

MEC 2023

VI Mineral Engineering Conference
VI Konferencja Inżynierii Mineralnej



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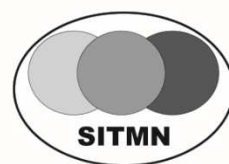
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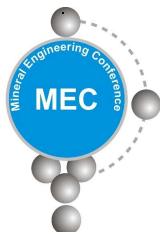
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CONFERENCE PROGRAMME

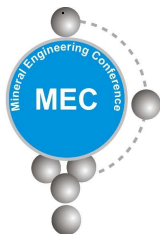


WEDNESDAY, June 14th, 2023

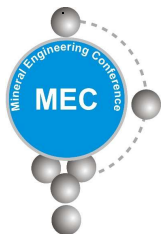
12:00 – 13:00	Registration
13:00 – 16:00	Lunch
14:00 – 14:30	<p>Conference opening Welcome speech Radosław Pilot, President of the Board, KGHM CUPRUM R&D Centre Director of Łukasiewicz Research Network — Institute of Non-Ferrous Metals</p>
14:30 – 15:30	<p>25th Anniversary of KGHM Polska Miedź S.A. Concentrators Division</p>
14:30 – 14:45	<p>25 years of improvement and development of copper ore enrichment technology in KGHM Polska Miedź S.A. <i>Paweł Piwowar, Chief Executive of KGHM Polska Miedź S.A. Concentrators Division</i></p>
14:45 – 15:30	<p>Awards of merit for the Concentrators Division of KGHM Polska Miedź S.A. and congratulations for the Division</p>
15:30 – 16:15	Plenary Session
15:30 – 15:45	<p>Increasing value through large-scale digitization in the mining industry <i>Sebastian Skąła - Division Director, Process Automation, ABB Poland</i></p>
15:45 – 16:00	<p>Metal ore pre-concentration by Comex multi-sensor sorters - current limitations and further development, <i>Jacek Kolacz, Jakub Progorowicz, Artur Szewczuk - Comex Polska Sp. z o.o.</i></p>
16:00 – 16:15	<p>Fine and ultrafine particles recovery in flotation with the CONCORDE CELL, <i>Mariusz Franek - Metso Outotec Poland Sp. z o.o., A. Yáñez, A. Rinne - Metso Outotec Finland Oy</i></p>
16:15 – 16:30	Coffee break
16:30 - 18:00	<p>Technical Session I – EIT RM an infinite resource of innovation - we inspire, support, connect (TBA)</p>
	<p>EIT RM Innovation Projects overview <i>Danuta Tuchorska Business Development Manager, EIT RM</i></p>
	<p>DynoSort - project presentation <i>Jakub Progorowicz R&D and Investment Director Comex Group</i></p>
	<p>More Productivity from Open Innovation <i>Hanna Junttila Business Development Manager, EIT RM</i></p>
19:00	Barbecue

THURSDAY, June 15th, 2023

THURSDAY, June 15th, 2023	
7:00 – 11:00	Breakfast
9:30 – 11:00	Technical Session II – 25th Anniversary of KGHM Polska Miedź S.A. Concentrators Division Session moderators: Andrzej Grotowski, Rafał Pępkowski
9:30 – 9:45	Application of modern techniques for separating waste rock from the feed stream at Division of Concentrators Lubin Plant(DOC), <i>Rafał Kaleta, Piotr Dyrba, Paweł Kurzydło - KGHM Polska Miedź S.A. Concentrators Division</i>
9:45 – 10:00	Optimization of copper concentrate drying process using a microwave moisture meter, <i>Robert Kukuć, Sebastian Kosorz, Łukasz Świzewski - KGHM Polska Miedź S.A. Concentrators Division</i>
10:00 – 10:15	<i>Evaluation of performance of the Reflux Flotation Cell (RFC) at KGHM Polish Copper Division of Concentrators,</i> <i>Paweł Kwiatkowski, Marcin Czekajło, Jarosław Prętki - KGHM Polska Miedź S.A. Concentrators Division</i>
10:15 – 10:30	<i>Innovative solutions in optimization control of the flotation process in Division of Concentrators, KGHM Polska Miedź S.A.,</i> <i>Adrian Grodecki, Tadeusz Legierski, Marek Jach, Ewelina Kasińska-Piłut, Wojciech Sitarski - KGHM Polska Miedź S.A. Concentrators Division, Tadeusz Legierski - AMEplus Sp. z o.o.</i>
10:30 – 10:45	The prediction of the flotation upgrading efficiency based on the laboratory mineralogy analysis, <i>Paweł Kurzydło - KGHM Polska Miedź S.A. Concentrators Division</i>
10:45 – 11:00	Summary of the session, time for discussion
11:00 – 11:30	Coffee break
11:30 – 13:00	Technical Session III – 25th Anniversary of KGHM Polska Miedź S.A. Concentrators Division Session moderators: Radosław Pilut, Paweł Piwowar
11:30 – 11:45	The numerical techniques application in the ball mill comminution process modelling, <i>Witold Pawłos - KGHM Polska Miedź S.A. Concentrators Division, Przemysław Dominiczak - e-engineer</i>
11:45 – 12:00	Overview of energy initiatives at Division of Concentrators Lubin Plant(DOC), <i>Rafał Stelmach, Łukasz Pałka, Piotr Dyrba - KGHM Polska Miedź S.A. Concentrators Division</i>
12:00 – 12:15	CMMS - a system supporting the work of technical departments in O/ZWR KGHM Polska Miedź S.A., <i>Michał Drozda, Paweł Kwiatkowski, Marcin Bisiakowski - KGHM Polska Miedź S.A. Concentrators Division</i>
12:15 – 12:30	Using the development of materials engineering in KGHM O/ZWR in order to increase the availability of processing machines and devices, <i>Krzysztof Kłudka, Michał Drozda, Łukasz Budzynowski - KGHM Polska Miedź S.A. Concentrators Division</i>
12:30 – 12:45	Cathodic Protection System of the Spiral Classifier at the KGHM Polska Miedź S.A. Ore Concentration Plant, <i>Marcin Czekajło - KGHM Polska Miedź S.A. Concentrators Division</i>



