









14th International Symposium of Continuous Surface Mining

Aristotle University's Research Dissemination Center (KEDEA)

Greece, Thessaloniki, 23-26 September 2018

Program







Mineral Resources Engineering









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Sunday, 23rd September 2018 GRAND HOTEL PALACE				
20.00	Registration			
21.00	Welcome cocktail			
Monday, 24th September 2018 Aristotle University's Research Dissemination Center (KEDEA)				
	Hall A	Hall B		
8:30	Registration			
9:30	Opening ceremony			
10:30	Coffee break			
	Plenary Works (C. Roumpos, V. Pavlovic, C. Drebenstedt)			
10:45	A tour of recent developments in EU climate and energy policy: the implications for coal and lignite, B. Rickets, EURACOAL			
11:15	UNESCO Sustainable Development Agenda 2030 and Role of Mining, C. Drebenstedt			
11:45	Current State and Development of Continuous Systems on EPS Opencast Coal Mines, D. Ignjatovic, V. Pavlovic, S. Mitrovic, B. Jevtic			
12:15	Coffee break			
	Session 1: Mine planning and design (Chair C. Drebenstedt)	Session 2: Modeling, simulation I (Chair M. Galetakis)		
12:30	Simulating the BWE-Conveyor-Stacker System in Python using Salabim Panagiotou G.N.	Ultimate Pit Limit Determination for Fully Mobile In-Pit Crushing and Conveying Systems: A Case Study E. Hay, M. Nehring, P. Knights, M.S. Kizi l		
12:50	A Holistic Approach for Highly Selective Mechanical Process Chains B. Grafe, C. Drebenstedt, T. Shepel, V. Vilas Yadav	Assessment of the Added-Value of Sentinel1&2 for Mapping and Monitoring Surface Mining M. Stefouli, A. Panagiotopoulou, E. Charou, Y. Spastra, E. Bratsolis, N. Madamopoulos, S. Perantonis		
13:10	Integrated Operation in Mining through Digitalization – from a concept to a solution D. Danicic, N. Drljevic, F. Rietschel	Application of the Push-Relabel Algorithm to Lignite Surface Mine Optimisation P. Mpinos, I. Kapageridis		
13:30	L	unch		

	Session 3: Equipment and mining systems I (Chair G. Panagiotou)	Session 4: Geotechnical engineening (Chair M. Kavvadas)
15:00	Experimental Investigation of the Activated Rock Cutting Process T. Shepel, C. Drebenstedt	The Role of Geological Faults in Mine Stability: Amynteon mine, Western Macedonia (Greece) as a Case Study S. Pavlides, A. Chatzipetros, I. Lazos
15:20	Determination of Optimal Life Cycle of Bulldozer in Open Pits with Continual Systems in PE EPS D. Ignjatović, P. Jovančić, I. Janković	A cloud-based real-time slope movement monitoring system C. Steiakakis, G. Papavgeri, N. Steiakakis, Z. Agioutantis, P. Schilizzi
15:40	The Role of the Independent Expert in Material Handling and Mining Equipment Design and Approval P. Moczko, D. Pietrusiak, E. Rusiński	The Impact of the Coal Clay in the Slope Geometry of the OCM Radljevo North Opening Cut B. Petrović, T. Šubaranović, I. Ristović
16:00	Development of a Real-Time Mine-Face Inspection System for the Early Detection of Hard Rock Formations during Mining by Bucket-Wheel Excavators M. Galetakis, A. Vafidis, T. Michalakopoulos, G. Apostolopoulos, C. Roumpos, F. Pavloudakis, A. Vasileiou, V. Deligiorgis, A. Soultana	Reliability Evaluation During Slopes Progressive Failure A.V. Deliveris, I.E. Zevgolis, N.C. Koukouzas
16:20	Simulating the performance of bucket wheel excavators by means of soft computing techniques M. Menegaki, Th. Michalakopoulos, C. Roumpos	Avoiding Instability Conditions in Sector 6 of the Southern Field Mine in Northern Greece N. Kolovos
16:40	Analysis of Dislocation of Continual System at "Field D" in Function of Overburden and Coal Production at Eastern Part of Kolubara Coal Basin M. Petrovic, M. Miskovic, S. Alimpijevic, G. Tomic, B. Simic	Investigation of the Stability of Deep Excavation Slopes in Continuous Surface Lignite Mines M. Kavvadas, C. Roumpos, P. Schilizzi
21.00	Gala dinner GRAND HOTEL PALACE	·

