# MINISTERUL EDUCAȚIEI NATIONALE / MINISTRY OF NATIONAL EDUCATION UNIVERSITATEA DIN PETROȘANI SI INCD-I.N.S.E.M.E.X. Petroșani UNIVERSITY OF PETROSANI AND INCD-I.N.S.E.M.E.X. Petroșani



# SIMPOZION ŞTIINŢIFIC INTERNAŢIONAL MULTIDISCIPLINAR INTERNATIONAL MULTIDISCIPLINARY SCIENTIFIC SYMPOSIUM

### "UNIVERSITARIA SIMPRO 2014"

## **PROGRAM**

SUB EGIDA/ UNDER THE AUSPICES OF:

Academia de științe tehnice din România/ Academy of Technical Sciences of Romania Asociația generală a inginerilor din România/ General Association of engineers in Romania

IN PARTENERIAT CU/ IN PARTNERSHIP WITH:

Consiliul Judetean Hunedoara/ Hunedoara County Council,
Primaria Municipiului Petrosani/Town Hall of the Municipality of Petrosani,
Primaria Municipiului Vulcan / Town Hall of the Municipality Vulcan,
Primaria Orasului Petrila / Town Hall of Petrila,
Carpatcement Holding S.A.,

Complexul Energetic Oltenia/ Oltenia Energy Complex, Complexul Energetic Hunedoara / Hunedoara Energy Complex, MAXAM Romania,

Rosia Montana Gold Corporation Alba Iulia, S.C. Deva Gold,

Societatea Nationala a Carbunelui Ploiesti /National Coal Company in Ploiesti, Asociația Absolvenților Universității din Petroșani, ALUMNI / ALUMNI Association of the University of Petrosani

10-11 OCTOBER, 2014

**PETROŞANI** 

## **PARTENERI**













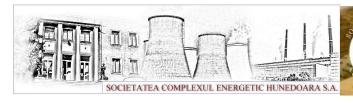






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### **SIMPRO 2014 Symposium Programme**

#### **OPENING CEREMONY**

Aula Hall, Building A, date 10.10.2014, hours 10:00 - 10:30

Coffee break Aula Hall, Building A hours 10:30-11:00

#### INVITED SPEAKERS

Aula Hall, Building A, date 10.10.2014, hours 11:00 - 13:30

1. A NEW TESTING METHOD FOR DETERMINATION OF UNCOFINED COMPRESSIVE STRENGTH (UCS): CORE STRANGLE TEST (CST),

Prof. Dr. Isik Yilmaz, Cumhuriyet University, Sivas, Turkey

2. IMPLEMENTATION OF REAL TIME GEOTECHNICAL MONITORING AT AN OPEN PIT MOUNTAIN COAL MINE IN WESTERN CANADA.

Brian Klappstein, M.Sc., PGeo., Manager of Long Range Planning at GCC, Canada, Gheorghe Bonci, PhD, PEng. \*Faculty at British Columbia, Institute of Technology, Canada, Wayne Maston, PEng., Production Engineer Surface, Grande Cache Coal LP, AB, Canada

3. LASER SCANNING TECHNOLOGY. Applications to the Mining Industry,

Carrie Davidson & Carles Xandri, KRJA Systems Ltd trading as Maptek, UK

4. MANAGEMENT BY VALUES (MBV) CONDITIONS IN MINING INDUSTRY,

**Jan Kudełko<sup>1,</sup> Agata Juzyk<sup>2</sup>**, **Leszek Zaremba<sup>3</sup>,** <sup>1</sup>KGHM Cuprum Ltd Research and Development Centre, <sup>2</sup>KGHM Polska Miedź S.A, <sup>3</sup> KGHM Cuprum Ltd Research and Development Centre

5. POLISH MINING INDUSTRY TODAY,

Prof. D.Sc Monika Hardigora, Ph. D, Wroclaw University of Technology, Wroclaw, President of KGHM CUPRUM Ltd. R&D Centre, Wroclaw, Poland

6. MUCK CLASSIFICATION: RAW MATERIAL OR WASTE IN TUNNELLING OPERATION,

Dr. C.Oggeri\*, T.M. Fenoglio\*, R.Vinai\*\*; \*DIATI Politecnico of Torino, Italy; \*\*Queen's University, Belfast, Northern Ireland

### **SESSIONS PROGRAM**

# 1. SAFETY AND ENVIRONMENT ENGINEERING 1.1 ENVIRONMENT ENGINEERING

Location: Lab Ecopedologie, Bilding C, date 10.10.2014, hours 14:30 - 17:30...

