWtZQzVyN0ZSNVBURVZCa1gyVitOdz09>  
    Meeting ID: 952 3718 9363      Passcode: session4M
- 13<sup>00</sup> – 14<sup>00</sup>**      **Lunch Break / SESAM 2021 On-line Sessions connection**
- 14<sup>00</sup> – 16<sup>15</sup>**      **Afternoon Parallel Sessions**
- Session 1**  
    Link: <https://zoom.us/j/99871712065?pwd=RFIBQ3J5cGM5bG1BSXYzdFNFDUcydz09>  
    Meeting ID: 998 7171 2065      Passcode: session1A
- Session 2**  
    Link: <https://zoom.us/j/91925517051?pwd=ZUpVVEVUcE9UVldFanVYZzVDbWYxZz09>  
    Meeting ID: 919 2551 7051      Passcode: session2A
- Session 3**  
    Link: <https://zoom.us/j/97299110063?pwd=NUxsd0MwMTBrdCtOUm14VmNtRVZpdz09>  
    Meeting ID: 972 9911 0063      Passcode: session3A
- Session 4**  
    Link: <https://zoom.us/j/93618229438?pwd=Y0dVU2k1Y2djcjFjNHpBcDRWSFhZZz09>  
    Meeting ID: 936 1822 9438      Passcode: session4A

## Important notes:

- A paper will be published online with open-access in MATEC Web of Conferences, **ONLY if it is presented** within the symposium.
- The official languages of the symposium are **English** and **Romanian**, simultaneous translation being not provided.
- Presenters must develop the slideshow presentations (PowerPoint) **only in English**.
- SESAM 2021 Opening Ceremony and Parallel Sessions **are recorded** by the organizers.

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\* Bucharest time

# Morning Parallel Sessions

<b>Morning Session 1, 10<sup>30</sup> – 13<sup>00</sup></b>		
<b>Zoom Meeting ID:</b> 981 6549 9266 <b>Passcode:</b> session1M <b>Access Link:</b> <a href="https://zoom.us/j/98165499266?pwd=d29tLzJqdicyZTMrb1B0bjRTeVVEZz09">https://zoom.us/j/98165499266?pwd=d29tLzJqdicyZTMrb1B0bjRTeVVEZz09</a>		
*Participants must connect to the Meeting Room between 10 <sup>00</sup> and 10 <sup>30</sup>		
<b>Session Chairman:</b> <b>Zoom Session Host:</b>		
<b>1.</b>	<b>10<sup>30</sup> – 10<sup>45</sup></b>	<b>PAPER 1</b> IMPLICATIONS OF COAL DISAPPEARANCE FROM THE ENERGY MIX IN ROMANIA <b>Authors:</b> Izabela-Maria Apostu, Maria Lazar and Florin Faur
<b>2.</b>	<b>10<sup>45</sup> – 11<sup>00</sup></b>	<b>PAPER 2</b> RESEARCH ON THE CONTINUATION OF MINING WORKS IN THE LICENSE PERIMETER OF THE PESTEANA NORD QUARRY <b>Authors:</b> Daniela Ionela Ciolea, Vasile Bobei, Tiberiu Rusu, Ioana Ionel and Tudor Andrei Rusu
<b>3.</b>	<b>11<sup>00</sup> – 11<sup>15</sup></b>	<b>PAPER 3</b> LIGHTING CONDITIONS AS THE OCCUPATIONAL HEALTH RELATED ISSUE – CASE STUDY <b>Authors:</b> Luiza Dębska and Anita Białek
<b>4.</b>	<b>11<sup>15</sup> – 11<sup>30</sup></b>	<b>PAPER 4</b> PRELIMINARY RESULTS OF INVESTIGATIONS RELATED TO THE ECOLOGY OF URDARI OPEN-PIT LAKE <b>Authors:</b> Florin Faur, Izabela-Maria Apostu and Maria Lazar
<b>5.</b>	<b>11<sup>30</sup> – 11<sup>45</sup></b>	<b>PAPER 5</b> INVESTIGATING ATMOSPHERE'S ENVIRONMENTAL COMPONENTS AND WORK ENVIRONMENT OF A HOUSEHOLD LANDFILL'S PLATFORM <b>Authors:</b> Angelica-Nicoleta Gaman, Alexandru Simion, Marius Kovacs and Izabella Kovacs
<b>6.</b>	<b>11<sup>45</sup> – 12<sup>00</sup></b>	<b>PAPER 6</b> GREEN METHODS THAT ARE USED TO ENSURE THE SUSTAINABLE DEVELOPMENT OF THE ENVIRONMENT AND THE SOCIETY <b>Authors:</b> Simona Gavrilas
<b>7.</b>	<b>12<sup>00</sup> – 12<sup>15</sup></b>	<b>PAPER 7</b> ASSESSMENT OF PRODUCTIVITY IN DIFFERENT THERMAL WORKING ENVIRONMENTS <b>Authors:</b> Natalia Krawczyk
<b>8.</b>	<b>12<sup>15</sup> – 12<sup>30</sup></b>	<b>PAPER 8</b> MEASUREMENTS OF PM10 PARTICLES MADE IN THE ROSIA OF JIU QUARRY AS A RESULT OF THE USE OF KOMATSU PC4000-11 HYDRAULIC EXCAVATOR <b>Authors:</b> Bogdan Ioan Marc, Alexandra (Soica) Stanimirescu and Angela Egri
<b>9.</b>	<b>12<sup>30</sup> – 12<sup>45</sup></b>	<b>PAPER 9</b> PUBLIC TRANSPORT ANALYSIS IN THE PETROSANI BASIN IN THE CONTEXT OF THE NEED FOR SUSTAINABLE MOBILITY <b>Authors:</b> Sorin Mihailescu and Gabriel Praporgescu
<b>10.</b>	<b>12<sup>45</sup> – 13<sup>00</sup></b>	<b>PAPER 10</b> AIR QUALITY ANALYSIS FOR A METROPOLITAN AREA IN ROMANIA DURING THE FIRST HALF OF 2021 <b>Authors:</b> Clementina Sabina Moldovan, Liana Simona Sbirna and Sebastian Sbirna
<b>13<sup>00</sup> – 14<sup>00</sup></b>		Lunch Break

