

A L T A
2001
NICKEL/COBALT-7

AIA

TECHNICAL PROCEEDINGS

Day 1

Tuesday 15th May

New Project Development

Mineralogical and Geochemical Studies -

Key Elements in evaluating Nickel Laterites

by Phillip L. Hellman - Hellman & Schofield Pty Ltd - Australia

Jervois Mining: Young Ni/Co Laterite Prefeasability Study Testwork Review

by Mal Jansen and Alan Taylor - International Project Development Services Pty Ltd - Australia

CVRD's Nickel Laterite Project - PAL Process Investigation

by Edson Ribeiro, Marcelo A.C. Albuquerque, Renato S. Costa, Ricardo A.C. Cordeiro
and Vanessa M. Torres - Companhia Vale do Rio Doce Mineral Development Centre - Brazil

**Minimising Risk - The Role of Testwork in Engineering Design
& Project Development**

by John O'Callaghan - SNC Lavalin Australia Pty Ltd

Mine Gate to Market Place

by Chris de Guingand - Mineral Commerce Service Pty Ltd - Australia

Observations from the RNO Pilot Plant at Lakefield Research, 2000 AD

by Mike Miller & Ian Skepper - Ravensthorpe Nickel Operations Pty Ltd - Australia
and Mike Dry & Iain Todd - Lakefield Research Ltd

PAL Plant Materials & Equipment

Developments in the Manufacturing of Explosive Bonded Clad Titanium Plate

by George A. Young and John G. Banker - Dynamic Materials Corporation - USA

**Properties & Applications for High Performance Alloys in
Laterite Nickel Processing & other Demanding Applications**

by Carl V.V. Shawber and James A. Laird - Haynes International - USA

Surface Coatings for Ball Valves in NiHPAL Service

by John Williams - Mogas Industries Incorporated - USA

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Day 2 - Wednesday 16th May

PAL Plant Materials & Equipment

The Use of Super Duplex Stainless Steel for High Pressure Acid Leach Circuits - A Supplier's Perspective

by Roger Francis, G. Byrne & G.R. Warburton - Weir Materials & Foundries - UK

Innovations in Plasma Sprayed Protective Coatings for Ball Valves in PAL & POX Process Environments

by Reza Sarrafi-Nour, Michael Menard, Irina Grigore, Eva Kharlanova
and Peter Tsantrizos - PyroGenesis Inc. - Canada

Material Selection for Sulfuric Acid Service

by Rob Henson - Wah Chang - USA, Matt Thayer - Astro Cosmos Metallurgical & Trent Mackenzie - Allegheny - A

SX/IX Developments

The Application of Bateman Pulsed Column Technology to the Falconbridge Cobalt Extraction Process

by O.M. Dotterud, C. Ciriello - Falconbridge
and R. Kleinberger, E. Buchalter, I Kenner & S. Miller - Bateman, Israel

The Recovery of Nickel and Cobalt from a Bioleach Liquor Saturated in Calcium using Versatic Acid in a Synergistic Mixture with 4 - Nonyl Pyridine

by Victor Nagel - Bateman Engineering - South Africa and Angus Feather - Mintek - South Africa

The Comparison of Alternative Column designs in a Cobalt/Nickel Separation Problem

by Roger W. Cusack - Koch Extraction Technologies - USA, Owen Morton - Lakefield Orestest Pty Ltd
Serge Lallenc - Anaconda Nickel Limited and Natalie Streltsova (formerly Lakefield Orestest Pty Ltd)

Potential Benefits of Resin-in-Pulp for PAL Plants

by Dr. Nikolai Zontov - CleanTeQ Pty Ltd - Australia

Process Modelling & Design

Modelling of Contact Tank and Liquor Coolers of an Ammoniacal Carbonate Leaching Process in a Cuban Nickel Plant

by Daniel Guzman del Rio - Higher Mining & Metallurgical Institute
Dr. C. Roger G. Misa Llorca - University of Havana
Dr. Claudio Garcia - University of Sao Paulo
Angel O. Columbie Navarro - Higher Mining & Metallurgical Institute

Hydraulic Analysis of Flashing for Pressure Leach Systems

by Quoc-Khanh Tran, Mark Palermo and Peter Bartsch - Hatch Kaiser Engineers - Australia

Process Modelling in Flowsheet Development - Concept and Case Study

by Mike J. Dry - Lakefield Research Limited and M.J. Miller - Ravensthorpe Nickel Operations Pty Ltd

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TECHNICAL PROCEEDINGS

Day 3

Thursday 17th May

Sulphide Process Development

Advancements in Thermophile Bioleaching Technology

by G.V. Rourke, P. Basson and Debbie Miller - Billiton Mineral Technology - South Africa

CESL Process

by David Jones - CESL Engineering - Canada

PLATSOL™ Treatment of the Northmet Copper Nickel Pgm Bulk Concentrate - Pilot Plant Results

by C.J. Ferron & C.A. Fleming - Lakefield Research Limited - Canada

D.B. Dreisinger - University of British Columbia and P.T. O'Kane - O'Kane Consultants Inc.

Advances in Nickel Sulfide Process development

by Mike Adams - Lakefield Oretest Pty Ltd & Gary Johnson - Western Minerals Technology Pty Ltd - Australia

Operations

QNI Yabulu Refinery Water Re Use Project

by J. Scott - QNI and D. Richardson - United Utilities - Australia

Larox Solid/Liquid Separation in Nickel/Cobalt Hydrometallurgical Processes

by Greg Timms - Larox Pty Ltd and Ian Townsend - Base Metal Concentrates Larox Oyj.

The Application of the EMEW® cell to the Nickel Industry

by P.A. (Tony) Treasure - Electrometals Technologies Limited - Australia

The Design, Commissioning and Operation of the QNI HiPAL Pilot Plant for Nickel Laterite Leaching

by Barry Harding - QNI Pty Ltd, Scot De Young - Hatch
and Ian Corrins - Lakefield Oretest - Australia

Gypsum - The Final Hurdle

by Peter Nofal - Preston Resources, Tony Showel - Normet,
Peter Hoskin and Sarah Allen - Bulong Nickel