Preliminary Technical Program

Time Zone Santiago, Chile. GMT -4 | English-Spanish-Portuguese Interpretation Available in all Technical Sessions

Tuesday, July 7

The parallel technical sessions will begin at 8:30 AM on Tuesday, July 7.
The session distribution and times will be announced during the first week of June.

INAUGURAL CEREMONY

Welcome Words

18:30

Mimy Mackenzie, Conference and Publications Manager, Gecamin, Chile

Magín Torres, Procemin-Geomet 2026 Program Director; Metallurgy and Engineering Manager, Minera Altair, Chile

Leopoldo Gutiérrez, Procemin-Geomet 2026 Co-Organizer; Professor, Department of Metallurgical Engineering, Universidad de Concepción, Chile

Francisca San Martín, Procemin-Geomet 2026 Co-Organizer; Professor, Department of Mining, Metallurgy and Materials Engineering, Universidad Técnica Federico Santa María, Chile

Bern Klein, Procemin-Geomet 2026 Co-Organizer; Professor, The Norman B. Keevil Institute of Mining Engineering, The University of British Columbia, Canada

Welcome Message and Opening Talk from the Chair of the Conference

19:10

Advanced Process Control and Operational Continuity: The Next Chapter of Concentrator Performance at Collahuasi *(title to be confirmed)*

Marcelo Rodríguez, Procemin-Geomet 2026 Chair; Metallurgy and Process Control Manager Compañía Minera Doña Inés de Collahuasi, Chile

19:30 **Welcome Reception**

Wednesday, July 8

PLENARY SESSION 1

11:00	**"Geometallurgy Models: Simplicity Wins Over Complexity – Back to Basics"** **Regina Baumgartner**, Manager, Geometallurgy and Mineralogy, Teck Resources, Canada	Teck
11:30	Title to be confirmed Speaker to be confirmed, Arcadis	ARCADIS

PLENARY SESSION 2

12:20	Title to be confirmed Speaker to be confirmed
12:50	Title to be confirmed Speaker to be confirmed

Thursday, July 9

PLENARY SESSION 3

11:00	**"Geometallurgy Driving Value: Managing Ore Variability Across Vale's Iron Ore Value Chain"** **Elisabeth da Fonseca**, Geometallurgy Specialist, Vale, Brazil	VALE
11:30	Title to be confirmed Speaker to be confirmed, Ausenco	Ausenco

PLENARY SESSION 4

12:20	Title to be confirmed Speaker to be confirmed
12:50	Title to be confirmed Speaker to be confirmed

Received Articles

(123 articles as of May 13)

Represented Countries (23): Argentina, Australia, Belgium, Brazil, Canada, Chile, China, Colombia, Finland, France, Germany, India, Mexico, Panama, Peru, South Africa, Spain, Sweden, Switzerland, The Netherlands, Turkey, United Kingdom and USA.

(PROCEMIN) New Mineral Processing Technologies (19 articles)

