



VIII Mineral Engineering Conference 2025

22–24 September 2025

Kocierz Resort, Targanice

Program MEC 2025

Organizators



WILiGZ



Wrocław University
of Science and Technology



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RESEARCH & DEVELOPMENT CENTRE



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MONDAY, 22.09.2025

- 13⁰⁰-15⁰⁰ **Reception and registration of Participants**
- 13³⁰-15⁰⁰ Lunch: **Karczma Hotel Kocierz Resort**
- 15⁰⁰- **Ceremonial opening of the Conference, Kocierzanka Hall**
- 15⁰⁰-18⁰⁰ **Plenary session – "New techniques in mineral processing"**
- 15⁰⁰-15²⁰ Beginning of the Conference
- 15²⁰-15⁴⁰ Dean of AGH Faculty of Civil Engineering and Resources Management, prof. **Arkadiusz Kustra**: *The role of the Faculty WILiGZ in supporting innovative solutions in raw material value chains*
- 15⁴⁰-16⁰⁰ **Jakub Urbanowski**: *Business continuity strategy in the conditions of KGHM Polska Miedź S.A.*
- 16⁰⁰-16²⁰ **Aleksandra Burczyk, Marek Lenartowicz, Janusz Babczyński**: *Change in the quality of hard coal production at KWK Budryk*
- 16²⁰-16⁴⁰ **Jacek Kołacz, Jakub Progorowicz**: *3-product sorting as a possibility of coarse cleaning of the excavated material or precise preconcentration of the feed*
- 16⁴⁰-17⁰⁰ **Jacek Kołacz, Jakub Progorowicz**: *Real-time qualitative analysis of the excavated material*

*on the conveyor belt using SWIR analysis and
XRT and XRF X-ray analysis*

- 17⁰⁰-17³⁰ Coffee break: **Patio of Kocierzanka Hall**
- 17³⁰-18⁰⁰ Laudation on the occasion of the jubilee of
Professor Kazimierz Trybalski's scientific work
- c. 18²⁰ Group photo of the participants MEC2025
- 19⁰⁰ Supper: **Karczma Hotel Kocierz Resort**

TUESDAY, 23.09.2025

- 7³⁰-9⁰⁰ 7³⁰-9⁰⁰ Buffet breakfast: **Karczma Hotel
Kocierz Resort**
- 9⁰⁰-11⁰⁰ Session I - Innovations in ore processing and
enrichment, **Kocierzanka Hall**
- 9⁰⁰-9¹⁵ **Sanjeeva Latchireddi, Rao Latchireddi:**
*Optimizing the Energy Efficiency of the
Grinding Process: Advances in Ball Mill
Performance*
- 9¹⁵-9³⁰ **Paweł Tomach:** *Influence of the size of the
grinders used on the grain size parameters of
the grinding product - selection method and
case study for vibratory grinding*

- 9³⁰- 9⁴⁵ **Magdalena Duchnowska, Alicja Bakalarz, Piotr Karwowski:** *Comparison of copper ore enrichment efficiency with LGOM in selected types of flotation machines*
- 9⁴⁵-10⁰⁰ **Tomasz Ratajczak, Danuta Szyszka:** *Review of studies on the flotation susceptibility of copper-bearing shale*
- 10⁰⁰-10¹⁵ **Alicja Bakalarz, Magdalena Duchnowska, Tomasz Stępień:** *Assessment of efficiency of the gravity sedimentation process of flotation concentrates from copper ore enrichment with LGOM*
- 10¹⁵-10³⁰ **Bartosz Dabrowski, Lance Christodoulou, Paweł Kwiatkowski, Marcin Czekajło, Przemysław Torończak, Ewelina Kasińska-Pilut, Rafał Pępkowski** *Determination of the possibility of introducing an RFC (Reflux Flotation Cell) flotation chamber in the technological circuits of O/ZWR KGHM Polska Miedź S.A. on the basis of industrial research*
- 10³⁰-10⁴⁵ **Lucy England:** *Sustainable copper mining schemes and the MissionZero mine*
- 10⁴⁵-11⁰⁰ **Cengizhan Demiroğlu:** *Analysis of Turkish Silver Ore in the Context of Optimizing Multi-Component Enrichment Results*
- 11⁰⁰-11³⁰ Coffee break: **Patio of Kocierzanka Hall**

- 11³⁰-12⁴⁵ Session II - Critical Raw Materials and Material Recovery, **Kocierzanka Hall**
- 11³⁰-11⁴⁵ **Anna Hołda, Aldona Krawczykowska:** *Biological leaching of precious metals from waste PCBs using cyanogenic bacteria*
- 11⁴⁵-12⁰⁰ **Dariusz Foszcz, Wiesław Mączka, Damian Krawczykowski, Adam Piestrzyński:** *Analysis of the Possibility of Gravity Enrichment to Obtain Ilmenite-Rich Titanium Preconcentrates and Ilmenite-Free Vanadium Preconcentrates for the Silicate Ore Deposit*
- 12⁰⁰-12¹⁵ **Paweł Friebe, Tomasz Suponik:** *Technology for the recovery of powdered neodymium alloy from hard drives*
- 12¹⁵- 12³⁰ **Łukasz Skrzypiec, Krystian Cichy, Rafał Łuczak:** *Research on the recovery of graphite from used Li-Ion batteries*
- 12³⁰-12⁴⁵ **Rafał Łuczak, Łukasz Skrzypiec, Krystian Cichy:** *An integrated approach to the flotation of primary, secondary and anthropogenic raw materials – from laboratory tests to pilot tests*
- 11³⁰-13⁰⁰ **Project workshops:** waste2CRM – Determining the potential for obtaining critical raw materials from mining waste and developing a method of their effective recovery,

