Received Abstracts

(28 abstracts as of November 4th)

Represented Countries (10): Brazil, Chile, Finland, Norway, Peru, Portugal, Romania, Spain, Sweden, and Switzerland

Innovation in sustainability (04 abstracts)

1. **(A03) Green Iron Nanoparticles for Uranium Removal in Circular Mine Water Management**
   Simão Martins, Maria de Lurdes Dinis, Beatriz Bento, Maria Cristina Vila, CERENA, University of Porto, Portugal; Erika Levei, Iulia Török, National Institute of Research and Development for Optoelectronics, INOE 2000, Romania; Niroshan Gajendra, Laura Ferrando-Climent, Deniz Avsar, and Mila Pelkonen; Institute for Energy Technology, Norway
2. **(A06) Preliminary Technical and Economic Feasibility of Mining Tailings as Sand Replacement in Concrete Production**
   Henrique Oliveira, Aida Vega, and Noelia Veja, ArcelorMittal, Spain
3. **(A16) Development and Implementation of Low-NOx Burners for Emission Reduction in Iron Ore Pelletizing**
   Raphael Medeiros, Maciel Bianchi, Luiz Silva, and Sérgio Nunes, Samarco Mineração, Brazil
4. **(A29) Innovation and Circular Economy – Use of Waste from Ornamental Stone Mining in Iron Ore Pellets**
   Ana Maria Bailon, Felipe De Oliveira, Lilian Baptisti, Adilson da Silva, Fernanda Pasolini, and Leandro Pacheco, Samarco Mineração, Brazil

Sustainable management in the LOM: integrating sustainability from design to closure (01 abstract)

5. **(A27) Rare Earth Recovery by Preconcentration and Flotation of Low-Grade Ore**
   Kamila Amancio, Maria Cristina Vila, and Maria de Lurdes Dinis, CERENA, University of Porto, Portugal; Erika Levei and Iulia Török, National Institute of Research and Development for Optoelectronics, INOE 2000, Romania; Niroshan Gajendra and Laura Ferrando-Climent, Institute for Energy Technology, Norway

Emerging technologies in monitoring, control, and validation for environmental management (04 abstracts)

6. **(A02) Drivers of Environmental, Social and Governance Incidents at Mines: Multilevel Global Evidence**
   Tomasz Orpiszewski and Mark Thompson, ZHAW School of Management and Law, Switzerland
7. **(A04) The Mineral Fingerprint: Ore Sorting and Intelligent Dust Suppression in Mining**
   Hugo Brugerolles, INERCO, Chile
8. **(A23) From Participation to Influence: Indicators for the Implementation of FPIC in Mining Projects**
   Pamela Albornoz and Magdalena Márquez, Arcadis, Chile
9. **(A28) Development and Evaluation of Ultrafine Iron Ore as a Sustainable Iron-Bearing Product for the Steel Industry**
   Ana Maria Bailon, Felipe De Oliveira, Lilian Baptisti, Adilson da Silva, Fernanda Pasolini, and Leandro Pacheco, Samarco Mineração, Brazil

Risk management of mine wastes (02 abstracts)

10. **(A05) Where Are We Heading in Tailings Management: Six Decades of Tailings Failures and the Reach of the GISTM Characters**
    Frederico Viana and Juliana PenaRica, HidroBR, Brazil
11. **(A20) Treatment of Mining Water by Biological and Chemical Precipitation for Ca and Mg Recovery**
    Joaquín Tripailaf and Carla Duarte-Nass, Universidad de la Frontera, Chile

Prediction, prevention, and control of environmental impacts (05 abstracts)

12. **(A10) CFD Assessment of Terrain Modification Effects on Wind Erosion at a Mining Operation**
    Fidel Vallejo, Marcelo Oyaneder, and Luis Díaz, Partículas, Chile
13. **(A12) Integrating Biodiversity into Mining Management: Gold Fields' Approach at Salares Norte**
    Elisa Gonzalez and Carla Tagini, Gold Fields, Chile; and Andrea Garcés, NTT Data, Chile
14. **(A15) In-house Environmental Assessment of Initiatives: Environmental Compliance Assurance System for the Development of Novandino Litio Projects**
    Andrés Quezada, Nicolas Escanilla, and Julio Garcia, Novandino, Chile

15. **(A19) Evaluation of Plant-Based Amine in Iron Ore Reverse Flotation**
Tamíris Fonseca, Carlos Silva, Thales Mantovani, and Paulo Oliveira, Samarco Mineração, Brazil