## Morning Session 2, 10<sup>30</sup> – 13<sup>00</sup>

**Zoom Meeting ID:** 922 5316 0968

**Passcode:** session2M

**Access Link:** <https://zoom.us/j/92253160968?pwd=dnU4d0VWcUFkM2xPS2hXczcxeUczUT09>

\*Participants must connect to the Meeting Room between 10<sup>00</sup> and 10<sup>30</sup>

**Session Chairman:**

**Zoom Session Host:**

1.	10 <sup>30</sup> – 10 <sup>45</sup>	<p><b>PAPER 1</b> EVALUATION OF EQUIPMENT USED IN EX ATMOSPHERES - INTERDISCIPLINARY FIELD <b>Authors:</b> Sorin Burian, Danut Grecea and Gabriela Pupazan</p>
2.	10 <sup>45</sup> – 11 <sup>00</sup>	<p><b>PAPER 2</b> USING FPGA RECONFIGURABLE INTEGRATED CIRCUITS FOR MONITORING, CONTROLLING AND MANAGING INDUSTRIAL PROCESSES IN POTENTIALLY EXPLOSIVE ATMOSPHERES <b>Authors:</b> Cosmin Ioan Colda, Gheorghe Marc, Sorin Burian and Marius Darie</p>
3.	11 <sup>00</sup> – 11 <sup>15</sup>	<p><b>PAPER 3</b> ON THE ESTIMATION OF MAXIMUM SURFACE TEMPERATURE FOR CELLS <b>Authors:</b> Marius Darie, Tiberiu Csaszar, Adriana Andris and Ioana Ciobanu</p>
4.	11 <sup>15</sup> – 11 <sup>30</sup>	<p><b>PAPER 4</b> EXPLOSION PREVENTION AND MITIGATION IN PLANTS WHICH PROCESS, GENERATE AND STORE COMBUSTIBLE DUSTS <b>Authors:</b> Adrian Marius Jurca, Mihaela Paraian and Niculina Vatavu</p>
5.	11 <sup>30</sup> – 11 <sup>45</sup>	<p><b>PAPER 5</b> CONSIDERATIONS REGARDING EX D IIB + H2 METHOD OF PROTECTION FOR FLAMEPROOF ELECTRICAL EQUIPMENT <b>Authors:</b> Mihai Magyari, Lucian Moldovan and Marcel Rad</p>
6.	11 <sup>45</sup> – 12 <sup>00</sup>	<p><b>PAPER 6</b> SPECIFIC ASPECTS ON THE ADEQUATE SELECTION OF ELECTRIC EQUIPMENT INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES <b>Authors:</b> Lucian Moldovan, Mihai Magyari, Dragos Fotau and Clementina Sabina Moldovan</p>
7.	12 <sup>00</sup> – 12 <sup>15</sup>	<p><b>PAPER 7</b> MODULAR AUTOMATION CABINET FOR PROACTIVE MONITORING IN ATEX ZONE 2 <b>Authors:</b> Cristian Nechifor, Claudia Borzea, Adrian Stoicescu, Daniel Lale and Mirela Vasile</p>
8.	12 <sup>15</sup> – 12 <sup>30</sup>	<p><b>PAPER 8</b> APPLICATION OF FLAMMABILITY TESTING METHODS FOR CONVEYOR BELTS INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES IN ORDER TO SELECT SUITABLE TYPES FOR FIELD APPLICATION <b>Authors:</b> Florin Adrian Paun and Dan Gabor</p>
9.	12 <sup>30</sup> – 12 <sup>45</sup>	<p><b>PAPER 9</b> PRESSURIZED HOUSINGS, STANDARDIZING POSSIBILITIES, OPPORTUNITIES AND DIFFICULTIES <b>Authors:</b> Gabriela Pupazan, Cosmin Colda, Tiberiu Csaszar, Adriana Andris and Danut Grecea</p>
10.	12 <sup>45</sup> – 13 <sup>00</sup>	<p><b>PAPER 10</b> STUDY ON NITROGEN BARRIER PROTECTION OF AN AIREND OIL-FREE COMPRESSOR BEARINGS IN H2 COMPRESSION <b>Authors:</b> Iulian Vladuca, Emilia Georgiana Prisacariu, Cosmin Petru Suci, Cristian Dobromirescu and Razvan Edmond Nicoara</p>

