ABSTRACTS APPROVED
(53 abstracts as of March 16, 2020)

Represented Countries (14): Australia, Bolivia, Brazil, Chile, China, Ecuador, Germany, Mexico, Peru, Russia, Spain, South Africa, UK and USA

New reagents, materials and technologies (4)

(A04) Commissioning and Development of Automated pH and ORP Control for CSIRO’s Intelligent Leaching Columns Facility
David Molenaar, Miao Chen, M. Vepsalainen, T. Kilpatrick and D. Marley, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

(A05) The Dissolution of Chalcopyrite Concentrate in Choline Chloride Ethylene Glycol Deep Eutectic Solvent
Carlos Carlesi, Universidad Católica de Valparaíso, Chile; and Robert Harris, Andrew Abbott and Gawen Jenkin, University of Leicester, United Kingdom

(A19) Lithium Recovery from Brine Using Lithium Ion-Sieves: A Process Model
Michael Page, Karin Soldenhoff and James Quinn, Australian Nuclear Science and Technology Organization, Australia

(A23) Calcium Arsenite Stabilization by Geopolymerization
Juan Rojas and Jesús Casas, Universidad Técnica Federico Santa María, Chile; and Ricardo Pezoa and Marcelo Acuña, EcoMettales, Chile

Innovation and process improvement (10)

(A10) An In-situ Synchrotron XAS Study on the Evolution of Arsenic Species During Pressure Leaching
CSIRO Mineral Resources, Australia

(A11) Microstructure Evolution of Low Grade Chalcopyrite Ores During Leaching: Synchrotron X-ray CT Study
Miao Chen, CSIRO Mineral Resources and Centre for Advanced Materials and Industrial Chemistry, School of Applied Sciences, RMIT University, Melbourne, Australia; Yi Yang, CSIRO Mineral Resources, Australia; and Yushuang Yang, CSIRO Manufacturing, Australia

Humberto Estay, Minghai Gim-Krumm, Michelle Quilaqueo, Gabriel Seriche, Simón Díaz-Quezada and Lorena Barros, Advanced Mining Technology Center (AMTC), Universidad de Chile; René Ruby-Figueroa and Ignacio Cortes, Universidad Tecnológica Metropolitana, Chile
(A27) Catalytic Oxidation of Ferrous Ion in Acid Medium with Active Aireation Using Activated Carbon Doped with Transition Metals
Ernesto de la Torre M. and D. Almeida, Universidad San Francisco de Quito, Ecuador; and Ernesto de la Torre C., Escuela Politécnica Nacional, Ecuador

(A30) Stabilization of Arsenical Industrial Waste Using Geopolymers
Juan José Segura, Christian Soto and Daniel Brito, R&D Department, Molibdenos y Metales, Chile

(A32) Oxidation Under Pressure of Flotation Concentrate in the Business Unit Córrego do Sítio, Anglogold Ashanti
Márcio Pereira, Marcus Magalhães, Mariana Lemos, Anglogold Ashanti, Brazil; Sônia Rocha, Department of Mining Engineering, Federal University of Minas Gerais, Brazil; Vinicius Assis, Anglogold Ashanti, Córrego do Sítio Mineração, Brazil

(A33) Evaluation of the Merrill-Crowe Process Route to CIL for Gold Recovery at the Serra Grande Business Unit, Anglogold Ashanti
Márcio Pereira, Vinicius Xavier, Vinicius Assis, Davi Cabral, José Dumont, Anglogold Ashanti, Brazil

(A36) Seawater and Solar Energy to Obtain Copper Crystals for Small-Scale Miners
Maía E. Taboada and Teófilo Graber, Department of Chemical Engineering and Mineral Processing, Universidad de Antofagasta, Chile

(A38) Chalcopyrite Dissolution: The End of a Long Waiting
Tihomir Domic and Esteban Domic, Nova Mineralis, Chile

(A49) Study on the Operational Variables that Influence the Electroosmotic Drainage Technique: Application to Leaching Gravels
Manuel Cánovas, Julio Valenzuela, Cristian Cuevas and Paul González, Department of Metallurgical and Mining Engineering, Universidad Católica del Norte, Chile

Modeling and automatic process control (3)

(A06) Use of SysCAD to Simulate Complex Chemistry of Gold Cyanide Leaching
Stuart Saich and Marcelo Pérez, Promet101 Consulting, Chile

(A28) A Model for the Leaching Kinetics of Porous Ore Particles Undergoing Structural Changes
Francisco Rojas and Tomás Vargas, Department of Chemical Engineering, Biotechnology and Materials, Universidad de Chile; AMTC, Universidad de Chile

(A47) Development of Soft-Sensor Prototype and Application to Seawater-Nitrate Brine Systems
Aldo Fuentes and Jesús Casas, Department of Materials and Metallurgical Engineering, Universidad Técnica Federico Santa María, Chile
(A01) Variables that Affect LGSO Bioleaching Pad and How to Improve and Maintain Cu Recovery
Cristian Zamorano, Fernanda Vera, Iván Sánchez and Cristian Garrido, Fluor, Chile

