SÜRELİ YAYINLAR

CİM BULLETIN

SEPTEMBER 2003

63 Evaluation of spontaneous fire risk potential of underground coal mine panels
T.R. Roy

68 Design of dewatering circuits in oil sand plants by utilizing a hydrocyclone model simulation
A.I.A. Salama

72 Laboratory and in situ investigations of tracking cutters for computer aided design of shearer drums
O.Z. Hekimoğlu, M. Ayhan and B. Tiryaki

76 Design of the pierina waste dump
P.M. Hawley, X. Ochoa and R. Sharon

81 Guided wave radar transmitters: Meeting the challenge for level detection under harsh conditions-Synopsis
E. Fauveau and K. Hambrice

82 Geostatistical grade control and opencast mine planning in a multi layer coal deposits - Technical note
S. Ural and A.H. Onur

INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES

SEPTEMBER 2003

795 Numerical determination of the equivalent elastic compliance tensor for fractured rock masses using the distinct element method
Ki-Bok Min and Lanru Jing

817 Elastic—brittle—plastic analysis of circular openings in Hoek-Brown media

S. K. Sharan

825 Rock fracture mean trace length estimation and confidence interval calculation using maximum likelihood methods
G. J. Lyman

833 Drift reinforcement design based on discontinuity network modelling
M. Guron and J. Hadjeorgiou

847 The application of critical state soil mechanics to the mechanical behaviour of porous sandstones
R. J. Cuss, E. H. Rutter and R. F. Holloway

863 Irregular elastic half-plane gravity problem
N. Hasebe and X. F. Wang

877 Deformation of the central pier of the permanent shiplock, Three Gorges Project, China: an analysis case study
Z. Q. Huang, T. Jiang, Z. Q. Yue, C. F. Lee and S. J. Wang

893 Models for normal fracture deformation under compressive loading
B. Malama and P. H. S. W. Kulatilake

903 Discontinuity trace map construction using photographs of rock exposures
F. Lemy and J. Hadjeorgiou

919 Porosity dependence of the elastic modulus of lithophysae-rich tuff: numerical and experimental investigations
B. B. Avar, N. Hudyma and M. Karakouzian

929 Estimates of rock joint shear strength in part of the Fimiston open pit operation in Western Australia
D. R. Wines and P. A. Lilly

939 Silicone rubber castings for aperture measurement of rock fractures
K. Kostakis, J. P. Harrison and S. M. Heath

947 An experimental method to link morphological properties of rock fracture surfaces to their mechanical properties
P. Lopez, J. Riss and G. Archambault
INDUSTRIAL MINERALS

OCTOBER 2003

6 News at the core: Europe Commerce/Imerys tieup
23 Comment: Asian boom time?
21 Markets Monitor: NL industries' Kronos spin-off
30 Corundum corundum
42 Risky rewards
48 A finger on the pulse
56 The power of spinel
60 It's a small world
64 Enervating times
71 Mineral spotlight: Gypsum
72 Continental drift: White hot Pingdu talc
75 Russian fluorspar
76 Southern African clays
77 Oglebay asset sales
79 Minerals on the move: How the west was won
85 Processing: A fine idea
93 Making the grade: Spodumene
98 Legal eye: Silica in the spotlight
100 Silica litigation
103 Exposure: Manitoba silica sand
106 On the receiving end: Paper-Stora Enso

NOVEMBER 2003

6 News at the core: Oglebay Norton sell of
23 Comment: Russia's Resource Revolution
24 Markets Monitor: Vesuvius refractories
30 Back to basics
44 Right place, right time...right price
50 The miller's tale
57 Mineral spotlight: Pyrophyllite
58 Plastic fantastic
64 Continental drift: Pakistan's mineral economics
67 Georgian minerals
68 Gambian minsands
69 New Mexico perlite
71 Minerals on the move: In the bag
76 Processing: Going with the flow
81 Making the grade: Diatomite and perlite
84 Legal eye: Construction mineral standards
87 Exposure: Turkish trona
90 On the receiving end: Glass fibre-owens corning