13<sup>00</sup> – 14<sup>00</sup>

Lunch Break

## Morning Session 3, 10<sup>30</sup> – 13<sup>00</sup>

**Zoom Meeting ID:** 963 9946 8407

**Passcode:** session3M

**Access Link:** <https://zoom.us/j/96399468407?pwd=bkplcmRCMXBuQjNodHRGWmNOMXVhdz09>

\*Participants must connect to the Meeting Room between 10<sup>00</sup> and 10<sup>30</sup>

**Session Chairman:**

**Zoom Session Host:**

1.	10 <sup>30</sup> – 10 <sup>45</sup>	<p><b>PAPER 1</b> ANALYSIS OF THE USE OF TRANSFORMABLE ELEMENTS IN INTELLIGENT TUNNEL VENTILATION SYSTEMS <b>Authors:</b> Omar Lanchava, Nicolae Ilias, Sorin Mihai Radu, Giorgi Nozadze and David Tsanova</p>
2.	10 <sup>45</sup> – 11 <sup>00</sup>	<p><b>PAPER 2</b> IMPLEMENTATION OF THE ROMANIAN MINING STRATEGY 2017-2035, WITH SPECIAL REGARD TO PIT COAL: FAILURE OR ABANDONMENT? <b>Authors:</b> Liliana Roman and Mircea Georgescu</p>
3.	11 <sup>00</sup> – 11 <sup>15</sup>	<p><b>PAPER 3</b> RESTRUCTURING OF COAL MINING IN ROMANIA BETWEEN THE CLIMATE CRISIS AND THE ENERGY TRANSITION <b>Authors:</b> Cristian Tomescu, Doru Cioclea, Cornel Boanta and Marius Morar</p>
4.	11 <sup>15</sup> – 11 <sup>30</sup>	<p><b>PAPER 4</b> SOCIAL IMPACT ASSESSMENT IN THE MINING INDUSTRY <b>Authors:</b> Ciprian Trocan, Marian Mocan, Ben-Oni Ardelean, Larisa Ivascu and Sergiu Sandru</p>
5.	11 <sup>30</sup> – 11 <sup>45</sup>	<p><b>PAPER 5</b> MODELLING OF METHANE DISTRIBUTION PROCESS IN MINESHAFTS WITH REGARD TO IMPACT OF THERMAL DROPS OF VENTILATION PRESSURE <b>Authors:</b> Aleksandr Nikolaev, Petr Maksimov, Danil Konotop and Stefan Vöth</p>
6.	11 <sup>45</sup> – 12 <sup>00</sup>	<p><b>PAPER 6</b> THEORETIC AND EXPERIMENTAL RESEARCH ON THE POSSIBILITIES FOR MODERNING AND REABILITATING THE EXTRACTION INSTALLATION OF THE SLANIC PRAHOVA SALT MINE <b>Authors:</b> Daniel Cosmin Vitan, Daniel Ion Matei, Ionela Cristina Lapadus (Macesaru) and Ionela (Dajic) Grecea</p>
7.	12 <sup>00</sup> – 12 <sup>15</sup>	<p><b>PAPER 7</b> METHANE EMISSIONS FROM THE MINES BELONGING TO THE HUNEDOARA ENERGY COMPLEX <b>Authors:</b> Emeric Chiuzan, Razvan Dragoescu, Nicolae Ianc, Adrian Matei and Alexandru Camarasescu</p>
8.	12 <sup>15</sup> – 12 <sup>30</sup>	<p><b>PAPER 8</b> INFLUENCE OF AMBIENT TEMPERATURE ON THE EFFICIENCY OF UNDERGROUND SPOT COOLING SYSTEM <b>Authors:</b> Ion Dosa, Sorina Anutoiu, Dan Codrut Petrilean and Gheorghe Urdea</p>
9.	12 <sup>30</sup> – 12 <sup>45</sup>	<p><b>PAPER 9</b> SPEED DISTRIBUTION IN THE EXHAUST DIFFUSER OF THE AIR FAN <b>Authors:</b> Ion Gherghe, Doru Cioclea, Florin Radoi, Emeric Chiuzan and Razvan Dragoescu</p>
10.	12 <sup>45</sup> – 13 <sup>00</sup>	<p><b>PAPER 10</b> CLASSIFICATION OF UNDERGROUND MINING WORKS WITHIN THE TG. OCNA SALT MINE FROM THE POINT OF VIEW OF GAS EMISSIONS <b>Authors:</b> Adrian Matei and Nicolae Ianc</p>