Chairman: Prof. Mircea Georgescu, Prof. Ildiko Tulbure

Chairr	nan: Prof. Mircea Georgescu, Prof. Ildiko Tulbure
No.	Paper / Authors / Affiliation
1	USING POTENTIAL OF BIOTECHNOLOGIES FOR ENVIRONMENTAL PROTECTION Ildiko Tulbure, University "1 December 1918", Alba Iulia, Romania
2	ASPECTS REGARDING MONITORING OF AIR POLLUTANTS EMISSIONS Angelica Călămar, George Artur Găman, Kovacs Marius, Toth Lorand, INCD INSEMEX Petrosani, Romania
3	STUDY OF SO <sub>2</sub> EMISSIONS RESULTED FROM COMBUSTION OF JIU VALLEY COAL Liana Simona Sbirna*, Clementina Sabina Moldovan **, *University of Craiova,** University of Petrosani, Romania
4	ROLE OF JIU VALLEY HARD COAL DEPOSITS BETWEEN EASTERN AND WESTERN EUROPEAN ENERGETIC CONSTRAINTS Grigore Buia, Csaba Lorint, Ciprian Nimară, Radu Lupuleac, University of Petrosani, Romania
5	DEVELOPMENT AND IMPLEMENTATION OF WATER AND SOIL SAMPLING, ASSAYING AND ASSESSMENT PROCEDURES MEANT TO DETERMINE THE HUMAN IMPACT ON THE ENVIRONMENT  Marius Kovacs, Gheție Gheorghe, Toth Lorand, Călămar Angelica, INCD INSEMEX Petrosani, Romania
6	ANTHROPIC IMPACTS ON THE ENVIRONMENTAL FACTORS AND ITS REDUCTION MEASURES WITHIN THE OLTET MINING PERIMETER Ioan Dumitrescu, Ciprian Nimară, University of Petrosani, Romania
7	ANALYSIS OF THE MEASURES FOR NO <sub>x</sub> EMISSIONS REDUCTION RESULTING FROM FOSSIL FUELS BURNING AT DEVA THERMAL POWER PLANT FOR COMPLIANCE WITH THE EU ENVIRONMENTAL STANDARDS Gheorghe Laurentiu Dobrei, University of Petroşani, Romania
8	CALCULATION MODEL OF THE ALTITUDE MODIFICATION AS A RESPONSE OF THE GEOMORPHOLOGIC SYSTEM FOLLOWING ANTHROPOGENIC ACTIVITIES OF MINERAL RESOURCES EXPLOITATION  Grigore Buia, Ciprian Nimară, University of Petroșani, Romania
9	INDICATORS OF SUSTAINABLE DEVELOPMET IN MINING Alina Adela Davidoiu, University of Petroșani, Romania
10	DESIGN OF CENTRIFUGAL HYDRAULIC CLASSIFIERS BASED ON HYDRODYNAMIC SIMILITUDE Catalin Vranceanu, Romulus Sârbu, University of Petroşani, Romania
11	<b>DETERMINING THE AVALANCHE RISK INTO THE PARANG MOUNTAIN Roxana Herbei*,</b> Aronel Matei*, Mihai Herbei**, *University of Petroşani, **Banat University of Agriculture Sciences and Veterinary Medicine Timisoara, Romania
12	RISK ASSESSMENT POLLUTION AND ECOTOXICOLOGICAL EFFECTS IN SITES ABANDONED MINING INDUSTRY IN ROMANIA  Dunca Emilia, University of Petroşani, Romania
13	THE HUMAN FACTOR INFLUENCE ON THE ECOSYSTEM OF BATS  Daniela Ionela Ciolea, Emilia Cornelia Dunca, University of Petrosani, Romania
14	NOISE ATTENUATION DUE TO PROPAGATION ENVIRONMENT PRODUCED BY MINING BAND CONVEYORS FROM OPEN PIT Aurora Stanci, Andreea Cristina Stanci, Dorin Tataru, University of Petroşani, Romania

### 1.2 OCUPATION HEALTH AND SALFY

Location: A7, Bilding A, date 10.10.2014, hour 14:00 - 16:00...

Chairman: Assoc. Prof. Iosif Moraru Roland, Dr. ing Emilian Ghicioi

Chairn	nan: Assoc. Prof. Iosif Moraru Roland, Dr. ing Emilian Ghicioi
	ASSESSING RISK IN RAIL TRANSPORT AND ADMINISTRATION OF NON-
1	INTEROPERABLE RAILWAY INFRASTRUCTURES WITHIN S.C. GRUP TRANSPORT
1	FEROVIAR S.A
	Roland Iosif Moraru, Mihai Popescu-Stelea, University of Petrosani, Romania
	INCREASING THE SECURITY ON PERFORMING BLASTING IN OPEN-CAST MINING,
	WITH THE ENSURANCE OF SEISMIC PROTECTION TO THE INDUSTRIAL / CIVIL
2	OBJECTIVES SITUATED IN THEIR VICINITY
	Gabriel Vasilescu, Emilian Ghicioi, Attila Kovacs, Edward Gheorghiosu, Stefan Ilici Ilie-Ciprian Jitea,
	Sorin Bordos, INCD INSEMEX Petroşani, Romania
	EXPERIMENTAL RESULTS FOR INTERNAL RESISTANCE VARIABILITY OF TESTING
3	APPARATUS FOR LOW CURRENT CIRCUITS IN EXPLOSIVE ATMOSPHERES
	Marius Darie, Sorin Burian, Jeana Ionescu, Tiberiu Csaszar, Lucian Moldovan, Cosmin Colda,
	Adriana Andriş, <i>INCD INSEMEX Petroşani, Romania</i> ENSURING THE SAFETY AND PRESERVATION OF THE HEALTH OF THE WORKERS BY
	THE USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE) IN THE MINING INDUSTRY
4	Nicoleta Crăciun, The National Research and Development Institute of Occupational Safety (INCDPM) -
	"Alexandru Darabont", Romania
	THE STUDY OF FOAMING POWER OF SOME FOAM STICKS USED FOR DRAINING
	WATER FROM GAS WELLS
5	Andra Tămas*, Martin Vincze**, *Politehnica University of Timisoara, **Mopeka Impex SRL
	Timişoara, Romania
-	RESEARCH ON THE CHANGES OF THE RESCUERS HEART RATE DURING TRAINING
6	Daniel Pupazan, Artur George Gaman, Cosmin Ilie, Alin Irimia, INCD INSEMEX Petrosani, Romania
_	THE USE OF ROBOTS IN UNDERGROUND RESCUE ACTIONS
7	Alin Irimia, George Artur Găman, Daniel Pupăzan, Cosmin Ilie, INCD INSEMEX Petrosani, Romania
	INFLUENCE OF GAS GENERATED BY DETONATION OF EXPLOSIVES FOR CIVIL USES,
8	ON THE WORK ENVIRONMENT
	Attila Kovacs, Cristian Raul Cioara, Gabriel Vasilescu, Emilian Ghicioi, Edward Gheorghiosu, Daniela-
	Carmen Rus, Ilie-Ciprian Jitea, INCD INSEMEX Petrosani, Romania
	ENVIRONMENTAL AND HUMAN HEALTH RISKS ASSOCIATED WITH THE CENTRAL
9	TAILING POND IN THE EAST OF BAIA MARE CITY, ROMANIA
	Irina SMICAL, Ioan BUD, Simona DUMA, Faculty of Mineral Resources and Environment, North
	University Centre of Baia Mare, Technical University of Cluj-Napoca,