1. **(A07) Enhacing SAG Mill Start-Up and Performance with Hybrid Liners: Solution for Modern Operations**
   Ernesto Mori and Jennifer Giron, Tega Industries, Chile and Panama; Mark Sherman, Fluor, Canada
2. **(A25) Use of an Online Grade Analyzer to Reduce Uncertainty in Flotation Feed Control at Salobo 3**
   Fabio Galvão, Olegario Junior, Gladstone Vieira, André Caetano, Igor Abreu and Erick Araujo, Vale Base Metals, Brazil
3. **(A47) Coarse Scavenging in a Modified Jameson Cell**
   Eduardo Morin, Adam Price and Chris Anderson, Glencore Technology, Chile and Australia
4. **(A49) Novel Process for Selective Gangue Removal from Copper and Sulfides Concentrates**
   Fabio Fernandes Pinto, Dan Stigers, Michaeline Albright, Karrie Radloff, Troy Bednarski, Coy Zimmerman, Bianca Cruz, Catherine Lebel and Kent Sorenson, Allonnia, USA and Marco Orellana, Innova-Met, Chile
5. **(A61) From Legacy Core Photography Towards Geometallurgical Applications: GSI and Q-prime at Deposit Scale**
   Luis Yañez, Datarock-Imdex, Australia
6. **(A67) A Geometallurgical Model for Predicting Acid Drainage Generation Potential in a Sulfide Copper Deposit**
   Lorena Guimarães, Elisabeth da Fonseca and Danielly Couto, Vale, Brazil and Matheus Bianchetti, Lunding Mining, Brazil
7. **(A80) Life Extension of Mining Components: Preliminary Assessment of Carbide Formation in Hardfacing**
   Diego Zúñiga and Felipe Castro, Department of Metallurgy, University of Santiago de Chile and Patricio Mendez, Department of Chemical and Materials Engineering, University of Alberta, Canada
8. **(A81) Application of Antiscalant Agent for the Lime Dosing Line at Salobo Plants 1 and 2**
   Renan Sousa, Daiane Silveira, Ricardo Melo and Igor Carneiro, Vale Base Metals, Brazil; Ana Paula Rufino and Carlos Castro, Ecolab, Brazil
9. **(A82) From Site-Specific Models to Probabilistic State Estimation for Grinding Media Wear**
   María José Astudillo, Paul Shelley and Yufan Mu, Molycop, Chile and Australia; Alejandro Ehrenfeld and Gonzalo Diaz, Advanced Mining Technology Center, Universidad de Chile and Pia Lois-Morales, Department of Mining Engineering, Universidad de Chile
10. **(A83) Coarse Particle Flotation without Desliming: Performance of NovaCell CPF Technology**
    Sherwin Morgan, Mario Saavedra, Lonn Cooper and Juan Ccarita, Jord International, Australia, Chile and Peru

11. **(A92) Magnetic Trommels: Their Significant Contribution to Energy Efficiency in Conventional Ball Milling Applications**
    Jaime Sepúlveda, J-Consultores, Chile; Carlos Stipicic B., Carlos Stipicic V. and Alejandro Rodríguez, Polimin, Chile
12. **(A94) A Chemical Data Driven Geometallurgical Regression Model for Apatitic Phosphorus Prediction and Flotation Response**
    Felipe Teixeira, Ausenco, Brazil; Natal Junio Pires and Mario Junior, Mining Engineer Department, CEFET-Araxá, Brazil
13. **(A96) Influence of Free Surface Exposure on Coarse Particle Flotation in a Froth-Feeding CPF Cell**
    Marly Carvalho, Cagri Emer, Sevda Dilmaghani and Jussi Liipo, Metso, Finland and Turkey
14. **(A105) Recovery of Coarse Particles in Rougher Tailings using Metso CPF Cell in Continuous Operation**
    Manuel Durán, Cagri Emer, Marly Carvalho, Joshua Sovechles, Xavier Peña and Valentina Concha, Metso, Finland, Canada and Chile; Luis Castro, Grupo Minera Las Cenizas, Chile
15. **(A106) Bulk Flotation Coordinator: Implementation of an Advanced Control System to Optimize and Coordinate the Collective Flotation Area of a Copper Concentrator Plant**
    Karla Rodríguez and Sergio Pinto, Andritz, Chile
16. **(A107) Real-Time LIBS Monitoring for Intelligent Mining Process Optimization**
    Sadia Manzoor and Ad Maas, Spectral Industries, The Netherlands; Dirk Van Der Werff and Jean Pierre Mery, Holtec, The Netherlands and Chile
17. **(A113) RockSense2D New Analytics Features: Results and Benefits for Comminution Circuits**
    Luis Lobos, Geoffrey Legrand, Ville Suontaka, Alessandro Castellani and Julio Aburto, Metso, Chile and France
18. **(A119) Step-Change in Molybdenum and Copper Recovery via Column Retrofit with CavTube™ Technology**
    Michele Tuchscherer, Jose Concha, Dann Segura, Christian Concha and Felipe Valdes, Eriez, Canada, Peru and Chile
19. **(A128) Implementing a Water Treatment Digital Twin for a Gold Mine Project**
    Christian Binder, Cesar Araujo, Antti Remes and Ari Rantala, Metso, Finland

(PROCEMIN) Modeling, Design, Optimization, and Control of Mineral Processing (20 articles)