13<sup>00</sup> – 14<sup>00</sup>

Lunch Break

## Morning Session 4, 10<sup>30</sup> – 13<sup>00</sup>

**Zoom Meeting ID:** 952 3718 9363

**Passcode:** session4M

**Access Link:** <https://zoom.us/j/95237189363?pwd=TWtZQzVyN0ZSNVBURVZCa1gyVitOdz09>

\*Participants must connect to the Meeting Room between 10<sup>00</sup> and 10<sup>30</sup>

**Session Chairman:**

**Zoom Session Host:**

1.	10 <sup>30</sup> – 10 <sup>45</sup>	<p><b>PAPER 1</b> OCCUPATIONAL SAFETY ISSUES RELATED TO COMPUTER EQUIPMENT INSTALLATION, MAINTENANCE AND USE <b>Authors:</b> Daniel Onut Badea, Doru Costin Darabont, Dominic Bucerzan, Alina Trifu, Eduard Smidu, Eugenia Bulboaca and Vergilica Haralambie</p>
2.	10 <sup>45</sup> – 11 <sup>00</sup>	<p><b>PAPER 2</b> QUANTITATIVE RISK ASSESSMENT AND SAFETY DATABASES IN ROMANIAN COAL MINING: PRELIMINARY SYSTEMATIC APPROACH <b>Authors:</b> Victor-Gabriel Vasilescu, Roland Iosif Moraru and Gabriel Bujor Babut</p>
3.	11 <sup>00</sup> – 11 <sup>15</sup>	<p><b>PAPER 3</b> PREVENTION ACTIVITIES IN SHIP LOADING AND UNLOADING OPERATIONS <b>Authors:</b> Daniel Nicu Freitag, Mihai Popescu-Stelea, Roland Iosif Moraru and Gabriel Bujor Babut</p>
4.	11 <sup>15</sup> – 11 <sup>30</sup>	<p><b>PAPER 4</b> OCCUPATIONAL RISK MANAGEMENT OF EQUIPMENT INTENDED FOR CHARGING ELECTRIC VEHICLES <b>Authors:</b> Georgeta Buica, Anca Elena Antonov, Constantin Beiu, Dragos Pasculescu and Remus Dobra</p>
5.	11 <sup>30</sup> – 11 <sup>45</sup>	<p><b>PAPER 5</b> PRINCIPLES FOR DESIGNING A COMPUTER APPLICATION SPECIFIC TO EXPLOSION RISK MANAGEMENT IN EXPLOSIVE DEPOSITS <b>Authors:</b> Florin Ionel Burdea and Monica Crinela Burdea</p>
6.	11 <sup>45</sup> – 12 <sup>00</sup>	<p><b>PAPER 6</b> ASSESSMENT OF EXPLOSION RISK FOR WOOD DUST IN A VENTILATION-DUST SEPARATION INSTALLATION, BY DETERMINING THE CONCENTRATION OF TOTAL DUST IN SUSPENSION INSIDE OF THE INSTALLATION <b>Authors:</b> Marius Kovacs, Lorand Toth and Sorin Simion</p>
7.	12 <sup>00</sup> – 12 <sup>15</sup>	<p><b>PAPER 7</b> STRESS AND PSYCHOLOGICAL RESILIENCE IN INTERVENTION AND RESCUE ACTIVITIES <b>Authors:</b> Izabella Kovacs, Andrei-Lucian Gireada, Lorand Toth and Sorin Simion</p>
8.	12 <sup>15</sup> – 12 <sup>30</sup>	<p><b>PAPER 8</b> RESIDENTIAL SECURITY THROUGH THE HOME ASSISTANT PLATFORM <b>Authors:</b> Laurentiu Munteanu, Marius Cornel Suvar and Gheorghe Daniel Florea</p>
9.	12 <sup>30</sup> – 12 <sup>45</sup>	<p><b>PAPER 9</b> DISCHARGE AND ATMOSPHERIC DISPERSION MODELLING IN CASE OF HAZARDOUS MATERIAL RELEASES <b>Authors:</b> Vlad Mihai Pasculescu, Emilian Ghicioi, Ligia Ioana Tuhut, Adrian Bogdan Simon-Marinica and Dragos Pasculescu</p>
10.	12 <sup>45</sup> – 13 <sup>00</sup>	<p><b>PAPER 10</b> ASPECTS REGARDING THE EXPLOSION RISK ASSESSMENT OF INSTALLATIONS IN ATMOSPHERES WITH COMBUSTIBLE DUST <b>Authors:</b> Catalin Mihai Popa, Florin Adrian Paun and Dan Sorin Gabor</p>