(A02) Effect of Pretreatment on the Leaching of Copper Sulfide Minerals
Víctor Quezada, Antoni Roca, Montserrat Cruells, Department of Materials Science and Physical Chemistry, Universidad de Barcelona, Spain; and Oscar Benavente, Department of Metallurgical and Mining Engineering, Universidad Católica del Norte, Chile

(A03) Hydrothermal Enrichment of Chalcopyrite Concentrates: Kinetics Aspects and Process Efficiency
Kritskii Aleksei and Naboichenko Stanislav, Department of Non-Ferrous Metals, Institute of New Materials and Technologies, Ural Federal University (UrFU), Russia

(A13) Cyanide Ion Oxidation by Catalytic Action of Nickel Ferrites
Cristhian Feijoo, Ernesto de la Torre and Belén Lozada, Department of Extractive Metallurgy, Escuela Politécnica Nacional, Ecuador

(A15) Comparative Studies of Chalcopyrite Leaching by Methanesulfonic Acid (MSA) with Alternative Oxidants
Junmo Ahn, Jiajia Wu and Jaeheon Lee, Department of Mining and Geological Engineering, The University of Arizona, USA

(A16) Gold Leaching from POX Residues of Copper Concentrate Using Various Lixiviants
Jiajia Wu, Junmo Ahn and Jaeheon Lee, Department of Mining and Geological Engineering, The University of Arizona, USA

(A17) Adsorption of La, Pr and Nd Ions Using Organophosphorus Extractants-Functionalized Nanoparticles
Lorena Molina, Carlos Basualto, José Gaete, Department, Food Science and Chemical Technology, Universidad de Chile; and Diego Venegas, Universidad de Santiago de Chile

(A18) Variability Control in Carbonate Grades Fed to Heap Leaching from Mantoverde
José Olguín, Rodrigo Guerra and Julio Flores, Mantos Copper, Mantoverde, Chile

(A35) Lithium, Cobalt and Nickel Dissolution from Spent Lithium-Ion Batteries
Cristian Serrano and Eduardo Mercado, Department of Metallurgical and Mining Engineering, Universidad Católica del Norte, Chile

(A42) A perspective into the impact of flotation reagents on the flocculation of tailings in view of process water recirculation needs in Cu-Ni-PGM ore concentrator
Malibongwe Manono and Kirsten Corin, Centre for Minerals Research, Department of Chemical Engineering, University of Cape Town, South Africa
(A45) Effect of Particle Size, Initial Moisture Content, and Irrigation Regime on Liquid Holdup in Heap Leaching
Leiming Wang and Wenying Liu, Department of Materials Engineering, University of British Columbia, Canada

(A46) Using Thiosulfate as Gold Leaching Agent in Brazilian Carbonaceous Ore: Batch Tests Analysis
Francisco Pedrosa, Institute for Technological Research, São Paulo State, Brazil; Fernando Barros, Amonex, Brazil Industry and Commerce; Arthur Chaves, Eliana Mano and Dimas Neto, Department of Mining and Petroleum Engineering, University of São Paulo, Brazil

(A50) Arsenic Extraction from Copper Smelter Dust by Alkaline Leaching
Fernando Parada and Andrés Reghezza, Department of Metallurgical Engineering, Universidad de Concepción, Chile

(A52) Safford Hydromet Expansion for the Lone Star Project
Kalli Ketel, Freeport-McMoran Mining Company, USA

(A53) Development of Pressure Oxidation Technology to Process Bulk Cu/Mo Concentrates at Freeport-McMoRan
Christy Green, Pranav Attavar, Freeport-McMoran Mining Company, Safford, USA

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(A25) Pretreatment and Leaching of Chalcopyrite Ore at 25 °C in an Acid-Chloride-Nitrate Media
Pía Hernández, Claudia Marchant and Monserrat Martínes, Department of Chemical Engineering and Mineral Processes, Universidad de Antofagasta, Chile

(A26) Petrographic-Mineralogical Contribution in the Leaching of Chalcopyrite with Sodium Persulfate
Diego Tamayo, Francisco Carrillo and Diego Martínez, Faculty of Metallurgy, Universidad Autónoma de Coahuila, Mexico

(A39) Leaching of Copper Sulfides Using Glycine in Alkaline Solutions
Rosario Juyo and Juan Álvarez, Department of Chemical Engineering, Universidad Nacional de San Agustín, Peru; and Susan Flores, Department of Biotechnology Engineering, Universidad Católica de Santa María, Peru

(A41) New Hydrometallurgical Tools for Optimal Production Planning
Jorge Menacho and Francisco Troncoso, De Re Metallica Ingeniería, Chile