1. **(A01) The Role of Impeller Size and Particle Size on Solids Suspension in a Mechanical Flotation Cell**
   German Lastra, Bellson Awatey, Juan Jose Frausto and Kym Runge, Julius Kruttschnitt Mineral Research Centre, The University of Queensland, Australia
2. **(A13) Python-Based Data Analytics for Operational Insights in Mineral Processing Plants**
   Juan Vergara-Meruane, Charles Blais, Katherine Mansilla, Ricardo Esteban and Javier Vergara, BBA Consultants, Chile and Canada
3. **(A14) Modernization of Molybdenum Flotation: A Case Study with Rio Tinto Kennecott Copper**
   Cory Smith and Cameron Strauss, Rio Tinto, USA; David Hatton and Tuhin Banerjee**,** Woodgrove Technologies, Canada
4. **(A23) Predicting Silica Grade in Iron Ore Flotation**
   Altieres Frade, Vale, Brazil; Kerollan Ramos, Vale Institute of Technology, Brazil and Thomás Pinto, Universidade Federal of Minas Gerais, Brazil
5. **(A60) Preliminary Results of a Specific Energy Model for AG/SAG Mills using the Geopyörä Index**
   Leonardo Lara and Marcos Bueno, Geopyörä, Finland and Markku Ohenoja, Environmental and Chemical Engineering Department, University of Oulu, Finland

6. **(A63) Online NIR Mineralogy as Digital Infrastructure for Copper Flotation**
   Marcelo Rocha, BHP Invent, Chile; Christian Potocan and Jonathan Dutton, SpectraFlow Analytics, Switzerland and South Africa
7. **(A73) Online Rheology as an Operational Indicator of Mineralogical Variability in Copper Flotation**
   Rodrigo Balboa, Vicente García, José Grandi, Arturo Rock and Miguel Parra-Marisio, Konatec, Chile; Leopoldo Gutiérrez and Walter Díaz, Universidad de Concepción, Chile
8. **(A86) Bottleneck Analysis in an Ore Crushing, Conveying, and Reclaiming Plant using Dynamic Simulation**
   Pilar Cisterna and Roberto Hernández, Pares & Alvarez, Chile
9. **(A87) Thickener Audits: Interaction Between Clay Mineralogy, Rheology, and Flocculation in Copper Concentrate Thickening**
   Andrei Chaura, David Romo and Catalina Gómez, Paterson and Cooke, Chile
10. **(A88) Codelco's Integrated Ore Variability Simulation for Improved FEL-2**
    Jair Alarcón and Paulo López, Orica Argentina, Australia and Chile; Karina Bustos, Rodrigo Cortés and Nicolás Sepúlveda, WSP, Chile; Pablo Durán and Franklin Cortés, Vice Presidency of Projects, Codelco, Chile
11. **(A93) Real-Time Optimization of the Rougher Flotation Circuit at Collahuasi: Validation Results and Copper Recovery Improvements**
    Marcelo Rodríguez and Sebastián Villareal, Compañía Minera Doña Inés de Collahuasi, Chile; Sebastián Samur and Cristian González, IntelliSense.io, Chile
12. **(A97) Power-Based Speed Control in Ball Mills to Reduce Energy Consumption and Improve Efficiency**
    Ana Luisa Magalhães, Bruno Vieira Sousa, Vitor Teixeira, Thiago Santos, Kesley Ribeiro, Francieli Giesi and Débora Chaves, Vale Base Metals, Brazil
13. **(A99) The Importance of an Early Assessment of Temporary Facilities in a Brownfield Project**
    Juan Schwarze, Arcadis, Chile
14. **(A100) A Study on the Effects of Grates' Openings Radial Position on the Efficiency of an AG Mill using DEM-SPH Coupled Simulations**
    Vasile Murariu, Håkan Ståhlbröst and Jenny Åkerström, Metso, USA and Sweden
15. **(A104) Impact Generation in SAG Mills: Diagnosis, Operational Control, and Optimization using Digital Tools**
    César Moscoso, ME Elecmetal, Chile and Alvaro Rendón, ECN Automation, Mexico
16. **(A109) Evaluation of Innovations and Optimizations in Concentrator Plants Using Statistical Causal**
    Fernanda Contreras, Pablo Castañeda, Pamela Mora and Jaime Díaz, Empírica Consultores, Chile
17. **(A117) Stochastic Dynamic Simulation and RAM Analysis in a Crushing–Grinding Circuit**
    Gabriel Illanes, Constanza Labra and Javier Rodríguez, Syntec Ingenieria, Chile
18. **(A118) Unlocking Hidden Capacity in an SABC Grinding Circuit: The Sossego Case Study**
    Gabrielle Sorte, George Aragão and Carolina Souza, Vale Base Metals, Brazil
19. **(A122) From Ore Tracking to Feasible Operating Targets: A COP Framework**
    Felipe Contreras, CleverMet, Chile
20. **(A123) Conditioning the Historian Industrial Data for Adaptive Model Predictive Control in High-Rate Thickeners**
    Camilo Mejías, Hibring, Chile; Javier Sierra and Scott O'Brien, McLanahan Corporation, Chile and USA; Catalina Becerra, Universidad de Concepción, Chile