# 2 MINING ENGINEERING, SURVEYING AND CADASTRIAL AREA

**2.1 MINING ENGINEERING** 

Location: A8, Bilding A, date 10.10.2014, hour 14:00 -17:00

Chairman: Prof. Ilie Onica, Dr. Doru Cioclea

No.	Paper / Authors / Affiliation						
	EVOLUTION OF COAL EXPLOITATION IN VALEA JIULUI DURING THE						
1	REORGANIZATION PROGRAMS AFTER 1990						
	Fănel-Radu Lupuleac, Eugen Cozma, Ilie Onica, University of Petrosani, Romania						
	PLOTTING THE CHARACTERISTIC CURVES FOR MINE VENTILATION FANS USING THE						
2	"VENTMEX" SOFTWARE						
	Corneliu Boantă, Constantin Lupu, Nicolae-Ioan Vlasin, Doru Cioclea, Ion Gherghe, INCD INSEMEX						
	Petrosani, Romania						
	NECESSITY TO VERIFY THE VENTILATION SYSTEMS OPERATING IN POTENTIALLY						
3	EXPLOSIVE AND/OR TOXIC ENVIRONMENTS						
	Florin Rădoi, D oru Cioclea, Constantin Lupu, Ion Gherghe, Corneliu Boantă, Emeric Chiuzan, INCD						

	INSEMEX Petrosani, Romania
4	RESEARCH REGARDING THE CURRENT STATE AND THE LATEST TRENDS IN CONSTRUCTION AND EXPLOITATION OF MINING POWER SUPPLY SYSTEMS István-Adrian Szép, Marin Silviu Nan, University of Petrosani, Romania
5	ANALYSIS OF MECHANIZED MINING TECHNOLOGIES FOR THE ROMANIAN ROCK SALT DEPOSITS Ilie Onica, Eugen Cozma, University of Petrosani, Romania
6	LANDFILL CAPACITY ASSESMENT AT WASTE DUMP VALEA ARSULUI - VULCAN COLLIERY Adrian FLOREA, Maria LAZĂR, Csabi Lorint, University of Petrosani, Romania
7	MEASURES, PROGRAMS AND LAWS ON THE RESTRUCTURING OF THE MINING ACTIVITIES IN ROMANIA AND THE EUROPEAN UNION Mariana NEGRU, Marin Silviu NAN, University of Petrosani, Romania
8	ANALYSIS OF AERODYNAMIC PARAMETERS SPECIFY A MAIN LOCAL STATIONS Marius Simion Morar, Doru Cioclea, Ion Gherghe, Adrian Matei, INCD INSEMEX Petrosani, Romania
9	TESTING THE RESISTANCE OF THE PROTECTIVE CLOTHING AGAINST CHEMICAL AGENTS IN ORDER TO ASSESS THEIR CONFORMITY  Irina Nălboc, Constantin Lupu, Maria Prodan, Andrei Szolloşi Moţa, INCD INSEMEX Petrosani, Romania
10	PRIOR ESTABLISHMENT OF WORK ENVIRONMENT CHARACTERISTICS IN CASE OF THE OCCURRENCE OF AN UNDERGROUND EXPLOSION  Doru Cioclea, Constantin Lupu, Ion Gherghe, Florin Rădoi, Corneliu Boantă, Cristian Tomescu, Marius Cornel Şuvar, Nicolae Ioan Vlasin, Vlad Mihai Păsculescu, INCD INSEMEX Petrosani, Romania
11	TECHNICAL-ECONOMIC INDICATORS FOR THE ASSESSMENT OF TECHNOLOGICAL SCHEMES OF MINES Rosioru-Cioara Inga, Ilias Nicolae, University of Petrosani, Romania
12	DIMENSIONING THE COAL FACES AND USE OF THE DESIGN SOFTWARE IN THE USED TECHNOLOGICAL CRITERION FROM OLTENIA'S LIGNITE COAL PITS Antonie Daniel*, Ogarlaci Vasile*, Predoiu Ionut Cosmin*, Brujan (Predoiu) Mioara**, * S. OLTENIA ENERGY COMPLEX S.A. – Mining Division, ** University of Petrosani, Romania.
	RVEYING AND CADASTRIAL AREA
Location	on: L Topo 1, date 10.10.2014, hour 15:00-16:00
Chairn	nan: Prof. Nicolae Dima, Prof. Wilhelm Stelling
1	CONTRIBUTION TO SOLVING GEOMETRIC LEVELING UNDERGROUND NETWORKS Ofelia-Larisa Filip, Nicolae Dima, Ioel Veres, University of Petrosani, Romania
2	METHODS OF VALUING REAL ESTATE IN GERMANY Wilhelm Stelling, University of Applied Sciences TFH Georg Agricola, Bochum, Germany
3	USE INDEPENDENT PATHWAY TO TROUBLE POLYGONAL TOPOGRAPHY PIRCING MINING Ofelia-Larisa Filip, Nicolae Dima, University of Petrosani, Romania
4	POSSIBILITY OF SOLVING PROBLEMS IN CADASTRE  Ioel Veres, Nicolae Dima, Ofelia-Larisa Filip, University of Petrosani, Romania
5	CONSIDERATIONS ON OVERALL STABILITY OF GAP CREATED, IN 22 DECEMBER 2010, IN TOWN OCNA MUREŞ, COUNTY ALBA Raluca Farcaş, Nicolae Dima, University of Petroşani, Romania

### 3. ROCK MECHANICS AND GEOTECHNICAL APPLICATIONS; CIVIL ENGINEERING

Location: A7, Bilding A, date 10.10.2014, hour 16:00 - 17:00...

