MARCH 2003

95 Considerations regarding the definition of remotely located integrated cogeneration plants. Part 2
D. Berkley

100 The Red Dog VIP mill optimization project. Part B: An integrated approach to modelling and design of the flotation plant
B. K. Gorain and A. W. Stradling

107 Effects of aging time on the wear resistance of alumina particulate reinforced MMCs
C. K. Fang

110 System divers in the performance of auxiliary ventilation systems
R. S. Suglo, S. Frimpong and I. R. Muirhead

116 Discrete event control and dynamic scheduling for tele-robotic mining- Synopsis
J. King, R. Gosine, B. Delaney, T. Norvell and S. O'Young

119 The use of a geographic information system for open-pit mine development- Technical Note
U. Dillon and G. Blackwell

APRIL 2003

43 TANCO-endurance through adaptability
T. Hilliard

47 The St. Lawrence deposit, Seeley’s Bay, Se Ontario- A major wollastonite skarn in the Frontenac Terrane
T. A. Grammatikopulos, A. H. Clark and B. Vasily

55 Role of dispersants in the production of fine particle size calcium carbonate and kaolin slurries
J. S. Phipps and D. R. Skuse,

61 Potash Processing in Saskatchewan- A review of process technologies- Technical note
C. F. Perucca

66 The post failure characteristics of rock
T. G. Joseph and K. Baron

75 The spontaneous combustion characteristics of Turkish lignite and correlation of the self heating process with the actual fire
T. Güyagüler, C. Karpuz and S. Bağcı

MAY 2003

Managing pit slope displacements: Highland Valley Copper’s Lornex pit southwest wall
H.W. Newcomen, L. Shwydiuk and C.S. Maggs

Measurements of deformation and stress variations in mine pillars
G. Ballivy, A.P. Bois, A. Ghorbal, V.

Hajabdolmajid and K. Saleh
Predicting cave initiation and propagation
R. Trueman and C. Mawdesley

Changes to drill pattern and adequate inter-row delay time improve blasting performance
P.H. Oliver

Thermal rock fragmentation — Applications in narrow-vein extraction
S. Poirier, J.-M. Fecteau, M. Laflamme and D. Brisebois

The application of digital video plotter (DVP) systems to the location and orientation of open pit wall slope features
S. Klingmann and G. Blackwell

INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES

APRIL 2003

283 A review of techniques, advances and outstanding issues in numerical modelling for rock mechanics and rock engineering
L. Jing

355 Shear fracture (Mode II) of brittle rock
Qiuhua Rao, Zongqi Sun, O. Stephansson, Chunlin Li and B. Stillborg

377 Rayleigh wave propagation in intact and damaged geomaterials
M. Stavropoulou, G. Exadaktylos, E. Papamichos, I. Larsen and C. Ringstad
389 Effects of pressure and saturating fluid on wave velocity and attenuation in anisotropic rocks
J. M. Carcione, K. Helbig and H. B. Helle

405 Statistical and microscopic investigation of disc segment wear related to sawing Ankara andésites
A. S. Eyuboglu, Y. Ozcelik, S. Kulaksiz and I. C. Engin

415 Numerical analysis of the stability of heavily jointed rock slopes using PFC2D
C. Wang, D. D. Tannant and P. A. Lilly

425 Effect of loading rate on Mode I fracture toughness, roughness and micromechanics of sandstone
T. Backers, N. Fardin, G. Dresen and O. Stephansson,

435 Tunnelling Mohr-Coulomb strength parameters for rock masses satisfying the generalized Hoek-Brown criterion
A. I. Sofianos

 equipment engineering

INDUSTRIAL MINERALS

MARCH 2003

22 Three’s a crowd?

33 DBM: security in diversity

36 Paper kaolin: evolution with a Latin flavour

41 Borates: capacity crunch time

49 Turkish minerals: sharpening the competitive edge

66 King of kaolin

77 Thirsty work

APRIL 2003

29 Poring over world soda ash

46 Fluorspar: taking stock

55 Trading in turmoil

60 Toxic crusader: US environmental lime

MINERALS ENGINEERING

MARCH 2003

179 Predicting variation in planned mineral processing plants
G. K. Robinson

187 Heavy metal immobilization in the mining-contaminated soils using various industrial wastes
R. Ciccu, M. Ghiani, A. Serci, S. Fadda, R. Peretti and A. Zucca