(PROCEMIN) Comminution: Crushing, SAG, HPGR, Ball and Ultrafine Grinding (06 articles)

1. **(A05) Dry Grinding with Vertical Roller Mills: Mill Design and Plant Layout**
   Caroline Woywadt and André Cruz, Gebr. Pfeiffer, Germany and Brazil
2. **(A10) Assessing Gold Leaching Variability in HPGR-Processed Ores Using Energy-Matched Piston Press Tests**
   Jaidar Saud, Bern Klein and Rafael Felipe, Norman B. Keevil Institute of Mining Engineering, The University of British Columbia, Canada
3. **(A74) Beyond SABC: Alternative Comminution Circuits Challenging the Traditional SABC Flowsheet**
   Juan Becker, Catalina Henríquez and Sergio Lagos, Ausenco, Chile
4. **(A111) Variable Speed on Ball Mills: More than just a-nice-to-have Feature?**
   Maarten van de Vijfeijken, ABB, Switzerland and Mark Sherman, Fluor, Canada
5. **(A116) Best Laid Plans: Key Drivers Affecting the Ramp-Up of Comminution Circuits**
   Rajiv Chandramohan, Campbell Haines and Greg Lane, Ausenco, Canada and Australia
6. **(A125) Performance Evaluation of Forged Grinding Media: Industrial Validation for Strategic Supplier Qualification**
   Paulo Cirilo, Samarco, Brazil; Nemer Saib and Javier Zela, ME Elecmetal, Brazil and Peru

(PROCEMIN) Flotation: Fundamentals, Reagents, and Industrial Applications (17 articles)

1. **(A09) Optimization of Copper Recovery in Smelter Slags: An Experimental Analysis of Flotation at Chuquicamata**
   Pablo Rojas, César Briceño and Eduardo Garrido, Chuquicamata Division, Codelco, Chile
2. **(A17) Industrial Evaluation of a Mixed Dithiophosphate-Thioamide Collector as a Single Collector in Rougher Flotation**
   Héctor Piña, Yarielba Serrano and Felipe Varela, Compañía Minera San Geronimo, Chile
3. **(A30) Methodology for Reagent Selection in Rougher Flotation of a High-Pyrite Copper Porphyry**
   Noelia Stuardo, Alex Rey and Cristian Garrido, Fluor, Chile
4. **(A46) Collector Blend Strategies for Chalcopyrite-Pyrite Flotation Selectivity at Natural pH**
   Natalie Shackleton, Vratislav Malysiak, Tyler Mabunda and Shani Engelbrecht, AECI Mining Chemicals, South Africa
5. **(A50) Synergistic Collector Interactions for Enhanced Ag–Pb Sulfide Flotation from a Polymetallic Ore**
   Luis Contreras-Pimentel, Compañía Minera Saucito, Fresnillo PLC, Mexico; Saul Ortiz-Landeros and Jaime Bravo-Valdivia, Fresnillo PLC, Mexico; María Salazar-Hernández and Enrique Elorza-Rodríguez, Departamento de Ingeniería en Minas, Metalurgia y Geología, Universidad de Guanajuato, Mexico
6. **(A55) Partial Replacement of NaHS with AERO® NR-7361 in Mo Selective Flotation: Plant Trial Results**
   Santiago Honores, Rodrigo Pinto, Diego Barriga, José Quinteros and Luis Salinas, Chuquicamata Division, Codelco, Chile and Claudia Golarte, Syensqo, Chile
7. **(A57) Oil Content of MoS2 Concentrates: New Interpretations and Implications for Mo Collector Design**
   Mitchell Lancaster, Syensqo, USA