13<sup>00</sup> – 14<sup>00</sup>

Lunch Break

# Afternoon Parallel Sessions

Afternoon Session 1, 14 <sup>00</sup> – 16 <sup>15</sup>		
<b>Zoom Meeting ID:</b> 998 7171 2065 <b>Passcode:</b> session1A <b>Access Link:</b> <a href="https://zoom.us/j/99871712065?pwd=RFIBQ3J5cGM5bG1BSXYzdFNFdUcydz09">https://zoom.us/j/99871712065?pwd=RFIBQ3J5cGM5bG1BSXYzdFNFdUcydz09</a>		
*Participants must connect to the Meeting Room between 13 <sup>00</sup> and 14 <sup>00</sup>		
<b>Session Chairman:</b> <b>Zoom Session Host:</b>		
1.	14 <sup>00</sup> – 14 <sup>15</sup>	<b>PAPER 1</b> THEORETICAL AND EXPERIMENTAL ANALYSIS ON ENVIRONMENTAL POLLUTION WITH EXHAUST GASES AT THE MECHANICAL DISLOCATION OF ROCKS, LOCATED IN A PROTECTED NATURE ENVIRONMENT <b>Authors:</b> Marin Silviu Nan, Daniel Cosmin Vitan, Sorina Daniela Anotoiu and Cristian Aron
2.	14 <sup>15</sup> – 14 <sup>30</sup>	<b>PAPER 2</b> RESEARCH ON POSSIBILITIES FOR MONITORING STABILITY OF ADJACENT SLOPES TO TRANSPORT ROUTES <b>Authors:</b> Aurelian Nicola, Marin Silviu Nan, Adrian Schiopu, Ionela Grecea and Daniel Matei
3.	14 <sup>30</sup> – 14 <sup>45</sup>	<b>PAPER 3</b> <b>Industrial area environmental monitoring based on transducers with MODBUS communication</b> <b>Authors:</b> Nicolae Patrascoiu and Cosmin Rus
4.	14 <sup>45</sup> – 15 <sup>00</sup>	<b>PAPER 4</b> AGRO-TOURISM STRUCTURES, SARS-COV-2: THE ROLE OF WATER <b>Authors:</b> Marco Schiavon, Ramona Giurea, Gabriela Ionescu, Elena Magaril and Elena Cristina Rada
5.	15 <sup>00</sup> – 15 <sup>15</sup>	<b>PAPER 5</b> ENVIRONMENTAL AND ECOTOXICOLOGICAL RISK ASSESSMENT OF POLLUTION WITH LIGHT CRUDE OIL FOR AN OIL EXPLOITATION FIELD <b>Authors:</b> Alexandru Florin Simion, Angelica Nicoleta Gaman, George Artur Gaman, Ionut Dragoi and Catalina Ghita
6.	15 <sup>15</sup> – 15 <sup>30</sup>	<b>PAPER 6</b> RESEARCH ON THE NEGATIVE EFFECTS OF THE "VALEA ARSULUI" TAILINGS DUMPS ON THE ENVIRONMENT <b>Authors:</b> Alexandra (Soica) Stanimirescu, Angela Egri, Florin Flavius Soica and Mirela Ancuta Radu
7.	15 <sup>30</sup> – 15 <sup>45</sup>	<b>PAPER 7</b> ASPECTS OF ENERGY EFFICIENCY IN MODERN ELECTRICAL INSTALLATIONS <b>Authors:</b> Maria Daniela Stochitoiu and Ilie Utu
8.	15 <sup>45</sup> – 16 <sup>00</sup>	<b>PAPER 8</b> DETERMINATION OF THE RADON CONCENTRATION IN HOMES DEPENDING ON THE INSULATION USED FOR THE FLOOR <b>Authors:</b> Andreea Cristina Tataru, Dorin Tataru and Aurora Stanci
9.	16 <sup>00</sup> – 16 <sup>15</sup>	<b>PAPER 9</b> A REVIEW OF THE IMPACT OF MINING OPERATIONS ON SUSTAINABLE DEVELOPMENT <b>Authors:</b> Ciprian Trocan, Marian Mocan, Lucian-Ionel Cioca, Larisa Ivascu and Rebeca Ardelean