Workshop supervisor: Michał Rejdak,
Sosnowa Room

- 13⁰⁰-14⁰⁰ Dinner: **Karczma Hotel Kocierz Resort**
- 14⁰⁰-18⁰⁰ **Workshops:** Interactive **HoloGEM** education and VR practice – JSW experiences, Skill Up & Mining, **Sosnowa Room**
- 14⁰⁰-15⁴⁵ Session III – Recycling and Circular Economy, **Kocierzanka Hall**
- 14⁰⁰-14¹⁵ **Mustapha Wahman, Agnieszka Surowiak:**
Recycling photovoltaic modules for sustainability: recovery of aluminium and silver
- 14¹⁵-14³⁰ **Tomasz Suponik; Paweł Friebe; Paulina Gołuch:** *Eco-efficient recovery of substances from waste electronic equipment*
- 14³⁰-14⁴⁵ **Izabela Kruszwicka, Kajetan Witecki, Anna Jakubcewicz:** *Commercial use of flotation waste from KGHM Polska Miedź S.A. as a potential to reduce its volume*
- 14⁴⁵-15⁰⁰ **Paweł Kurzydło, Karolina Kwiatkowska, Ewelina Kasińska-Piłut, Rafał Pępkowski:**
Possibilities of using flotation waste for the production of binding materials in construction

- 15⁰⁰-15¹⁵ **Piotr Rak, Bogdan Kawczyk, Piotr Sebastian:** *Circular economy in practice: aggregate recovery and land regeneration post-operative works of KWK Mysłowice-Wesoła*
- 15¹⁵-15³⁰ **Katarzyna Chruszcz-Lipska, Monika Orlof-Naturalna, Anna Młynarczykowska:** *Application of Amberlite™ PWA5 Commercial Anion Exchange Resin to Remove Phenol from Aqueous Solution*
- 15³⁰-15⁴⁵ **Jeongyun Kim, Gwang Suk You:** *Research on the separation of cathode and anode materials in black matter from waste electric vehicle batteries using separation in heavy liquids*
- 15⁴⁵-16⁰⁰ Coffee break: **Patio of Kocierzanka Hall**
- 16⁰⁰-16⁴⁵ Session IV – New technologies and digitization of processes, **Kocierzanka Hall**
- 16⁰⁰-16¹⁵ **Alona Nad, Geoffrey Legrand, Mohammad Jooshaki:** *Continuous online analysis of the particle size distribution on the conveyor belt using the Rock Sense 2D system at GTK Mintec, Finland*
- 16¹⁵-16³⁰ **Anna Jakubcewicz, Kajetan Witecki, Izabela Kruszwicka:** *More copper – less rock! Innovative technology for reducing the*

- amount of excavated material directed to enrichment - the genesis and assumptions of the MineCuON project*
- 16³⁰-16⁴⁵ **Jacek Galas, Dariusz Litwin, Kamil Radziak, Wiesław Małkiński, Marcin Karliński, Adam Czyżewski, Narcyz Błocki, Michał Kozielski, Dominik Borys, Dariusz Foszcz, Daniel Saramak, Łukasz Pałka, Marcin Czekajło, Ewelina Kasińska-Piłut, Adam Klinkowski:** *Artificial intelligence (AI) in flotation monitoring and control*
- 16⁴⁵-18⁰⁰ Session V – Sustainability, Education and HoloGEM workshops, **Kocierzanka Hall**
- 16⁴⁵-17⁰⁰ **Oktay Şahbaz:** *Innovative Training in Mineral Processing: The HoloGEM Approach*
- 17⁰⁰-17¹⁵ **Tomasz Niedoba, Agnieszka Surowiak, João Santos Baptista, Oktay Şahbaz:** *Modern educational solutions in earth sciences and mining*
- 17¹⁵-17³⁰ **Marcin Lutyński:** *Towards an integrated hydrogen education framework: lessons from the Hy-EDU project*
- 17³⁰-17⁴⁵ **Anna Młynarczykowska, Anna Wiktor-Sułkowska, Arkadiusz Kustra:** *The urban environment as a source of useful ingredients – specialization of the new formula*



17⁴⁵-18⁰⁰ Summary of the day and closing of the meeting

18¹⁵-18⁴⁵ Meeting of the MEC Conference Council, Publishers and Invited Guests

19³⁰ Beer Feast with Humor **Baciarska Chata**

WEDNESDAY, 24.09.2025

7³⁰-9⁰⁰ Buffet breakfast: **Karczma Hotel Kocierz Resort**

9³⁰ End of Conference