#### **Abstracts Received**

### Evaluation of oxygen requiremnets of ore precursors in the effective hydrometallurgical leaching of gold

S. Gostu and T. Murray , *Air liquide Innovation Campus Delaware* , *USA (New Jersey)* 

#### Modular approach solution to small scale gold mining projects

N.C. Steenkamp, B.N. Scott, and G. Bezuidenhout, *Bowline Professional Services, South Africa* 

#### Solvent extraction of gold from thiosulphate solution using phosphonium ionic liquid

H. Mahandra, F. Faraji, and A. Ghahreman, Queen's University, Canada

#### Optimization of gold-copper sulfide ore processing at Yanacocha's Gold Mill Plant

J. Baron¹ and G. Guzman², ¹Newmont Mining Corp., Englewood, CO, USA and ²Minera Yanacocha SRL, Cajamarca, Peru

### Distillation of biogenic cyanide generated by bacillus megaterium for efficient gold recovery

F. Faraji, H. Mahandra, and A. Ghahreman, Queen's University, Canada

### Additional gold recovery from double refractory ores using high temperature caustic conditioning – modelling and optimization of the process

P.J. Pieterse<sup>1</sup>, R.F. Sandenbergh<sup>1</sup>, and C. van Buuren<sup>2</sup>, <sup>1</sup>University of Pretoria, Hatfield, Pretoria 0028, South Africa and <sup>2</sup>Metso Outotec, South Africa

### Elikhulu 'The Big One' gold tailings retreatment project – The journey to success H. Oosthuysen, *DRA*, *South Africa*

### Operational value engineering: Practical application of statistical process control techniques in mining operations

J. Wilkens, DRA, South Africa

## Extraction of gold from preg-robbing ores using gold selective AmberSep™ 91419 and AmberSep™ 91419XL ion exchange resin

J. Bester and T. Thulare, DuPont , South Africa

#### Good carbon management - the value of carbon inventory replenishment

K. Barbetti<sup>1</sup>, A. Cranley<sup>2</sup>, and W.P. Staunton<sup>1</sup>, <sup>1</sup>Gold Technology Group Curtin University, Perth, Western Australia and <sup>2</sup>Newmont Tanami Operation Northern Territory, Australia

### Forty years of carbon-in-pulp technology - what have we learnt, what has changed, and what has remained the same

W.P. Staunton, K. Barbetti, and T. McGrath, *Gold Technology Group, Curtin University, Australia* 

#### A review of the use of peroxide in gold cyanidation

E. Drake, K. Barbetti, T. McGrath, and W. Staunton, *Curtin University, Australia* 

### Dithionocarbamate flotation of auriferous arsenian pyrite from refractory gold ore

P. Forson, W. Skinner, and R. Asamoah, University of South Australia, Australia

#### Role of selected leach-aids in refractory gold leaching behaviour

P. Forson and R. Asamoah, University of South Australia, Australia

# Interstage screening evolution, retrofitting oceansagold's haile gold mine's CIL interstage screens with Urethane screening surfaces and the increased savings and performance

J. Rozelle<sup>1</sup>, E.R. Mortensen<sup>2</sup>, A. Nicosia<sup>3</sup>, and P.L. Stasio<sup>3</sup>, <sup>1</sup>OceanaGold, Haile Gold Mine, USA, <sup>2</sup>Process Machinery Associates, USA and <sup>3</sup>Derrick Corporation, USA

#### Processing options for the recovery of refractory gold in Zimbabwe

O. Bazhko¹, J.A. Strauss², M. Valenta³, and J. Mungoshi⁴, ¹Mintek, South Africa, ²Metso:Outotec, South Africa, ³Metallicon Process Consulting (Pty) Ltd, South Africa and ⁴Manhize Mineral Consultants, South Africa

### Sampling of heterogeneous gold-bearing conglomerates from the Western Australian Pilbara

S. Dominy<sup>123</sup>, <sup>1</sup>Novo Resources Corporation, West Perth, Australia, <sup>2</sup>Camborne School of Mines, University of Exeter, UK. <sup>3</sup>Western Australian School of Mines, Australia

### The effect of pH and collector dosage on the flotation rate constant of arsenopyrite and pyrite

E. Avelar¹, C. Evans², R. Dunne³, K. Runge², and E. Manlapig², ¹Western Australian School of Mines: MECE, Curtin University, Australia, ²Julius Kruttschnitt Mineral Research Centre, University of Queensland, Australia, and ³Newmont Mining Corporation, Denver, USA

### A desktop study to understand the fundamental reasons for reduced gold recovery from gold tailings containing electrum

S. Makamu, Mintek, South Africa

#### A sustainability based decision-making framework for mine waste management options

E.R. Manjengwa, M. Tadie, and C. Dorfling, Stellenbosch University, South Africa

Improved industrial-scale cyanide analysis for sulphide containing ores N. Anthony, *Mintek, South Africa* 

#### Oxidative pretreatment of sulfidic ore to enhance gold extraction

S. Teimouri, J.H. Potgieter, and L. van Dyk, *The University of The Witwatersrand, South Africa* 

#### Using scCO, to extract gold from refractory tailings

M. Henderson, L. van Dyk, and J.H. Potgieter, *The University of The Witwatersrand, South Africa* 

#### Is faster better?

P. Netshapapame, Hexagon, South Africa

#### Gold in electronic waste, a sustainable circular economy approach

D. Ray<sup>1</sup>, J. Graves<sup>1</sup>, A. Greenwood<sup>3</sup>, and S. Farnaud<sup>1,1</sup>Bioleaching Group, CSELS, Faculty of Health & Life Sciences, Coventry University, Coventry, UK, <sup>2</sup>IFTC, Faculty of Engineering, Environment & Computing, Coventry University, Coventry, UK and <sup>3</sup>Faculty of Health & Life Sciences, Coventry University, Coventry, UK

### A study of alternative methods for gold extraction and challenges faced in the artisanal and small-scale gold mining sector

A.N. Manzila, J. Petersen, and T. Moyo, University of Cape Town, South Africa

### Washing gold from a brownfield: a case for the leaching option in gold processing from electronic waste

I.O. Otunniyi, Vaal University of Technology, South Africa

# Value from fine waste: Gas-phase extraction of gold from mine dumps I.A. Ali, J.T. Wainer, J.H. Potgieter, L.D. van Dyk, P. den Hoed, and A. Luckos,

University of the Witwatersrand, South Africa

### The role of glycine in cyanidation of copper bearing gold ores A molecular modeling study

S. Mohammadnejad, Tarbiat Modares University, Iran

#### Optimization and design of CIC adsorption circuits

A.R. Bax and T.D.H. McGrath, Ozmet, Australia

### Exploration of the thiosulphate process for the dissolution of gold from electronic waste and its recovery through ion-exchange

D. Maharaj, T. Moyo, and J. Petersen, *University of Cape Town, South Africa*