## Afternoon Session 2, 14<sup>00</sup> – 16<sup>15</sup>

**Zoom Meeting ID:** 919 2551 7051

**Passcode:** session2A

**Access Link:** <https://zoom.us/j/91925517051?pwd=ZUpVVEVUcE9UUVldFanVYZzVDVbWYxZz09>

\*Participants must connect to the Meeting Room between 13<sup>00</sup> and 14<sup>00</sup>

**Session Chairman:**

**Zoom Session Host:**

1.	14 <sup>00</sup> – 14 <sup>15</sup>	<p><b>PAPER 1</b> CONSIDERATIONS REGARDING TEST METHODS AGAINST DUST AND WATER INGRESS PROTECTION FOR EX EQUIPMENT <b>Authors:</b> Niculina Vatavu, Mihaela Paraian, Sorin Vatavu and Mihai Popa</p>
2.	14 <sup>15</sup> – 14 <sup>30</sup>	<p><b>PAPER 2</b> CONSIDERATIONS REGARDING THE CHOICE OF CABLE GLANDS FOR ELECTRICAL EQUIPMENT USED IN POTENTIALLY EXPLOSIVE ATMOSPHERES <b>Authors:</b> Marcel Daniel Rad, Dragos Fotau, Diana Salasan and Sorin Zsido</p>
3.	14 <sup>30</sup> – 14 <sup>45</sup>	<p><b>PAPER 3</b> COMPUTERIZED SIMULATIONS IN THE VULCAN MINE VENTILATION NETWORK <b>Authors:</b> Corneliu Boanta and Cristian Tomescu</p>
4.	14 <sup>45</sup> – 15 <sup>00</sup>	<p><b>PAPER 4</b> CAREER ORIENTATION, DEVELOPMENT AND EVOLUTION BASED ON PERSONAL SKILLS AND APTITUDES <b>Authors:</b> Bianca Alina Buta</p>
5.	15 <sup>00</sup> – 15 <sup>15</sup>	<p><b>PAPER 5</b> APPLYING THE PRISMA METHOD FOR OBTAINING SYSTEMATIC REVIEWS OF OCCUPATIONAL SAFETY ISSUES IN LITERATURE SEARCH <b>Authors:</b> Alina Trifu, Eduard Smidu, Daniel Onut Badea, Eugenia Bulboaca and Vergilica Haralambie</p>
6.	15 <sup>15</sup> – 15 <sup>30</sup>	<p><b>PAPER 6</b> RESEARCH ON LABOR CONSUMPTION AND RESCUERS' PHYSIOLOGICAL PARAMETERS PROGRESS IN THE CASE OF PRACTICAL TRAINING IN A MOBILE TRAINING FACILITY <b>Authors:</b> Cristian Nicolescu, George Artur Gaman, Daniel Pupazan and Cosmin Ilie</p>
7.	15 <sup>30</sup> – 15 <sup>45</sup>	<p><b>PAPER 7</b> RESEARCH ON RESCUERS' TRAINING PROCESS IN TOXIC / EXPLOSIVE / FLAMMABLE ENVIRONMENTS <b>Authors:</b> Andrei-Lucian Gireada, Cosmin Ilie and Alin Irimia</p>
8.	15 <sup>45</sup> – 16 <sup>00</sup>	<p><b>PAPER 8</b> RESEARCH ON THE USE OF VIRTUAL REALITY IN INTERVENTION AND RESCUE ACTIVITIES <b>Authors:</b> Alin Irimia, George Artur Gaman, Emilian Ghicioi, Daniel Pupazan and Cristian Nicolescu</p>
9.	16 <sup>00</sup> – 16 <sup>15</sup>	<p><b>PAPER 9</b> THE ROLE OF NUMERICAL MODELING IN SCIENTIFIC FIRE INVESTIGATION <b>Authors:</b> Marius Cornel Suvar, Laurentiu Munteanu and Zoltan Vass</p>