	Tuesday, 25th Sept		
	Aristotle University's Research Dissemination Center (KEDEA)		
	Hall A	Hall B	
	Session 5: Equipment and mining systems II (Chair Th. Michalakopoulos)	Session 6: Health & Safety, Environment (Chair V. Pavlovic)	
9.10	A Real-Time Event-Driven Database System for Maintenance Planning and Productivity Analysis in Continuous Surface Mining Operations Z. Agioutantis, S. Delmadorou, N. Steiakakis, C. Steiakakis, S. Papaterpos	Control of Social and Environmental Risks During Opencast Lignite Mining N. Pavlovic, D. Ignjatovic, V. Pavlovic	
9:30	Methods of Decreasing of Bucket Wheel Excavators Failures Working In Soils Including Unmineable Intrusions A. Bajcar, M. Onichimiuk, A. Nowak – Szpak, M. Wygoda	A Review of the Effectiveness of Health & Safety Management Systems according to OHSAS 18001 Standard at PPC's Lignite Mines Th. Vlachos	
9:50	Open Pit Mine Conveyor Belt shifting using modern surveying equipment – An overview I. Karnaris	Innovative Approaches to Coal Surface Mine Sites Rehabilitation: A Case Study of Megalopolis Lignite Fields A. Sokratidou, E. Gkouvatsou, C. Roumpos, A. Perdiou, G. Tsagkarakis, S. Kaimaki	
10:10	PPC Excavator Production improvement of 20% by iBelt 2D Radar Control M. Schönhofer, D. Kasapidis, D. Spanidis, E. Dougalis	Impact of Environmental Policies on Lignite Plants Generation in the Greek Wholesale Electricity Market I. Skoteinos, A. Vlachou, G. Panagakis, G. Orfanos	
10:30	Gearless droves for medium power belt conveyors U. Richter	Alkali Activating of Low-Alumina Mine Tailings for more Sustainable Raw Material Supply Mahroo Falah, Robert Obenaus- Emler, Mirja Illikainen	
10:50	Mining 4.0 - Our Digital Journey T. Neumann, Ina Wiens	Occupational Accidents in Turkish energy sector S.N. Longinos, M. Parlaktuna	
11:10	Coffee break		
	Session 7: Land reclamation (Chair F. Pavloudakis)	Session 8: Water management - Environmental monitoring (Chair N. Koukouzas)	
11:30	Moving from Energy Depletion to Energy Crops in Exhausted Continuous Surface Mines V.G. Iliadis, S.M. Kastanakis, A.V. Iliadi	Planning of Mavropigi and Kardia mines depressurization systems by three dimensional groundwater flow numerical modelling G. Louloudis	
11:50	Towards a New Deal for the Lignite Industry in Western Macedonia D. Sotiropoulos, E. Karlopoulos, D. Giannakopoulos, D. Mavromatidis	Improvement Methods of Pumping Station Function in Coal Mines of Western Macedonia Lignite Centre N. Koukouzas, R. Karametou, V. Gemeni, C. Roumpos, C. Sachanidis, F. Pavloudakis	
12:10	Backfilling and Securing of abandoned Small Scale Coal Mines in Mongolia with Coal Combustion By-Products (CCB's) - the BASMIC Project M. Knippertz, P. Vossen	Alfeios River Sectional Diversion for the Expansion of the Continuous Surface Mining Operations of Megalopolis Mines in the Peloponnese Peninsula, Greece A. Spyridis, C. Roumpos, V. Koutalou, A. Liakoura, N. Arampelos	