MINERALS ENGINEERING

SEPTEMBER 2003

785 Recent developments in magnetic methods of material separation
J. Svoboda and T. Fujita

793 Processing of vanadium: a review
R. R. Moskalyk and A. M. Alfantazi

803 Mechanistic modelling of mineral sizers
R. Heng, K. Cheng, D. Tuppurainen, R. A. Bearman and S. Oswald

815 Process system identification strategies based on the use of singular spectrum analysis
C. Aldrich and M. Barkhuizen
1027 Studies on reaction mechanism of bioleaching of manganese ore
C. Acharya, R. N. Kar and L. B. Sukla

1031 Flotation of aluminosilicates using \(N\)-(2-aminoethyl)-1-naphthaleneacetamide
M. Zhao, D. Z. Wang, Y. H. Hu, S. X. Bao and J. Xu

NOVEMBER 2003

1045 Liquid overflow from a column of rising aqueous froth
P. Stevenson, C. Stevanov and G. J. Jameson

1055 CFD modelling of bubble-particle collision rates and efficiencies in a flotation cell
P. T. L. Koh and M. P. Schwarz

1061 Level control strategies for flotation cells
P. Kämpjärvi and S. -L. Jämsä-Jounela

1069 Evaluation of control performance: methods, monitoring tool and applications in a flotation plant
S-L. Jämsä-Jounela, R. Poikonen, N. Vatanski and A. Rantala

1075 Monitoring the composition of water of flotation slurries with an on-line analyser
S. Luukkanen, P. Parvinen, M. Miettinen, P. Stén, S. Lähteenmäki and A. Tuikka

1081 Gas dispersion measurements in a flotation cell
R. A. Grau and K. Heiskanen

1091 Jameson Cell fundamentals—a revised perspective
G. Harbort, S. De Bono, D. Carr and V. Lawson

1103 SUPASIM: a flotation plant design and analysis methodology
M. P. Hay and C. M. Rule

1111 Dynamic froth stability in froth flotation
N. Barbian, E. Ventura-Medina and J. J. Cilliers

1117 Adsorption of starch, amylose, amyllopectin and glucose monomer and their effect on the flotation of hematite and quartz
S. Pavlovic and P. R. G. Brandao

1123 Simple relationships for predicting the recovery of liquid from flowing foams and froths
S. J. Neethling, H. T. Lee and J. J. Cilliers

1131 The use of flotation techniques in the remediation of heavy metal contaminated sediments and soils: an overview of controlling factors
M. Vanthuyne, A. Maes and P. Cauwenberg

1143 Influence of gas flow rate and frothers on water recovery in a froth column
A. V. Nguyen, P. A. Harvey and G. J. Jameson

1149 The interaction of flash flotation with closed circuit grinding
S. Mackinnon, D. Yan and R. Dunne

1161 Investigations of alkylmorpholines—collectors for a new halite flotation process
S. Titkov, R. Sabirov and N. Panteleeva

1167 Hydrophobic aggregation of alumina in surfactant solution
Y. Hu and J. Dai

1173 A study of bubble-particle interaction using atomic force microscopy
A. V. Nguyen, J. Nalaskowski and J. D. Miller

1183 Froth delineation based on image classification
W. Wang, F. Bergholm and B. Yang

1193 Study on the flotation behaviour of low energy materials at low surface tensions
V. Kirjavainen, H. Lehto and K. Heiskanen

1197 Froth recovery measurement in plant scale flotation cells
D. J. Alexander, J. P. Franzidis and E. V. Manlapig

1205 Development of a method for separation of PVC and PET using flame treatment and flotation
R. D. Pascoe and B. O'Connell

1213 The effect of grinding conditions on the flotation of a sulphide copper ore
K. L. C. Gonçalves, V. L. L. Andrade and A. E. C. Peres

1217 The selective flotation of arsenopyrite from pyrite
B. Tapley and D. Yan

1221 Electrokinetic behavior and flotation of kaolinite in CTAB solution
Y. Hu, H. Jiang and D. Wang
827 A quantification of the benefits of high pressure rolls crushing in an operating environment
D. Maxton, C. Morley and R. Bearman