## Afternoon Session 3, 14<sup>00</sup> – 16<sup>15</sup>

**Zoom Meeting ID:** 972 9911 0063

**Passcode:** session3A

**Access Link:** <https://zoom.us/j/97299110063?pwd=NUxsd0MwMTBrdCtOUm14VmNtRVZpdz09>

\*Participants must connect to the Meeting Room between 13<sup>00</sup> and 14<sup>00</sup>

**Session Chairman:**

**Zoom Session Host:**

1.	14 <sup>00</sup> – 14 <sup>15</sup>	<p><b>PAPER 1</b> BACKGROUND-ORIENTED SCHLIEREN TECHNIQUE IN EXPERIMENTAL RESEARCH REGARDING THE EFFECT OF EXPLOSION PRESSURE <b>Authors:</b> Adrian Bogdan Simon-Marinica, Emilian Ghicioi, Nicolae-Ioan Vlasin, Florin Manea and Dorin Popescu</p>
2.	14 <sup>15</sup> – 14 <sup>30</sup>	<p><b>PAPER 2</b> EXPERIMENTAL POSSIBILITIES FOR INDUSTRIAL VENTILATION <b>Authors:</b> Florin Radoi, Ion Gherghe and Alexandru Camarasescu</p>
3.	14 <sup>30</sup> – 14 <sup>45</sup>	<p><b>PAPER 3</b> BEST PRACTICES IN THE FIELD OF SPECIFIC RISK EVALUATION OF PYROTECHNIC ENTERTAINMENT ARTICLES SUBJECT TO LEGAL AND ILLEGAL MARKET SURVEILLANCE <b>Authors:</b> Bogdan Garaliu-Busoi, Daniela Carmen Rus, Claudia Miron, Olga Miclea and Dan Pintilie</p>
4.	14 <sup>45</sup> – 15 <sup>00</sup>	<p><b>PAPER 4</b> CONSTRUCTION AND SAFETY ASPECTS FOR THE ARRANGEMENT OF MOBILE EXPLOSIVE DEPOSITS <b>Authors:</b> Robert Laszlo, Stefan Ilici, Aurelian Nicola, Stefan Usurelu and Ionut Zamblau</p>
5.	15 <sup>00</sup> – 15 <sup>15</sup>	<p><b>PAPER 5</b> GENERALIZED GRAPHIC-ANALYTICAL MODEL FOR EVALUATION OF THE FATALITY / STRUCTURAL COLLAPSE PRODUCTION MECHANISM ON A BUILDING AFFECTED BY AN EXPLOSION <b>Authors:</b> Gabriel Vasilescu, Attila Kovacs, Ciprian Jitea, Doru Anghelache and Florian Stoian</p>
6.	15 <sup>15</sup> – 15 <sup>30</sup>	<p><b>PAPER 6</b> TECHNICAL – ORGANIZATIONAL MEASURES FOR CLASSIFYING PYROTECHNIC ARTICLES <b>Authors:</b> Cristian Raul Cioara, Marius Simion Morar and Andrada Denisa Babut</p>
7.	15 <sup>30</sup> – 15 <sup>45</sup>	<p><b>PAPER 7</b> DETERMINATION OF NON-HAZARDOUS AREAS IN TERMS OF SEISMIC EFFECT FOR THE USE OF EXPLOSIVES IN THE OPEN PIT IN SAFE CONDITIONS <b>Authors:</b> Edward Gheorghiosu, Daniela Rus, Stefan Ilici and Sorin Mihai</p>
8.	15 <sup>45</sup> – 16 <sup>00</sup>	<p><b>PAPER 8</b> TECHNICAL SOLUTIONS FOR THE EVALUATION OF THE EFFECT OF EXPLOSION PRESSURE WHEN DETONING VARIOUS EXPLOSIVE LOADS IN VIEW OF INCREASING THE DEGREE OF SOCIETAL SECURITY <b>Authors:</b> Ilie-Ciprian Jitea, Robert Laszlo, Olga Miclea, Anton Darsy and Claudiu Popescu</p>
9.	16 <sup>00</sup> – 16 <sup>15</sup>	<p><b>PAPER 9</b> EVALUATION OF THE MECHANICAL RESISTANCE OF RHEOPHORES OF THE MEANS OF INITIATION FOR EXPLOSIVE'S MATERIALS, ON THE BASIS OF THE RESISTANCE TO ABRASION DETERMINED WITH THE OPVA 10 SPECIALIZED EQUIPMENT <b>Authors:</b> Cristian Radeanu, Gabriel Vasilescu, Claudia Miron, Florin Vedinas and Ladislau Radermacher</p>