16. **(A25) Intelligent Sustainbility and Valorization Center (CISV)**
Karen Köhnenkamp and Jorge Lama, Ecológica, Chile

Rehabilitation, remediation, and biodiversity (03 abstracts)

17. **(A07) Development of an Integrated Approach Applied to River Restoration in the Gualaxo do Norte River**
Lizandra Foeger, Pedro Diogenis, and Brigida Maioli, Samarco Mineração, Brazil; Douglas Andrade and Luiz Souza, TimeNow, Brazil

18. **(A22) LiDAR-Based Digital Twin and Biodiversity Monitoring Guiding Conservation in the Extraction Industry**
Erik Josefsson and Stina Langenius, Hexagon, Sweden; and Jazmin Parra, Hexagon, Chile

19. **(A24) Risk Assessment for the Sustainable Management of Mining Environmental Liabilities, Iberian Pyrite Belt**
Carolina Fonseca, INERCO, Chile; Joaquín Parrales and Bruno Coquelet, INERCO, Spain

Sustainable energy for green mining (01 abstract)

20. **(A17) Use of Bio-Oil in Pelletizing Operations**
Raphael Medeiros, Helbert Ferreira, and José Egídio, Samarco Mineração, Brazil

Climate change: vulnerability and adaptation (01 abstract)

21. **(A11) Expected Loss from Physical Climate Risk in a Copper Mining Company: A Quantitative Financial Analysis**
Christian Puebla, MINCORE INGENIERIA, Chile

Indigenous peoples, indigenous rights and mining (01 abstract)

22. **(A13) A New Approach to Indigenous Partnerships: BHP´s Chile Indigenous Peoples Plan**
Cristhian de la Piedra and Carla Martinez, BHP, Chile

Human rights and social due diligence (02 abstracts)

23. **(A01) From Citizen Participation to Human Rights Due Diligence in Mid-Tier Mining**
Isadora Jorratt, Minera Altair, Chile

24. **(A09) Human Rights Inspections as a Due Diligence and Risk Management Tool**
Erica Alves, Izabela Alves, Fillipe Estevam, and Arianna Molina, Samarco Mineração, Brazil

Social investment, community development, and collective impact (04 abstracts)

25. **(A14) Social Investment in Latin American Mining: Institutional Arrangements and Territorial Governance**
Juan Antonio Carrasco, Independent Advisor and Researcher, Chile; Javier Muñoz, Gestión Comunitaria, Chile; and Petri Salopera, East Egg Oy, Finland

26. **(A18) Works for Taxes and Social Responsibility: Public-Private Governance in Chumbivilcas**
Alexandra Laverdure, Aldo Trelles, and Edsel Contreras, Hudbay Peru

27. **(A26) Mining Social Investment and Sustainable Development: Trends and Intervention Priorities in Peru, 2021–2025**
Mariana Zurita, Ausenco, Peru

Gender, diversity, and inclusion programs (01 abstract)

28. **(A08) Impact, Mentorship, and Enrollment of the Women in STEM Program: Strategy and Results for Industrial Sustainability**
Carolina Águila, INACAP, Chile; and Kimberlyn Contreras, Caserones, Lundin Mining, Chile

ABSTRACTS DISTRIBUTION

MINING COMPANIES (14 abstracts)

ArcelorMittal, Spain (1)
BHP, Chile (1)
Caserones, Lundin Mining, Chile (1)
Gold Fields, Chile (1)
Hudbay Peru (1)
Minera Altair, Chile (1)
Novandino, Chile (1)
Samarco Mineração, Brazil (7)

ENGINEERING AND CONSULTING COMPANIES (11 abstracts)

Arcadis, Chile (1)
AtkinsRéalis Perú (1)
Ausenco, Peru (1)
East Egg Oy, Finland
Ecológica, Chile (1)
Gestión Comunitaria, Chile (1)
Hexagon, Chile (1)
Hexagon, Sweden
HidroBr, Brazil (1)
INERCO, Chile (2)
INERCO, Spain
Mincore Ingeniería, Chile (1)
NTT Data, Chile
Particulas, Chile (1)
Timenow, Brazil

UNIVERSITIES AND RESEARCH (03 abstracts)

Institute for Energy Technology, Norway
National Institute of Research and Development for Optoelectronics, INOE 2000, Romania
Universidad de La Frontera, Chile (1)
University of Porto, Portugal (1)
ZHAW School of Management and Law, Switzerland (1)