(A51) Industrial Application of Assisted Bioleaching to Radomiro Tomic Low Grade Sulfide Ores
Mario Letelier, Francisco Arriagada, Arcadis, Chile; Felipe Lagno, North District, Codelco, Chile; and Cristian Hu, Radomiro Tomic Division, Codelco, Chile
(A07) Study of Extraction Performance of Copper Ion Leaching Solution Containing Chloride Ion by Different Extractants
Aang-Fan, Xu-Zhigang, Tang-Qiming, Zou-Qian, Wang-Chaohua, Kopper Chemical Industry, China

(A08) Study on the protective effect of sulfamic acid on hydroxyoxime extractant in the PLS containing nitrate
Wang-Shichuan, Xu-Zhigang, Zou-Qian, Wang-Chaohua, Zhou-Fangli, Kopper Chemical Industry, China

(A22) New Mechanism Finding Offers More Alternatives to Control Nitration in Copper Solvent Extraction
Philippe Joly, Jack Bender, JJ Taute, Hector Yañez, Leonor Ardiles, Francisco Reyes, BASF, Chile / USA

(A37) Development of Physical Barriers with New Materials, for the Reduction of Microdrops Drag in the Solvent Extraction Stage of the Copper Hydrometallurgical Industry
Juan Carlos López and Víctor Hernández, BBS, Chile; and Patrix Thierry, Thierry Präzisionslackiertechnik GmbH, Germany

Leaching and solvent extraction in chloride medium

(A40) Chloride Control in SX-EW Electrolytes from Chloride Leach Operations
Jorge Menacho and Sebastián Manríquez, De Re Metallica Ingeniería, Chile

(A43) Review of Chloride Mass Balance in Organic Washing Stage
Francisco Reyes, Héctor Yañez, Philippe Joly, Leonor Ardiles, BASF, Chile

(A44) Migration of Traditional Leaching to Leaching in Chlorinated Medium - Costs and Impacts on Infrastructure
Sergio Aguilera and Guillermo Kelly, ChkIng Ingeniería, Chile

Hydrometallurgical recovery of minor elements for mining waste

(A20) Circular Economy in Mining: Hydrometallurgical Waste Treatments as an Environmental Remediation Alternative
Gerardo Zamora, Walter Blanco and Ruth Meza, Department of Metallurgy, Oruro Technical University, Bolivia

(A31) Value Recovery from Leached Flue Dust
Ricardo Pezoa, Quentin Graaff, Nelson Parra and Marcelo Acuña, Business & Development Department, EcoMétales Limited, Chile

Design and operation of solvent extraction and electrowinning circuits
(A09) Improving the Electrical Connections of a Cathode Electrode for Copper Production – A Case Study
Luis Marin, CSIRO Chile; David Molenaar, CSIRO, Australia; and A. Lopez, Cerro Negro, Chile

(A12) Mapping Stray Currents in a Tankhouse
David Molenaar, CSIRO, Australia; N. Kimlin, Glencore Technology, Australia; and Luis Marin, CSIRO Chile

(A14) Application of Fence-Type Aluminum-Based Lead-Alloy Composite Material Anode in Hydrometallurgy
Guo-Zhongcheng, Huang-Hui, Li-Xuelong, Guo-Yang, Zhou-Fangli, Zou-Qian, Kunming Science and Technology University; Kopper Chemical Industry, China

(A48) Effect of Electrowinning Parameters on Cathode Pre-Stripping
Ephrem Gebrehiwot, William Sanders and Scot Sandoval, Freeport-McMoran, USA

Recycling of metals and alloys (1)

(A24) Zinc and Manganese Dissolution from Spent Alkaline Batteries
Cristian Serrano and Nicolás Ortega, Faculty of Engineering and Geological Sciences, Universidad Católica del Norte, Chile

Integral management of hydrometallurgical business (2)

(A29) Integral Management of the Hydrometallurgical Circuit in Molymet Nos
Juan José Segura, Cristian Pizarro and Edgardo Cisternas, R&D Department, Molibdenos y Metales, Chile

(A34) Characterization of Gold Minerals Inside 20 Tons Artisanal Miners Dump Trucks Before Processing
Anuar Anchelia, Universidad Peruana de Ciencias Aplicadas UPC, Peru

ABSTRACT DISTRIBUTION

Mining Companies (10 abstracts)

CAP Minería, Cerro Negro, Chile (1)
Mantos Copper, Mantoverde, Chile (1)
Molibdenos y Metales, Chile (2)
AngloGold Ashanti, Brazil (2)
AngloGold Ashanti, Córrego do Sítio Mineração, Brazil
Freeport-McMoran, USA (2)
Freeport-McMoran, Safford, USA (1)
North District, Codelco, Chile (1)
Radomiro Tomic Division, Codelco, Chile
## Engineering and Consulting Companies

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## Supplier Companies

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## Universities and Research Centres

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