8. **(A62) Concorde Cell Scale Up Study at Kevitsa Mine**
   Berivan Tunc, Toni Mattsson, Joshua Sovechless and Alejandro Yáñez, Metso, Finland and Canada; Markku Kasala, Heikki Kela and Benjamin Musuku, Kevitsa, Boliden, Finland

9. **(A66) Predicting Copper Fluidized Bed Flotation Using First-Principles and Historical Data Models**
   Ronney Rodrigues Silva, Jose Concha, Rodrigo Cretier and Eric Wasmund, Eriez, USA

10. **(A76) Effective Particle Size Control in Copper Concentration Regrinding: Real-Time Measurement with Imaging Technology and Neural Networks**
    Renan Sousa, Rafael Oliveira, Ricardo Nunes and Igor Carneiro, Vale Base Metals, Brazil; Vitor Braz, SOPAT GmbH (AMS), The Netherlands and Sebastian Maaß, SOPAT GmbH, Germany

11. **(A85) Evaluation of the Depressant Effect of Cationic Nanoparticles on the Flotation of Mo, Cu and Fe**
    Camila Rodríguez, Romina Murga and Lina Uribe, University of Talca, Chile; Leopoldo Gutiérrez, Department of Metallurgical Engineering and Water Research Center of Agriculture and Mining, University of Concepcion, Chile

12. **(A98) Comparative Assessment of Gas Dispersion in Industrial Flotation Technologies**
    Luis Vinnett and Juan Yianatos, Dept. of Chemical and Environmental Engineering, Universidad Técnica Federico Santa María, Chile; Francisca San Martín, Dept. of Mining, Metallurgy and Materials Engineering, Universidad Técnica Federico Santa María, Chile; Ricardo Ñanculef, Dept. of Computer Science, Universidad Técnica Federico Santa María, Chile; Duong Hoang, Helmholtz Institute Freiberg for Resource Technology, Helmholtz-Zentrum Dresden-Rossendorf, Germany and Maelgwyn Mineral Services, United Kingdom; Ahmad Hassanzadeh, Maelgwyn Mineral Services, United Kingdom

13. **(A101) Effect of Mechanically Degraded PAM on Chalcopyrite Flotation: From Model Systems to Plant Ore**
    Felipe Arcos, Dept. of Metallurgical Engineering, Universidad de Concepción and Dept. of Mining Engineering, Universidad de Talca, Chile; Pablo Chacón, Dept. of Metallurgical Engineering, Universidad de Concepción, Chile; Lina Uribe, Dept. of Mining Engineering, Universidad de Talca and Water Research Center for Agriculture and Mining, Universidad de Concepción, Chile; Leopoldo Gutiérrez, Dept. of Metallurgical Engineering, Universidad de Concepción and Water Research Center for Agriculture and Mining, Universidad de Concepción, Chile

14. **(A102) A Novel Cu and Fe Sulfide depressant as a Safe and Efficient Alternative of NaSH in Cu-Mo Separation**
    Carmina Quintanar, Claudia Golarte and Julio Zapata, Syensqo, Chile

15. **(A112) Industrial Implementation and Operational Validation of Pressure-Based Monitoring of Superficial Gas Velocity and Gas Hold-Up in Rougher Flotation Cells**
    Jorge Sarzosa and Leopoldo Gutiérrez, University of Concepción, Chile; Francisco Melo, Compañía Minera Doña Inés de Collahuasi, Chile and Sergio Lagos, PSINet, Chile

16. **(A120) BIOFLOT®: Sustainable Biopolymeric Frother to Improve Selectivity in Flotation**
    Sebastián Vergara, Dept. of Metallurgical Engineering, University of Santiago de Chile and Rodrigo Urtubia, EnviroTec Environment and Technologies, Chile