839 Adsorption and contact angle of single and binary mixtures of surfactants on apatite
H. Sis and S. Chander

849 The use of amine complexes in managing inadvertent activation of pyroxene in a pentlandite-pyroxene flotation system
N. J. Shackleton, V. Malysiak and C. T. O'Connor

857 Sampling and flotation testing of Sudbury Basin drill core for process mineralogy modelling
N. O. Lotter, D. L. Kowal, M. A. Tuzun, P. J. Whittaker and L. Kormos

865 India's first medium scale demonstration plant for treating poly-metallic nodules
N. K. Mittal and P. K. Sen

869 Electrogenerative leaching of galena with ferric chloride
S. Wang, Z. Fang, Y. Wang and Y. Chen

873 Cashew gum: a new depressor for limestone in the phosphate minerals flotation

877 Effect of cell design and electrode configuration on the efficiency of applied potential and sulfide mineral flotation
H. Guo and W. -T. Yen

881 Three phase mixing studies for nickel precipitation
M. Roberts and A. E. Lewis

OCTOBER 2003

893 Review of copper pyrometallurgical practice: today and tomorrow
R. R. Moskalyk and A. M. Alfantazi

921 Gallium: the backbone of the electronics industry
R. R. Moskalyk

931 Evaluation of alternative reagent schemes for the flotation of platinum group minerals from various ores
S. Bulatovic

941 Effects of frother type and froth height on the flotation behaviour of chromite in UG2 ore
Z. Ekmekçi, D. J. Bradshaw, S. A. Allison and P. J. Harris

951 Determination of the shape, morphological and wettability properties of quartz and their correlations
U. Ulusoy, M. Yekeler and C. Hıçılmaç

965 Microbially-induced flocculation and flotation for pyrite separation from oxide gangue minerals
P. Patra and K. A. Natarajan

975 Evaluation of the selective detachment process in flotation froth
R. Q. Honaker and A. V. Ozsever

983 Applying discrete element modelling to vertical and horizontal shaft impact crushers
N. Djordjevic, F. N. Shi and R. D. Morrison

993 Further validation of DEM modeling of milling: effects of liner profile and mill speed
O. Hlungwani, J. Rikhotso, H. Dong and M. H. Moys

999 An investigation into an improved method of fine coal dewatering
M. le Roux and Q. P. Campbell

1005 The "fish-hook" phenomenon in centrifugal separation of fine particles
A. K. Majumder, P. Yerriswamy and J. P. Barnwal

1009 The effect of desliming by sedimentation on paste backfill performance
A. Kesimal, B. Ercikdi and E. Yılmaz

1013 Extraction of cobalt(II) from an ammonium nitrate-containing leach liquor by an ammonium salt of di(2-thylhexyl)phosphoric acid
R. H. Matjie, M. M. Mdleleni and M. S. Scurrell

1019 Bio-dissolution of zinc sulfide concentrate in 160 L 4-stage continuous bioreactor
C. K. Pali, S. Swain, R. N. Kar, G. R. Chaudhury, L. B. Sukla and V. N. Misra

1023 Improving the efficiency of oxide copper-cobalt ores flotation by combination of sulphidisers
K. Kongolo, M. Kipoka, K. Minanga and M. Mpoyo
1225 Garpenberg—an old concentrator at peak performance
N. J. Bolin, P. Brodin and P. Lampinen

1231 The use of biosurfactants in flotation: application for the removal of metal ions
A. I. Zouboulis, K. A. Matis, N. K. Lazaridis and P. N. Golyshin

NOVEMBER 2003 (SUPPLEMENTARY)

1239 Sulfide mineral identification using laser-induced plasma spectroscopy
Saara Kaski, Heikki Häkkänen and Jouko Korppi-Tommola

1245 Direct comparison on mechanical and digital size analyses of Kemi Chromite, Finland
T. Chernet and J. Marmo

1251 Microstructures of industrial sinters from Quadrilatero Ferrífero's iron ores, Minas Gerais State, Brazil
M. Sacramento de Magalhães and P. Roberto Gomes Brandão