12:30	Land reclamation planning of continuous	Surface mining in Western Macedonia,	
12.50	surface lignite mines in closure phase: A risk-	Greece: PM10 Emissions and Dispersion	
	based investigation Roumpos C., Spanidis &	Triantafyllou A., Andreadou M.,	
	Pavloudakis F.	Moussiopoulos N., Garas S., Kapageridis I.,	
		Tsegas G., Diamantopoulos Ch., Saxanidis	
		Ch., Skordas J.	
12:50	A Multi-Criteria Methodology for Low-Risk	Statistical Analysis and Spatial Distribution of	
12.50	Evaluation of Mine Closure Restoration in	Trace Elements Contained in Clays Excavated	
	Continuous Surface Lignite Mining Projects P- M.	in Western Macedonia Continuous Surface	
	Spanidis, C. Roumpos, F. Pavloudakis	Mining Complex F. Pavloudakis, C.	
	Spanius, C. Roumpos, F. Pavioudaris	Roumpos, C. Sachanidis	
13:10	Lunch		
10.10		Session 10: Geological exploration, quality	
	Session 9: Modelling, simulation II	control, homogenisation	
	(Chair C. Roumpos)	(Chair D. Ignjatovic)	
14:30	Use of Mine Planning Software in Mineral	Structural Geology of the Lignite Mines in	
	Resources and Reserves Estimation of the Lava	the Ptolemais Basin, NW Greece E.	
	Lignite Deposit in Servia – Greece I. Kapageridis,	Delogkos, V. Papanikolaou, T. Manzocchi, C.	
	A. Apostolikas, E. Koundourellis	Childs, V. Roche, G. Camanni, M. P. J.	
	· · · · · · · · · · · · · · · · · · ·	Schöpfer, J. J. Walsh, S. Pavlides, A.	
		Chatzipetros, C. Sachanidis and T. Barbas	
14:50	CARBON: A WebGIS Software to evaluate and	Structural Analysis of Greek and Bulgarian	
	model open-pit lignite mining systems E.	Coals by Solid-State 13C Nuclear Magnetic	
	Louvari, A. Pittas	Resonance (NMR) Spectroscopy C.	
	···· , ····	Apostolidou, A. Georgakopoulos	
15:10	Model-based Investigations of Hybrid Mining	Energy Efficiency By Ecological Coal Quality	
	Systems Using Cutting, Crushing and Conveying	Management In EPS And Its Benefits N.	
	Technology in Medium Hard Rock M. Dammers,	Drljevic, M. Andric	
	C. Deppe		
15:30	Why One Dimension is Not Enough – A	Morphology, Mineralogy, and Chemistry of	
	Comparative Study of Lignite Resources	Fly Ash from the Ptolemais Power Stations,	
	Estimation Using Drillhole Mineable Lignite	Northern Greece, and its potential as partial	
	Compositing of Uncorrelated Seams and	Portland cement substitute Apostolidou Ch.,	
	Mineable Lignite Compositing of Correlated	Georgakopoulos A.	
	Lignite Seams I. Kapageridis, A. Iordanidis		
15:50	Unsupervised Machine Learning Applications on	Open Pit Mine 3D Geological face mapping	
	Greek Lignite Mining Industry Louloudis G.,	perspectives obtained by a fully automated,	
	Louloudis E., Roumpos C.	terrain following, rotary-wing UAVs mission	
		I. Karnaris, N. Kolovos	
16:10	An Evolutionary Solution for Coal Reserves	Investments in geological exploration and	
	Modelling and Production Scheduling I.	effects on mining operating cash costs at	
	Kapageridis, A. Kerridge, E. Coloma	lignite open pits Kolubara (Lazarevac), Serbia	
		B. Vuckovic, B. Dimitrijevic	
16:30	Coffee break		
10.30		Closing Ceremony	
17:00	Closing Ce	remony	
	Closing Ce Wednesday, 26th Se		

Poster Session

Geostatistical Estimation of Coal Reserves in Kardia Mine using Kriging and Conditional Simulation Methods **P. Gkafa, A. Pavlides, C. Roumpos, D. Hristopulos**

Adaptation of Fruit Crops in Rehabilitated Old Mines Soils in West Macedonia Lignite Centre I. Papadopoulos, M. Tentsoglidou, C. Papadopoulos, B. Taralidis and F. Papadopoulou

Evaluation of Honey Producing Potential of Robinia Pseudacacia in Reforested Old Lignite Mines in West Macedonia F. Papadopoulou, M. Tentsoglidou, F. Pavloudakis, N. Papadimopoulos, I.Papadopoulos

Do coal combustion products affect the groundwater quality around Power Plants area of the Lignite Ptolemais basin? Vasileiou E., Dimitrakopoulos D., Papazotos P., Oikonomopoulos I., Stathopoulos N., Skliros V., Perraki M.

Sustainable Development Analysis of Lignite Mining, by Coupling Environmental, Economic and Social Indicators N. Paraskevis, D. Sideri, N. Stathopoulos, C. Roumpos, F. Pavloudakis

Technological and environmental upgrading of lignite from Amynteon and Ahlada deposits, in Northern Greece, via selective grinding **D. Vamvuka, A. Kreona, A. Mantza, M. Galetakis, A. Vasileiou**

Overview of the Results of Researches Related to Adaptation of Bucket Wheel Excavators Operating in Romanian Lignite Open Pits for Excavation in Rocks with Increased Cutting Resistance M. Lazar, I. Andras, A. Andras, F.D. Popescu, S.M. Radu, M. Rîsteiu

New Method of Residual Lifetime Assessment of Bucket Wheel Excavators Operating in Romanian Lignite Open Pits I. Andras, M. Lazar, A. Andras, S.M. Radu, F. Vîlceanu, S. Dinescu