17. **(A124) Design and Evaluation of Frother Mixtures as Alternatives to MIBC for Cu–Mo Flotation Using Response Surface MethodologyRSM**
    Cristian Saavedra, Patricio Zarate, Michael Mallea and Wagner Silva, Clariant, Chile and USA

(PROCEMIN) Processing of Precious Metals, Industrial Minerals, and Ferrous Minerals (03 articles)

1. **(A06) Gold Grade Measurement in Conveyed Ores using Geoscan Gold**
   Henry Kurth and Claudio Ramon, Scantech International, Australia

2. **(A40) Optimizing Direct Leaching of Refractory Gold Through Mineralogical Insights and Process Adjustment**
   Juliana Freitas, Vagno Faustino and Gaspar Junior, Jaguar Mining, Brazil
3. **(A84) The Influence of Aluminum Minerals on the Metallurgy of Oxidized High-Sulphidation Epithermal Gold Projects**
   Steve Williams, Alex Miket and Nichola McKay, Blue Coast Research, Canada

(PROCEMIN) Mineral Economics, Tailings Reprocessing, and Materials Recycling (04 articles)

1. **(A39) State of the Art in Recovery of Encapsulated Cobalt from Pyrite and Copper Sulfide Tailings**
   Jorge Ipinza, Millaray Hernández, Camilo Araos, Patricia Fernández and Waldo Aracena, Centro de investigación en minería sustentable, CIMS-JRI, Chile
2. **(A45) Can Substitutes Supply the Looming Global Copper Shortages?**
   Martin Lynch and Rick Valenta, Sustainable Minerals Institute, University of Queensland, Australia
3. **(A70) Synthesis of Zirconia from Tailings of Alluvial Gold Mining in the Bajo Cauca Region of Colombia**
   Carlos Quesada, Gustavo Neira and Hugo Estupiñan, Department of Materials and Minerals, Universidad Nacional de Colombia
4. **(A79) Towards the Implementation of Third-Generation Advanced Steels in Semi-Autogenous Grinding Media**
   Dilan Muñoz and Felipe Castro, Dept. of Metallurgy, University of Santiago de Chile; Daniel Jordán, Alxar Minería, Chile; Patricio Méndez, Dept. of Chemical and Materials Engineering, University of Alberta, Canada; Leo Kestens, Dept. of Electromechanical, Systems and Metal Engineering, Ghent University, Belgium and Dept. of Mechanical, Maritime and Materials Engineering, Delft University of Technology, The Nederlands

(PROCEMIN) Plant Operation and Management (02 article)

1. **(A35) Real-Time Detection and Categorization of Pressure Spikes in SAG Milling via Advanced Analytics**
   Juan Pablo Bastías and Francisca Hurtado, Laguna Seca, Minera Escondida, BHP, Chile; Katherine Bustos, Rafael Berrios, Nicolás Grágeda, José Rojas, Daniel Baquedano and Nicolás Neira, Honeywell, Chile
2. **(A114) Business Alternatives in Small-Scale Mining: Vertical Integration or Direct Sales?**
   Vicente Cancino, Felipe Muñoz and Reinaldo Salazar, National Mining Society, Sonami, Chile

(PROCEMIN) Advanced Process Control and Expert Systems (06 articles)

1. **(A04) Smart Eyes in the Slurry Real-Time Particle Sizing with AI-Powered Inline Microscopy**
   Vitor Braz, SOPAT GmbH (AMS), The Netherlands; Sebastian Maaß, SOPAT GmbH, Germany and Jose Benedito Roberto, Vale, Brazil
2. **(A36) Scenario Detection and Coordination for Copper Flotation Circuits**
   Nicolás Grágeda, Nicolás Neira, Daniel Baquedano, José Rojas and Francisco Arenas, Honeywell, Chile; Juan Pablo Bastías, Laguna Seca, Minera Escondida, BHP, Chile
3. **(A78) AI-Driven Operational Optimization to Maximize Fine Copper Recovery in a Concentrator Plant**
   Jorge Infantes, Yanderier Rivera and Luis Chacon, Marcobre, Peru