1257 Crystallite size of haematite from thermal oxidation of pyrite and marcasite—effects of grain size and iron disulphide polymorph
E. Eneroth and C. Bender Koch

1269 Secondary mineral phases associated with a historic arsenic calciner identified using automated scanning electron microscopy; a pilot study from Cornwall, UK
G. S. Camm, A. R. Butcher, D. Pirrie, P. K. Hughes and H. J. Glass

1279 Chemical composition and surface property of kaolins
Y. Hu and X. Liu

1285 Morphological varieties of goethite in iron ores from Minas Gerais, Brazil
L. D. Santos and P. R. G. Brandão

1291 Tin and indium mineralogy within selected samples from the Neves Corvo ore deposit (Portugal): a multidisciplinary study
M. Benzaazoua, P. Marion, A. Pinto, H. Migeon and F. E. Wagner

1303 Study on the alteration of chemical composition and structural parameters of modified montmorillonite
X. Lu, X. Cui and M. Song

1307 The platinum-group minerals in chromitites of the Akanvaara deposit, Northern Finland and in their processing products
S. Gornostayev and T. Mutanen

1313 Characterization of bauxite fines aiming to minimize their iron content
H. Kahn, M. M. L. Tassinari and G. Ratti

1317 Characterization of the mode of occurrence of gold in Jokisivu pilot feed and products
J. Lipo

MINING ENGINEERING

SEPTEMBER 2003

FEATURE ARTICLES
15 Creating wealth and competitiveness in mining John E. Tilton

23 “Here's to low-grade ore and plenty of it,” the Hearsts and the Homestake Mine Duane A. Smith

28 Gold companies look at Mexico, Dominican Republic Steve Krai

31 Equipment management: cost reduction, performance-enhancing opportunity Paul D. Tomlingson

TECHNICAL PAPERS (peer reviewed and approved)

65 Profile of groundfall incidents in underground coal mines D.M. Pappas and C. Mark

72 Public-private partnerships: education and research opportunities, F. Brenner

75 Successful application of remote seals used to extinguish a coal-mine fire C. Nyikos, R. Curtice and D. Bour

OCTOBER 2003

FEATURE ARTICLES
23 Solution mining of nahcolite at American Soda’s Yankee Gulch Project Michael Hardy, Max Ramey, Charlie Yates and Kurt Nielsen

32 Technology ensures coal will be the nation’s fuel choice Steve Krai 34 Calcining plant converts limestone into quicklime
35 Rapid Excavation and Tunneling Conference 2003 breaks attendance records William R. Yernberg

38 Goodyear unveils Two Piece Assembly for mining tires Tim O'Neil

40 Simulators improve operator training and safety

TECHNICAL PAPERS (peer reviewed and approved)

49 Mine roof truss-support systems technology R.M. Cox

57 Ventilation system operating cost comparison between a conventional and an automated underground metal mine CK. Kocsis and S. Hardcastle

NOVEMBER 2003

FEATURE ARTICLES
16 Yule Quarry back in business again Rex E. Loesby

23 Rich Hill, Arizona; historic gold district, modern gold rush Eric Melchiorre, Dante Lauretta, M. Katherine Crombie and Chris Gholson

29 Mining Foundation of the Southwest honors 2003 inductees

TECHNICAL PAPERS (peer reviewed and approved)

33 Thickening and disposal of oil sand tailings Y. Xu and H. Hamza

40 Cliffs and Associates’ Circored iron plant S.A. Elmquist, L.C. Kipfstuhl and E.C. Dowling

ORICA

ORICA-NITRO
PATLAYICI MAD. SAN ve TIC. AŞ.

Hülya Sokak No. 45, 06700 Gaziosmanpaşa / ANKARA
Tel : (0) 312 - 446 16 00 PBX Faks : (0) 312 - 446 15 55
Fab. : (0) 312 - 865 19 63 PBX Faks : (0) 312 - 865 19 68