## Afternoon Session 4, 14<sup>00</sup> – 16<sup>15</sup>

**Zoom Meeting ID:** 936 1822 9438

**Passcode:** session4A

**Access Link:** <https://zoom.us/j/93618229438?pwd=Y0dVU2k1Y2djcjFjNHpBcDRWSFhZZz09>

\*Participants must connect to the Meeting Room between 13<sup>00</sup> and 14<sup>00</sup>

**Session Chairman:**

**Zoom Session Host:**

1.	14 <sup>00</sup> – 14 <sup>15</sup>	<p><b>PAPER 1</b> THE ADVANTAGE OF MODERN PROGRESS ON OCCUPATIONAL SAFETY AND HEALTH WITH THE HELP OF ONLINE APPLICATIONS/PLATFORMS <b>Authors:</b> Andrada Denisa Babut, Cristian Raul Cioara and Daniel Florea</p>
2.	14 <sup>15</sup> – 14 <sup>30</sup>	<p><b>PAPER 2</b> SELF-IGNITION TEMPERATURE OF THE DUST ACCUMULATIONS FOR SUNFLOWER AND WOOD POWDERS <b>Authors:</b> Maria Prodan, Andrei Szolosi-Mota, Vasilica Irina Nalboc, Niculina Sonia Suvar and Adrian Jurca</p>
3.	14 <sup>30</sup> – 14 <sup>45</sup>	<p><b>PAPER 3</b> PERCEIVED RISK FACTORS IN THE PROCESS OF CLOSURE AND GREENING OF THE LUPENI MINING OPERATION FOR THE MINER WORKPLACE <b>Authors:</b> Manuel Cristian Savulescu, Andreea Cristina Tataru, Aurora Stanci, Dorin Tataru and Sorin Mihai Radu</p>
4.	14 <sup>45</sup> – 15 <sup>00</sup>	<p><b>PAPER 4</b> DETERMINATION OF FLAMMABILITY PARAMETERS FOR ORGANIC WASTE RESULTING FROM THE PROCESSING OF SUNFLOWER SEEDS <b>Authors:</b> Andrei Szollosi-Mota, Maria Prodan, Vasilica Irina Nalboc and Niculina Sonia Suvar</p>
5.	15 <sup>00</sup> – 15 <sup>15</sup>	<p><b>PAPER 5</b> A CASE STUDY ON USING THE FDS TOOL FOR ON-SITE FIRE INVESTIGATION <b>Authors:</b> Ligia Ioana Tuhut, Vlad Mihai Pasculescu, Nicolae Ioan Vlasin and Florin Manea</p>
6.	15 <sup>15</sup> – 15 <sup>30</sup>	<p><b>PAPER 6</b> DIGITAL HUMAN FACTOR MANAGEMENT <b>Authors:</b> Yuriy Ivanov, Alexey Voroshilov, Nikolay Novikov and Konstantin Todradze</p>
7.	15 <sup>30</sup> – 15 <sup>45</sup>	<p><b>PAPER 7</b> A NEW PERSPECTIVE ON MUSCULOSKELETAL DISORDERS – EMERGING ERGONOMIC RISKS IN THE EUROPEAN UNION AND ROMANIA <b>Authors:</b> Maria Elena Boatca, Alexandra Coroian and Anca Draghici</p>
8.	15 <sup>45</sup> – 16 <sup>00</sup>	<p><b>PAPER 8</b> INVESTIGATING THE RELATIONSHIP BETWEEN JOB SATISFACTION, COMMUNICATION STYLE, EMPLOYEE BEHAVIOR IN CONFLICT SITUATIONS <b>Authors:</b> Gabriela Caldarescu, Laura Florea, Nicoleta Monica Lohan and Mihai-Adrian Bernevig</p>
9.	16 <sup>00</sup> – 16 <sup>15</sup>	<p><b>PAPER 9</b> THE ROLE OF COGNITIVE FUNCTIONS IN THE DYNAMICS OF WORK ACCIDENTS <b>Authors:</b> Daniel George Tanasievici, Gabriela Caldarescu, Constantin Baciu and Elena Matcovschi</p>