4. **(A90) Data-Driven Advanced Process Control for Phosphate Thickening: A Robust, Real-Time APC System**
   Sushil Kumar Dubey, Bipin Kumar Angadi, Velan Kumar and Rajiv Krishnamurthy, Takraf India Private, India
5. **(A91) Expert Optimizer: Advanced Process Control Expert System at Salobo III**
   Bruno Vieira, Ana Magalhães, Jailton Araujo and Laura Torres, Vale Base Metals, Brazil
6. **(A103) PI Vision Digital Shadow for Monitoring Iron Ore Homogenization Stockpiles**
   Maria Inêz Oliveira, Vale and Department of Mining Engineering, Federal University of Minas Gerais, Brazil; Igor Silva, Radix Engineering and Software, Brazil; Rafael Freitas, Vale, Brazil and Ana Araújo, EY, Brazil

(PROCEMIN) Classification, Screening, and Mineral Sorting (01 article)

1. **(A64) Quantifying the Impact of Hydrocyclone Operating Patterns on Net Metal Production**
   Rodrigo Bruna, Alejandro Ramos, Robert Maron and Alejandro Jaque, CiDRA Minerals Processing, Chile and USA

(PROCEMIN) Expansions and New Projects (02 articles)

1. **(A48) Process Design at Scale: Flotation Selectivity and Ore Competence Constraints at the Warintza Cu–Mo Concentrator**
   Harold Lopez and Greg Lane, Ausenco Services, Australia; Daniel Diaz del Olmo, Ausenco, Peru; Jesus Rodriguez and Carolina Malca, Lowell Copper, Solaris Resource, Peru
2. **(A89) Mine Start-Up Execution: How Ramp-Up Determines Whether CEOs Create or Destroy Value**
   Nicolas Beauchamp and Ricardo Varas, BBA Consultants, Canada and Chile

(PROCEMIN) Solid Liquid Separation (01 article)

1. **(A75) Advances in Feed Well Technology and Implications for Thickener Sizing**
   Diego Rubio, Roytec Global, Chile; Peter Sampson, Roytec Global, United Kingdom and Alex Krassnokutski, Krassno Consulting, South Africa

(GEOMET) Sampling and Sensors (04 articles)

1. **(A02) In-Pit Sensing of Deleterious High Alumina Ores to Enable Selective Mining**
   Daniel Finfer and Janti Shawash, Anglo American, United Kingdom
2. **(A18) Continuous Elemental Analysis for Validation of Geometallurgical Models**
   Robin Sheehy, Héctor Mendoza and Jake Jones, Real Time Instruments, Australia and Chile
3. **(A24) Advancing Mineral Processing with PGNAA: Enhancing Efficiency, Quality, and Sustainability**
   Tom Strombotne, Claudio Piccino, Garry Noble and Kevin Gordon, Thermo Fisher Scientific, USA and Australia
4. **(A53) Impacts of Installing a Non-Representative Sampling System**
   Rubén Aravena, SCI-A, Chile and Antoni Magri, GIS Analytics, Chile

(GEOMET) Testing and prediction of metallurgical parameters: Crushing, Grinding, Flotation, Concentration, Sedimentation, Filtration, and Environmental Performance (04 articles)

1. **(A03) Robust Flowsheet Development with High-Confidence Flotation Testing**
   Norman Lotter, Flowsheets Metallurgical Consulting, Canada; Maxine Hoffman, Maximum Process Solutions, Canada; Neri Roux, SGS Lakefield, Canada and Phillip Mackey, P.J. Mackey Technology, Canada
2. **(A43) Evaluation of Error Propagation in Metallurgical Testing Programs and its Impact on Geometallurgical Modeling**
   Pablo Castañeda, Ricardo Miles, Javiera Quiroz and Jaime Diaz, Empírica, Chile
3. **(A54) Updating the Bond Work Index Database to Support the Design of the RT Sulfuros Fase II Concentrator**
   Alex Doll, SAG Milling, Canada; Franklin Cortés, Vice Presidency of Projects, Codelco, Chile; Ricardo Krefft and Claudio Seguy, Radomiro Tomic Division, Codelco, Chile; Rodrigo Cortés and Nicolás Sepúlveda, WSP, Chile
4. **(A110) Residence Time Distribution for the Performance Evaluation of Flotation Cells**
   Francisco Diaz and Juan Carlos Salas, Trazado Nuclear e Ingeniería, Chile