Chairman: Prof. Lazar Avram, Prof. Valeriu Stoian,

No.	Paper/Authors/Affiliation
	RESEARCH ON LOAD CARRYING CAPACITY OF BASE TERRAINS OF THE WASTE
1	DUMPS IN JIU VALLEY
	Maria Lazar, Adrian Florea, Florin Faur, University of Petrosani, Romania
	GEOMECHANICAL RESEARCH ON THE STABILITY OF ACTIVE WASTE DUMPS FROM
2	JIU VALLEY
	Oana Bărăiac, Victor Arad, Susana (Iancu) Apostu, Gheorghe Lasc, Vlad Cosma, University of
	Petrosani, Romania
3	PROGRESSIVE COLLAPSE SCENARIO SIMULATION
3	Andrei Bindean, Valeriu Stoian, "Politehnica" University of Timisoara, Romania
	CONSTRUCTION, DESIGN AND EVALUATION OF TAILINGS DAMS FOR NEW MINING
4	PROJECTS
	Vlad Cosma, Gheorghe Lasc, Oana Bărăiac, Susana Iancu, University of Petrosani, Romania
5	CRITICAL ASPECTS ON SYSTEMS ECOLOGY EXPLORATION AND EXPLOITATION OF
	SHALE GAS
	Lazar Avram, Monica Emanuela Stoica, Tudora Cristescu, Petroleum and Gas University of Ploiesti,
	Romania

### 4. ELECTRICAL ENGINEERING AND ENERGETICS

Location: L8, Bilding A, date 10.10.2014, hour 15:00-17:00...

Chairman: Assoc. Prof. Marius Marcu, Assoc. Prof. Liliana Samoila,

No.	Paper/Authors/Affiliation
1	ANALYSIS OF FAULTS IN EXPLOSION PROOF ELECTRIC DRIVES AND CONCERNS FOR MODERNIZING THE MAINTENANCE AND REPAIRS OF MOTORS OPERATING IN EXPLOSIVE ATMOSPHERES  Mihai Magyari, Sorin Burian, Martin Friedmann, Lucian Moldovan, Dragos Fotau, Cosmin Colda, INCD
2	INSEMEX Petroşani, Romania  THE NEW EUROPEAN DIRECTIVE REGARDING THE EXPOSURE OF WORKERS TO THE RISKS ARISING FROM PHYSICAL AGENTS  Beiu Constantin, Buica Georgeta, Anca Elena Antonov, Institute for Labor Protection "Alexandru Darabont", Bucharest, Romania
3	MEASURING AND ADJUSTING THE TEMPERATURE WITH CPU 224 PLC AND TD 200 OPERATOR INTERFACE SIEMENS Gabriel Nicolae Popa, Iosif Popa, Corina Maria Dinis, Angela Iagar, Faculty of Engineering Hunedoara, Politehnica University Timisoara
4	UPON ACHIEVEMENT OF THE USUAL FUNCTIONS OF TIME WITH PS-3 PLC KLÖCKNER – MOELLER  Iosif Popa, Gabriel Nicolae Popa, Corina Maria Dinis, Sorin Ioan Deaconu, Faculty of Engineering Hunedoara, Politehnica University Timisoara
5	FUTURE OF COAL AND CHALLENGES IN ENERGY FIELD Susana Arad, Liliana Samoila, University of Petrosani, Romania
6	REDUCING ELECTRICITY CONSUMPTION AT WINDING MACHINES OPERATED BY INDUCTION MOTOR USING POWER ELECTRONICS Ilie Utu, Maria Daniela Stochitoiu, University of Petrosani, Romania
7	USING THE EASY PROGRAMABLLE LOGIC CONTROLLERS TO THE MINING CONVEYORS BELT IN JILT OPEN PIT Maria Daniela Stochitoiu, Ilie Utu, University of Petrosani, Romania