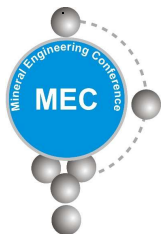
12:45 – 13:00	Summary of the session, time for discussion
13:00 – 16:00	Lunch
14:30 – 18:30 16:00 – 19:00	Technical Session IV – New solutions in raw and secondary materials processing/ Session moderators: Łukasz Skrzypiec, Magdalena Duchnowska Special parallel Session DigiRescueMe – education for mining
14:30 – 14:45	Between the environment, economy and technology – chosen aspects of the new solutions in mineral engineering, <i>Kajetan Witecki, Andrzej Grotowski, Monika Szkurat - KGHM CUPRUM – Research and Development Centre</i>
14:45 – 15:00	Optimization of the production process of collective Zn-Pb concentrate with increased silver content in the process of zinc sludge flotation, <i>Krystian Cichy, Łukasz Skrzypiec, Waldemar Mijał - Łukasiewicz Research Network – Institute of Non-Ferrous Metals, Cezary Reguła, Maciej Wójcicki – ZGH „Bolestaw” S.A.</i>
15:00 – 15:15	The impact of the selection of equipment and the technological system of the grinding process on the efficiency of copper ore grinding, <i>Dariusz Foszcz, Jan Sidor, Tomasz Gawenda, Damian Krawczykowski, Daniel Saramak, Paweł Tomach, Jacek Feliks - AGH University of Science and Technology in Krakow</i>
15:15 – 15:30	Pretreatment and enhanced magnetic separation of bauxite residue for enhanced recovery of valuable metals, <i>Panagiotis Angelopoulos, Paschalis Oustadakis, Georgios Anastassakis, Maria Taxiarchou, - National Technical University of Athens NTUA; Michael Pissas - Institute of Nanoscience and Nanotechnology NCSR “Demokritos”</i>
15:30 – 15:45	Fundamental Technologies in an Ever-Challenging Business Climate: Solutions to Secure Profitability and Achieve Maximized Net Metal Production in the Short Term, <i>Steve Fiondella - CiDRA Minerals Processing Inc., USA</i>
15:45 – 16:00	New multi-channel on-line particle size distribution analyzer with dynamic sampling, <i>Jacek Kolacz, Marcin Jarosz - Comex Polska Sp. z o.o.</i>
16:00 – 16:15	Advanced Process Control and Digital Twins <i>Ryan Koorts - ABB Switzerland Ltd</i>
16:15 – 16:30	Copper ore processing 4.0 in practice, <i>Jacek Galas, Dariusz Litwin - Łukasiewicz Research Network - Tele and Radio Research Institute, Dariusz Foszcz, Damian Krawczykowski, Daniel Saramak - AGH University of Science and Technology in Krakow, Ewelina Kasińska-Piłut - KGHM Polska Miedź S.A. Concentrators Division, Michał Kozielski - Łukasiewicz Research Network – Institute of Innovative Technologies EMAG</i>
16:30 – 16:45	Coffee break
	Session moderators: Marcin Lutyński, Dariusz Foszcz
16:45 – 17:00	Management of tailings from current production of KGHM Polska Miedź S.A. – economical, technological and environmental aspects FLOT-BUD Project, <i>Kajetan Witecki, Andrzej Grotowski, KGHM CUPRUM - Research and Development Centre</i>
17:00 – 17:15	An analysis of the efficiency of carbonate copper ore flotation from Legnica-Glogow Copper Basin (SW Poland), <i>Alicja Bakalarz, Magdalena Duchnowska - Wrocław University of Science and Technology</i>
17:15 – 17:30	Possibility of producing materials with graining below 100 μm in vibrating mill, <i>Paweł Tomach - AGH University of Science and Technology in Krakow</i>
17:30 – 17:45	A novel green flotation reagent: improving flotation performance in sulfide ores using organosolv lignin particles, <i>K. Hružová, July Ann Bazar, Leonidas Matsakas, Ulrika Rova, Paul Christakopoulos - Luleå University of Technology, Anders Sand - Boliden Mineral AB</i>