(GEOMET) Geometallurgical Modeling (12 articles)

1. **(A08) Geometallurgy Models: Simplicity Wins Over Complexity – Back to Basics**
   Regina Baumgartner, Linda Duncan and Keith Merriam, Teck Resources, Canada
2. **(A16) Development of a Geometallurgical Algorithm for Rougher Recovery in a Copper Concentrator Plant**
   Adriela Osses, Alex Rey and Cristian Garrido, Fluor, Chile
3. **(A20) Knowledge-Guided Early-Stage Geomet Modelling: ML and Multivariate Recovery Simulation**
   Rob Downard, Ryan Barnett and John Manchuk, GeologicAI, Australia and Canada
4. **(A28) Geometallurgical Recovery Estimation from Liberation Grade**
   Trinidad Salas, Alex Rey and Cristian Garrido, Fluor, Chile
5. **(A29) Recovering Value from Rougher Tailings: Predictive Modeling of Coarse Particle Flotation**
   Catalina Lobos-Zúñiga, Catalina Martínez-Barrueto and Mauricio Romero, Empírica Consultores, Chile
6. **(A32) Industrial Reagent Testing at the Sossego Plant: The Use of Quicklime and Milk of Lime**
   André Menezes, Douglas Rocha, Elaine Lima, Manassés Aguiar, Maria Beatriz Silva, Mário Freitas, Jorge Arce and Stephanie Sá, Vale Base Metals, Brazil
7. **(A37) Small Data: Unlocking Deep-Learning for Geometallurgy Through Two-Stage Training**
   Javier Merrill-Cifuentes and Alex Maritati, IMDEX, Australia
8. **(A38) Integrated Methodology for the Development of SWIR Chemometric Models Applied to Geometallurgy**
   Francisca Gómez, Débora Sugamiele, Javiera Fernández, Esteban Leiva and Efraín Cárdenas, Teck Resources, Chile
9. **(A44) Adherence Assessment of a Geometallurgical Model Based on Plant Operational Results**
   Mônica Mendes, Fabiana Teixeira, Julio Ferreira, Pauliney Rocha, Matheus Feitosa, Roberta Ferreira and Diana Rodrigues, Vale, Brazil
10. **(A71) Mineralogical Data Optimization and Machine Learning Prediction of Cu Recovery in Chloride Leaching**
    Fernando Stocker, Universidad del Desarrollo and SRK Consulting, Chile and Joled Nur, SRK Consulting, Chile

11. **(A115) Deep Learning for Long-Term Spatial Estimation of Clay Minerals in a Large-Scale Copper Mine**
Pablo Vega, Ricardo Kreft and Julian Ravanal, Radomiro Tomic Division, Codelco, Chile; Valentina Elgueta, Cesar Briceño, Carlos Barrio and Javier Inostroza, Chuquicamata Division, Codelco, Chile; Tomás Rodriguez, Jacqueline Harris, Pablo Soto and Maximiliano Contreras, Mineral Forecast, Chile

12. **(A127) Phenomenological Geometallurgical Plan for Capstone Copper Assets in Chile**
Brandon Akestrom, Luis Lazo, Emily Jaques and Leonardo Parraguez, Capstone Copper, Australia and Chile

(GEOMET) Geometallurgical Applications in Production Planning (05 articles)

1. **(A11) Geometallurgical Mapping of Deleterious Elements at the Salobo Mine**
Ricardo Nunes Melo, Giseli Ramos and Igor Carneiro, Vale Base Metals, Brazil and Fernanda Gontijo, Federal University of Rio Grande do Sul, Mining Engineering Department, Brazil

2. **(A22) Impact of Over-Extraction Beyond Economic Height on Metallurgical Recovery and the Development of a Geometallurgical Risk Index at the Chuquicamata Underground Mine**
Paula Peñaloza and Claudio Cordova, Chuquicamata Division, Codelco, Chile

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