8	METHODS FOR DETERMINING THE INSULATION RESISTANCE, Teodora Hristova, University of Mining and Geology "St. Ivan Rilski", Sofia, Bulgaria  CONSIDERATIONS REGARDING THE TORQUE TEST FOR BUSHINGS AND THERMAL SHOCK TEST, APPLICABLE TO ELECTRICAL EQUIPMENT DESIGNED FOR USE IN
9	EXPLOSIVE ATMOSPHERES Lucian Moldovan, Sorin Burian, Martin Friedmann, Mihai Magyari, Dragos Fotau, Cosmin Colda, INCD INSEMEX Petroșani, Romania
10	LOW POWER EMBEDDED SYSTEM APPROACH FOR POWER QUALITY CONTROL Gheorghe Marc, Mircea Risteiu, Ioan Ileana, "1 Decembrie 1918" University of Alba Iulia, Alba Iulia, Romania
11	THE IMPORTANCE OF OLTENIA'S COAL ANTONIE DANIEL*, OGARLACI VASILE*, PREDOIU IONUT COSMIN*, BRUJAN (PREDOIU) MIOARA**, * S. OLTENIA ENERGY COMPLEX S.A. – Mining Division, ** University of Petrosani, Romania
12	<b>DESIGN AND SIMULATION OF HYBRID ISOLATED LOW POWER SYSTEM Sorin Deaconu,</b> Marcel Topor, Corina Daniela Cunţan, Ioan Baciu, Corina Maria Diniş, Gabriel Nicolae Popa, <i>Politehnica University of Timisoara, Romania</i>
13	ANALYSIS OF THERMIC STABILITY IN SHORT CIRCUIT REGIME OF ELECTRIC DISTRIBUTION NETWORKS CONDUCTOR,  Leon Pana, Florin Gabriel Popescu, Razvan Slusariuc, Liliana Samoila, University of Petrosani, Romania.
14	THE QUANTIFICATION OF ENERGY EFFECT OF LOSSES IN TRANSPORT AND DISTRIBUTION HEATING NETWORK, Mija Eduard Aurelian, Iliaş Nicolae, Preda Lucian, Head of Commercial Service at CET. Paroseni, University of Petrosani, City Hall Petrila, Romania.
5. SYS	TEM CONTROL, APPLIED INFORMATICS AND COMPUTER ENGINEERING
Locati	on: A3 Bilding A data 10 10 2014 hour 14:30 16:30
	on: A3, Bilding A, date 10.10.2014, hour 14:30 -16:30 nan: Prof. Emil Pop, Assoc. Prof. Nicolae Patrascoiu
Chairi	man: Prof. Emil Pop, Assoc. Prof. Nicolae Patrascoiu
Chairi No.	Paper/Authors/Affiliation  A SOLUTION FOR MONITORING CONVEYOR BELT Nicolae Patrascoiu, Ioana Camelia Barbu, Cecilia Rosulescu, University of Petrosani, Romania, Grigore Geamanu Scool, Romania INFORMATION ROUTING IN WIRELESS SENSOR NETWORKS
No.	Paper/Authors/Affiliation  A SOLUTION FOR MONITORING CONVEYOR BELT Nicolae Patrascoiu, Ioana Camelia Barbu, Cecilia Rosulescu, University of Petrosani, Romania, Grigore Geamanu Scool, Romania
No.	Paper/Authors/Affiliation  A SOLUTION FOR MONITORING CONVEYOR BELT Nicolae Patrascoiu, Ioana Camelia Barbu, Cecilia Rosulescu, University of Petrosani, Romania, Grigore Geamanu Scool, Romania  INFORMATION ROUTING IN WIRELESS SENSOR NETWORKS Ionut-Alin Popa, Emil Pop, University of Petrosani, Romania  INTELLIGENT SOFTWARE APPLICATION FOR CONTROL AND MONITORING OF DEGASSING PROCESS Vali Sirb, Angela Egri, Emil Sergiu Andras, University of Petrosani, Romania, Eng. Mine Paroseni,
No. 1 2 3	Paper/Authors/Affiliation  A SOLUTION FOR MONITORING CONVEYOR BELT Nicolae Patrascoiu, Ioana Camelia Barbu, Cecilia Rosulescu, University of Petrosani, Romania, Grigore Geamanu Scool, Romania INFORMATION ROUTING IN WIRELESS SENSOR NETWORKS Ionut-Alin Popa, Emil Pop, University of Petrosani, Romania INTELLIGENT SOFTWARE APPLICATION FOR CONTROL AND MONITORING OF DEGASSING PROCESS Vali Sirb, Angela Egri, Emil Sergiu Andras, University of Petrosani, Romania, Eng. Mine Paroseni, Romania CHEAP WIRELESS MONITORING SOLUTION OF THE CONDITION FOR ELECTRIC MOTORS Bogdan Sochirca, Aron Poanta, University of Petrosani, Romania  MODELING AND SIMULATION OF A BIOENERGY SYSTEM FOR CAMPUS OF THE UNIVERSITY OF PETROSANI
No.  1  2  3	Paper/Authors/Affiliation  A SOLUTION FOR MONITORING CONVEYOR BELT Nicolae Patrascoiu, Ioana Camelia Barbu, Cecilia Rosulescu, University of Petrosani, Romania, Grigore Geamanu Scool, Romania INFORMATION ROUTING IN WIRELESS SENSOR NETWORKS Ionut-Alin Popa, Emil Pop, University of Petrosani, Romania INTELLIGENT SOFTWARE APPLICATION FOR CONTROL AND MONITORING OF DEGASSING PROCESS Vali Sirb, Angela Egri, Emil Sergiu Andras, University of Petrosani, Romania, Eng. Mine Paroseni, Romania CHEAP WIRELESS MONITORING SOLUTION OF THE CONDITION FOR ELECTRIC MOTORS Bogdan Sochirca, Aron Poanta, University of Petrosani, Romania MODELING AND SIMULATION OF A BIOENERGY SYSTEM FOR CAMPUS OF THE UNIVERSITY OF PETROSANI Adrian Nicolae Dinoiu, Emil Pop, Ioana Camelia Barbu, University of Petrosani, Romania USING VIRTUAL INSTRUMENTATION IN DISTRIBUTED CONTROL SYSTEMS Nicolae Patrascoiu, Ioana Camelia Barbu, Cecilia Rosulescu, University of Petrosani, Romania, Grigore
No.  1 2 3 4	Paper/Authors/Affiliation  A SOLUTION FOR MONITORING CONVEYOR BELT Nicolae Patrascoiu, Ioana Camelia Barbu, Cecilia Rosulescu, University of Petrosani, Romania, Grigore Geamanu Scool, Romania  INFORMATION ROUTING IN WIRELESS SENSOR NETWORKS Ionut-Alin Popa, Emil Pop, University of Petrosani, Romania  INTELLIGENT SOFTWARE APPLICATION FOR CONTROL AND MONITORING OF DEGASSING PROCESS Vali Sirb, Angela Egri, Emil Sergiu Andras, University of Petrosani, Romania, Eng. Mine Paroseni, Romania  CHEAP WIRELESS MONITORING SOLUTION OF THE CONDITION FOR ELECTRIC MOTORS Bogdan Sochirca, Aron Poanta, University of Petrosani, Romania  MODELING AND SIMULATION OF A BIOENERGY SYSTEM FOR CAMPUS OF THE UNIVERSITY OF PETROSANI Adrian Nicolae Dinoiu, Emil Pop, Ioana Camelia Barbu, University of Petrosani, Romania  USING VIRTUAL INSTRUMENTATION IN DISTRIBUTED CONTROL SYSTEMS

### **INFORMATICS**

Location A3, Bilding A, date 10.10.2014, hour 16:30 - 17:00...