17:45 – 18:00	Flotation chemistries – selectivity in copper sulfides flotation systems, <i>Jacques Bezuidenhout, Anuar Seidaliyev - NALCO Water An Ecolab Company</i>
18:00 – 18:15	Bio-coke as a reductant for the ferroalloy smelting process, <i>Michał Rejdak, Małgorzata Wojtaszek – Kalaitzidi, Bartosz Mertas, Anna Rodź - Institute of Energy and Fuels Processing Technology, Michał Książek - SINTEF AS, Norway, Sten Yngve Larsen - ERAMET AS, Norway, Robert Baron - Koksownia Częstochowa Nowa Sp. z o.o</i>
18:15 – 18:30	Summary of the session, time for discussion
18:30 – 19:00	MEC Council Members Meeting
20:00	Gala dinner

FRIDAY, June 16th, 2023

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7:00 – 11:00	Breakfast
8:00 – 9:00	Poster session
	Flotation of copper-bearing shale at different pH values of solutions and sodium chloride concentrations, <i>Jakub Sajewicz, Tomasz Ratajczak - Wrocław University of Science and Technology</i>
	Recovery of metals used in the production of batteries through the use of lignin-based reagents (OLP), <i>Rafał Łuczak, Łukasz Skrzypiec, Waldemar Mijał, Krystian Cichy - Łukasiewicz Research Network – Institute of Non-Ferrous Metals</i>
	Spent Lithium-Ion Batteries as Pollutant and Resource, <i>Lukasz Hupka, Anna Zielińska-Jurek, Jan Hupka – Gdańsk University of Technology</i>
	Study of foam stability of solutions of organic lignin-based flotation reagents - ONL, <i>Monika Szkurat – KGHM CUPRUM - Research and Development Centre, Mateusz Kruszelnicki, Izabela Polowczyk – Wrocław University of Science and Technology</i>
	Design of a shredder for e-waste containing neodymium magnets, <i>Paweł Friebe - KOMAG Institute of Mining Technology, Tomasz Suponik, Paweł M. Nuckowski – Silesian University of Technology</i>
	Comparison of different pre-treatment methods for lithium-ion battery recycling, <i>Umut Kar, Muammer Kaya - Eskisehir Osmangazi University, Turkiye; Tomasz Suponik – Silesian University of Technology</i>
	Issues of water quality in non-ferrous metal mining industry <i>Anna Jakubcewicz, Kajetan Witecki - KGHM CUPRUM - Research and Development Centre</i>
9:00 – 11:15	Technical Session V – Future of raw and secondary materials engineering Session moderators: Tomasz Niedoba, Ewelina Kasińska-Pilut
9:00 – 9:15	Analysis of separation efficiency of copper concentrate using selected segregation reagents, <i>Magdalena Duchnowska, Alicja Bakalarz, Piotr Karwowski, Tomasz Stępień - Politechnika Wrocławska</i>
9:15 – 9:30	Evaluation of the possibility of gold recovery using an innovative ecological technology of adhesive coatings, <i>Dariusz Foszcz, Adam Piestrzyński - AGH University of Science and Technology in Krakow, Andrzej Ciechulski - Golden Dust Mining House</i>
9:30 – 9:45	Preliminary research of thermal properties of materials based on mining waste for sensible heat storage, <i>Marcin Lutyński, Konrad Kołodziej, Piotr Pierzyna - Silesian University of Technology</i>
9:45 – 10:00	Mechanical processing of copper-bearing slag from electric furnace, <i>Waldemar Mijał, Damian Mazurek, Krystian Cichy, Łukasz Skrzypiec, Rafał Łuczak, Grzegorz Krawiec - Łukasiewicz Research Network – Institute of Non-Ferrous Metals, Kornel Tobiczky - Norwegian University of Science and Technology</i>
10:00 – 10:15	Numerical Modeling and Calibration of Copper Ore Slurry Behavior in a Ball Mill, <i>Błażej Doroszuk, Piotr Bortnowski, Robert Król - Wrocław University of Science and Technology</i>
10:15 – 10:30	Possibilities of managing fly ash from the combustion of heavy crude oil fractions, <i>Małgorzata Olejarczyk - Re-solve SP. z o.o., Malbork; Adam Mickiewicz University in Poznań, Mateusz Cymański - Re-solve sp. z o.o., Malbork, Włodzimierz Urbaniak - Adam Mickiewicz University in Poznan</i>



10:30 – 10:45	Implementation of the circular economy approach in higher education programmes related to extractive industry - post graduate short-course of CIRCEXTIN project, <i>Marcin Lutyński - Silesian University of Technology</i>
10:45 – 11:00	Eco-efficient recycling technology for waste printed circuit boards, <i>Dawid M. Franke, Tomasz Suponik - Silesian University of Technology</i>
11:00 – 11:15	Summary of the session, time for discussion
11:15 – 11:30	Closing of the conference
13:00 – 16:00	Lunch
14:00 – 18:00	Field trip - Cieszyn Castle Brewery - Meeting point - Reception Desk