Chairman: Prof. Kecs Wilhelm, Lecturer Dr. Preda Mircea

- 9 INTEGER TRIANGLES WITH INTEGER MEDIANS
  Nicolae Nicolae, Secondary School Number 6, Vulcan, Romania

  10 BUILDING A DATA WAREHOUSE FOR UNIVERSITY FROM PETROŞANI
  Preda Mircea, University of Petrosani, Romania

  GENERATE GRAPHICAL TREE STRUCTURES FROM DATA STRUCTURES DBF
  Preda Mircea, University of Petrosani, Romania
- 6. MECHANICAL ENGINEERING AND TRANSPORT 6.1 MECHANICAL ENGINEERING

Location L12, Bilding A, date 10.10.2014, hour 15:00 - 17:00...

Chairman: Prof. Sorin Mihai Radu, Prof. Stefan Vöth

Challi	nan. 1101. Sofin Minai Radu, 1101. Stefan votn
No.	Paper/Authors/Affiliation
	PRODUCTION OF CONSTRUCTION MATERIALS FROM POWER INDUSTRY WASTE
1	Anghelescu Lucica, Chiroiu Corina Natalia, "Constantin Brâncuşi" University of Târgu-Jiu, Romania,
	Radu Sorin Mihai, Dinescu Stela, University of Petrosani, Romania
	STRUCTURAL, FUNCTIONAL AND ENERGETIC MARKERS OF REFRIGERATING
2	INSTALLATIONS
	Vătavu Sorin, University of Petroșani, România, Vătavu Niculina, INSEMEX Petroșani, România
	PROPERTIES OF FORM FITTING SAFETY COUPLINGS
3	Vöth Stefan, Sippel Jan, Technische Fachhochschule Georg Agricola, Center for Drive and Hoisting
	Technology, Bochum, Germany
	DIAGNOSIS OF WINDING ENGINE BRAKE MECHANISM IN BLIND SHAFT No. 15 IN
4	PETRILA MINE
	Itu Răzvan-Bogdan, University of Petroșani, România
	BREAKING CASE REHABILITATION AND TECHNICAL VERIFICATION OF BREAKING
5	SYSTEM IN THE MK 2,1 x 4 WINDING ENGINE MOUNTED IN LONEA MINE SKIP SHAFT
	Itu Vilhelm, Itu Răzvan-Bogdan, <i>University of Petroșani, România</i>
	RESEARCH AND CONTRIBUTIONS REGARDING THE OPERATION OF A STATIONARY
6	MONITORING SYSTEM FOR GAS LEAKS AND EMISSIONS IN TERMS OF COALFIELD
	AND POWERPLANT AREAS
	Nan Marin Silviu , <b>Şimon Adrian Bogdan</b> , <i>University of Petroşani, România</i>
_	STATE OF STRAIN AND DISPLACEMENTS FROM THE STRUCTURE OF THE
7	EXTRACTING TOWER IN THE CASE OF APPLICATION OF THE SAFETY BRAKE
	Pop Ioan Alexandru, Radu Sorin Mihai, University of Petroşani, România
	STUDY ON THE RESISTANCE OF THE CHASSIS-TANK CONNECTION TO THE LOADS
8	THAT APPEAR IN USE
	Radu Sorin Mihai, University of Petroşani, România, Tănăsoiu Bogdan, drd at Illinois Institute of
	Technology; Aonofriesei Ioan, University of Petroşani, România
9	TESTS ON INERTISATION OF OIL SLUDGE RESULTED FROM OIL EXTRACTION ACTIVITIES
9	
	Rus Ioan Constantin, Pop Gheorghe, University of Petroşani, România THE DECREASE OF THE MECHANICAL STRESSES AND THE REDUCTION OF THE
10	DISTORTIONS OCCURED IN THE FLEXIBLE JOINTS OF THE GLIDING STEEL
	TIMBERING
	Simaschevici Alexandru, Simaschevici Horia, <i>University of Petroșani, România</i>
	STRUCTURAL AND FUNCTIONAL SOLUTIONS FOR THE IMPROVEMENT OF THE
11	SLIDING STEEL MINE TIMBERING
	Simaschevici Alexandru, <b>Simaschevici Horia</b> , <i>University of Petroşani, România</i>
	METHODOLOGY OF ESTABLISHING RESIDUAL LIFETIME OF LIFTING INSTALATION
12	BY NON-DESTRUCTIVE METHODS
	DI NON-DESTRUCTIVE METHODS

	v necunu i ioin	i, Radu Solili I	Mihai, Ridzi Mil	nai Carm	eio, <i>Oni</i>	versity of Pe	etroşanı,	KON	rania	
13 F	POWER PLA Gheorghe Laure	<b>ANT</b> entiu DOBREI <sup>1</sup>	BALANCE  , Dan Codruţ P of Petrosani, <sup>2</sup> De	ETRILE	AN¹. Ioa	ın CONT². (				

### **6.2 TRANSPORT ENGINEERING**

Location A6, Bilding A, date 10.10.2014, hour 14:00-15:30

Chairman:: Prof. Ion Copaci, Prof. Marin Silviu Nan

No.	Paper/Authors/Affiliation
	ON THE EFFECTS CAUSED BY THE SHOCK DURING RAILWAY VEHICLE BUFFING
1	Copaci Ion, Tănăsoiu Aurelia, <i>Universitatea</i> , <i>Aurel Vlaicu</i> " <i>Arad, România</i> , Aonofriesei Ioan, <i>University</i>
	of Petroşani, România
	RESEARCH ON THE CONSTRUCTION AND FUNCTION OF THE ROAD VEHICLES
2	SUSPENSION SYSTEMS
2	Nan Marin Silviu, Secara Monia Camelia, Grecea Danuţ, Popescu Dorina, University of Petroşani,
	România.
	THE STUDY OF CONSTRUCTIVE FUNCTIONAL ASPECTS OF THE STEERING SYSTEM
3	FOR MOTOR ROAD STEADS
3	Secara Monia Camelia, Nan Marin Silviu, Tutuianu Gabriel, Grecea Danuţ, University of Petroşani,
	România
	RESEARCH ON THE POSSIBILITIES OF IMPROVING THE VULCANIZATION RUBBER
4	CONVEYOR BELTS
	Armășoiu Petre, Florea Vlad Alexandru, University of Petroșani, România
5	OPTIMUM DESIGN OF A MULTIPLE-PIPE ABOVE-GROUND PIPELINE
	Virág, Zoltán, University of Miskolc, Hungary
	GRAPHICAL INTERFACE FOR EXPERIMENTAL ANALYSIS OF NONDESTRUCTIVE
6	TESTING OF DRILL PIPES
	Stan Ioana Gabriela, Niculae Georgeta Claudia, Universitatea .Petrol și Gaze Ploiesti, România

### **6.3 MINING EQUIPMENT**

Location; A6, Bilding A, date 10.10.2014, hour 15:30 -17:30...

Chairman: Prof. Iosif Andras, Assoc. Prof. Iosif Dumitrescu

No.	Paper/Authors/Affiliation
	STUDY THE POSSIBILITIES OF IMPROVING TECHNOLOGICAL EQUIPMENT
1	MAINTENANCE ACTIVITY FROM QUARRIES
	Tihanov Tănăsache Daniel, Florea Vlad Alexandru, University of Petroșani, România
	STUDY ON THE ESTIMATION OF THE DEMAND OF SPARE PARTS BY USING THE
2	RENEWAL PROCESS
	Tomuş Ovidiu-Bogdan, Iosif Kovacs, Jula Dumitru, University of Petroşani, România
	MANAGEMENT OF THE VENTILATION NETWORK AT VULCAN MINING UNIT
3	Morar Marius Simion, INSEMEX Petroșani, România, Sorin Mihai Radu, University of Petroșani,
	România, Doru Cioclea, Ion Gherghe, INSEMEX Petroșani, România
	STUDY OF THE MINING PRODUCTION SYSTEMS, PROCESSES AND COMPONENTS
4	USING ARTIFICIAL INTELLIGENCE METHODS
	Dinescu Stela, Andraș Andrei, University of Petroșani, România
5	THE SYNTHESIS COMPLEX MECHANISM OF GUIDING ROOF SUPPORTS FOR THE
	COAL MINING
	Dimirache Gabriel, Zamora Adriana, University of Petroşani, România

	OPPORTUNITIES FOR USING THE FINITE ELEMENT METHOD BY COMPUTER
6	RESEARCH ON A ROTARY CRUSHER OF THE ECCENTRIC TYPE 800Dx75
	Iliev Zhivko, Perenovski Nikolay, Assistant Professors, University of Mining and Geology, Sofia
7	SIMPLE PULLEY BLOCK TO HOIST THE SKIP IN LUPENI MINE
,	Dumitrescu Iosif, Itu Răzvan-Bogdan, University of Petroşani, România
	PRESENT STAGE AND TENDENCIES IN THE MANAGEMENT AND MONITORING
8	MODERNIZATION SYSTEMS OF EXTRACTION
	Grecea Dănuţ, Nan Marin Silviu, University of Petroşani, România
	RESEARCH AND RESULTS REGARDING ENVIRONMENTAL PROTECTION DURING THE
9	REVERSE OSMOSIS USED FOR THE TREATMENT OF WASTEWATER FROM URANIUM
9	PROCESSING
	Stănilă Sorina Daniela, Jula Dumitru, University of Petroşani, România
	SUBLEVEL CAVING SHIELDS AND THEIR UTILIZATION IN MINING OUT DISTURBED
10	THICK COAL SEAMS
	Kamburov, Stefan Milenov; <b>Molnár, József,</b> <i>University of Miskolc, Hungary</i>
O M/A	NACEMENT AND MADIZETING
8. MA	NAGEMENT AND MARKETING
Logoti	on A5, Bilding A, date 10.10.2014, hour 15:00-16:30
Locati	on A3, Buding A, date 10.10.2014, nour 15.00-10.50
Chairr	nan: Prof. Sabina Irimie, Prof. Florian Bușe
Chani	nan. 1101. Sabina irinine, 1101. Fiorian Buye
No.	Paper/Authors/Affiliation
110.	-
	ECONOMIC EFFICIENCY OF QUALITY
1	Buşe Florian, Dobriţoiu Nicolae, , Mangu Sorin-Iuliu, Buşe Gheorghe-Florin, University of Petrosani,
	Petrosani, Romania
	LEADERSHIP CHALLENGES OF TODAY'S MANAGERS: OVERVIEW OF APPROACHES
2	AND A STUDY IN ROMANIA
	Irimie Sabina, Băleanu Virginia, Suciu Cristina, Filip Elena, University of Petrosani, Petrosani, Romania
3	HIGH PERFORMANCE WORK PRACTICES FOR HUMAN RESOURCES; AMO MODEL
3	Munteanu Anca, West University of Timișoara, Romania
4	THE DYNAMICS OF CLUSTERING PROCESSES IN EUROPE
4	Maticiuc Mădălina, West University of Timișoara, Romania
	ENGINEERING AND MANAGEMENT AT THE UNIVERSITY OF PETROSANI,
5	Edelhauser Eduard, Csiminga Diana, Tiuzbaian Ioan Nicolae, Munteanu Rares, Furdui Ersilia,
	University of Petrosani, Petrosani, Romania
-	THE ROLE OF INNOVATION IN ENTREPRENEURIAL DEVELOPMENT
6	Ghicajanu Mihaela, Dobre –Baron Oana, University of Petrosani, Petrosani, Romania
7	QFD BASED SOFTWARE FOR AN INNOVATIVE MEDICAL DEVICE ANALYSIS
	Ionică Andreea, Monica Leba, Remus Dobra, University of Petrosani, Petrosani, Romania
0 FCC	DNOMICS AND PUBLIC ADMINISTRATION
J. ECC	DIOMICS AND I UDLIC ADMINISTRATION
Locati	on Sală Consiliu Facultatea de Științe, Bilding A, date 10.10.2014 hour 15:00-17:30
Chain	ware Assas Duef Caduuta Duna Assas Duef Ilia Dăsaslasu
Chairi	nan: Assoc. Prof. Codruta Dura, Assoc. Prof Ilie Răscolean
No.	Paper/Authors/Affiliation
	-
1	SOME USEFUL TOOLS FOR MARKET SEGMENTATION: CRITERIA, STRATEGIES AND
1	METHODS
	Codruța Dura, Imola Drigă, University of Petrosani, Romania
2	THE FINANCIAL SECTOR AND THE ROLE OF BANKS IN ECONOMIC DEVELOPMENT
	Imola Drigă, Codruța Dura, University of Petrosani, Romania
	FINANCIAL GLOBALIZATION: CONCEPTS AND MAIN TRENDS
3	Valentina Fetiniuc, Ivan Luchian, International Institute of Management IMI-NOVA Chisinau, Republic
	of Moldova
4	ONLINE CENTRALIZATION OF ECONOMIC AGENTS DECLARATIVE STATEMENTS
4	Alin Isac, Claudia Isac, University of Petrosani, Romania

5	ISSUES CONCERNING THE MAIN TOOLS OF FINANCIAL PLANNING AND CONTROL IN
	THE PUBLIC SYSTEM
	Maria Măcriș, University of Petrosani, Romania
6	ROMANIAN INSURANCE MARKET: SIZE, STRUCTURE AND TRENDS
	Mirela Monea, Ana Preda, University of Petrosani, Romania, University of Craiova, Romania
	THE ANALYSIS OF GROSS WRITTEN PREMIUMS IN THE MAJOR REGIONS OF THE
7	WORLD, BEFORE, DURING AND AFTER FINANCIAL CRISIS
	Ana Preda, Mirela Monea, University of Craiova, Romania, University of Petrosani, Romania
	THE PREROGATIVE OF IMPLEMENTING AN EFFECTIVE INTERNAL CONTROL OF
8	INVENTORIES IN THE ECONOMIC ENTITIES
	Bogdan Răvaș, University of Petrosani, Romania
9	DEVELOPMENT OF ACCOUNTING THEORY FROM THE PERSPECTIVE OF
	COMPLEXITY OF FINANCIAL INSTRUMENTS
	Sabin Armăselu, University of Craiova, Romania  CORPORATE PERFORMANCE DETERMINANTS. EVIDENCE OF DIFFERENCES ACROSS
10	SECTORS
	Sorana Vatavu, West University of Timisoara, Romania
	CONSIDERATIONS REGARDING TO ACHIEVING THE FINANCIAL EQUILIBRIUM TO
11	MICRO ECONOMICAL LEVEL
	Ilie Răscolean, Gabriela Slusariuc, University of Petrosani, Romania
	COMPETITIVENESS – KEY FOR ECONOMIC DEVELOPMENT. STUDY CASE AMONG THE
12	CENTRAL AND EASTERN ECONOMIES IN UE
	Emilia Ungureanu, Felix-Constantin Burcea, University of Pitesti, Romania, ASE Bucuresti, Romania
10 50	CIO – HUMAN SCIENCES
10. 50	CIO – HUMAN SCIENCES
Locati	on A10, Bilding A, date 10.10.2014, hour 14:00-15:30
Chairman: Lecturer Felicia Andrioni, Lecturer Lavinia Hulea	
No.	Paper/Authors/Affiliation
1	JIU VALLEY'S DEMOGRAPHIC DIMENSIONS AT THE INTERSECTION OF SOCIO-
	ECONOMIC TRANSFORMATIONS
	Felicia Andrioni, Mariana Anghel, University of Petrosani, Romania, and Lavinia Elisabeta Popp,
	University "Eftimie Murgu" Reşiţa, Romania
2	THE MINER'S ALMANACH. 1935-1938
	Mircea Baron, Oana Baron, University of Petrosani, Romania
3	EMOTIONAL INTELLIGENCE AND JOB PERFORMANCE
	Izabella Eisler, INSEMEX, Romania
4	CURATIVE EDUCATION PERSPECTIVE ON TEMPERAMENTS
	Miron Golașie, Curative Education Center Simeria, Romania
5	VICTORIAN AGE - A CONTEXT
	Lavinia Hulea, University of Petrosani, Romania
6	STUDY THE POSSIBILITY OF INCREASING THE CAPACITY OF SERVICE OF MINING
	GROUNDWATER BY IMPROVEMENT OF PHYSICAL STATE
	Cristian Ilioni, Marin Silviu Nan, University of Petrosani, Romania
17.20 End of aggions	
17:30- End of sessions	
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