193 Adaptive tolerance behaviour of fungi in heavy metals
M. Valix and L. O. Loon

199 Electrochemical passivation of sphalerite during bacterial oxidation in the presence of galena
G. da Silva, M. R. Lastra and J. R. Budden

205 Fire-resistant geopolymer produced by granulated blast furnace slag
T. W. Cheng and J. P. Chiu

211 A new approach to Bond grindability and work index: dynamic elastic parameters
Vedat Deniz and Hüseyin Ozdag
219 Role of crystal structure in flotation separation of diaspore from kaolinite, pyrophyllite and illite
Y. Hu, X. Liu and Zhenghe Xu

229 On-line analysis of flotation process waters at Siilinjärvi (Finland) apatite concentrating plant
P. Stén, P. Parvinen, M. Miettinen, S. Luukkanen, V. Kaskiniemi and J. Aaltonen

237 The solvent extraction and stripping of chromium with Cyanex® 272
M. D. Lanagan and D. C. Ibaña

247 Pulp potential and floatability of chalcopyrite
H. Guo and W.-T. Yen

APRIL 2003

305 Defining "cleaner production" and "pollution prevention" in the mining context, G. Hilson

323 A procedure to estimate weight particle distributions from area measurements
G. Vallebuona, K. Arburo and A. Casali

331 Discrete element modelling of the influence of lifters on power draw of tumbling mills,
N. Djordjevic

337 Variables affecting the fine grinding of minerals using stirred mills
A. Jankovic

347 Flotation scale up: use of separability curves
J. B. Yianatos, L. G. Bergh and J. Aguilera

353 Effect of thermal stability on the flotation response of sodium carbonate salts
Ô. Özcan, M. S. Çelik, Z. S. Nickolov and J. D. Miller

359 Effect of dissolved oxygen and galvanic contact on the floatability of galena and pyrite
with Aerophine 3418A
E. T. Pecina-Trevino, A. Uribe-Salas and F. Nava-Alonso

369 On-site gold refining of cyanide liquors by solvent extraction
M. D. Adams

375 Zinc and silver recoveries from zinc-lead-iron complex sulphides by pressure oxidation
S. A. Bolorunduro, D. B. Dreisinger and G. Van Weert

391 Liquid-liquid extraction of molybdenum(VI) from acidic media with Cyanex-301
K. Saberyan, M. Ghannadi Maragheh, P. Ashtari and S. Keshavarz Alamdari

395 Effects of oxidising agents on dissolution of Gumuskoy silver ore in cyanide solution
O. Bayat, H. Vapur, F. Akyol and C. Poole

399 Comparison of non-ionic and ionic collectors in the flotation of coal fines
H. Sis, G. Ozbayoglu and M. Sarikaya

MAY 2003

411 Intensive cyanidation: onsite application of the InLine Leach Reactor to gravity gold concentrates
R. J. Longley, A. McCallum and N. Katsikaros

421 Modelling of gold (I) cyanide adsorption based on the properties of activated bagasse
N. Syna and M. Valix

429 Hydrothermal precipitation of arsenic compounds in the ferric-arsenic (III)—sulfate system: thermodynamic modeling
R. C. M. Mambote, P. Krijgsman and M. A. Reuter

441 Local models for soft-sensors in a rougher flotation bank
G. D. Gonzalez, M. Orchard, J. L. Cerda, A. Casali and G. Vallebuona

455 Limitations of variance analysis using propagation of variance
Z. Xiao and A. Vien

463 Influence of sintering conditions on the reduction behaviour of pure hematite compacts
K. Higuchi and R. H. Heerema

479 Flotation of colemanite from realgar
S. Koca, M. Savaş and H. Koca

MINING ENGINEERING

MARCH 2003

11 Tom O’Neil: an interview with the 2003 SME president

15 Arizona copper industry continues to face challenges
William R. Yernberg
17 Plant design and practice conference attracts mineral processing specialists
William R. Yernberg

22 Drive options for belt and apron feeders
Laszlo Toth

TECHNICAL PAPERS

25 New approaches to mine-face ventilation
A. Wala, J. Jacob, J. Brown and G. Huang

31 In situ, anaerobic, biological immobilization of uranium, molybdenum and selenium in an alluvial aquifer
B.N. Nelson, R. Cellan, T. Mudder, J. Whitlock and R. Waterland

37 High-altitude, passive-water-treatment system design and construction for leach-pad effluent
K. Whiting, R. Huffsmith, R. Olsen and D. Adams

APRIL 2003

FEATURE ARTICLES

12 Ironmaking industry trends and directions
Robert E. Mazurak

17 Wireless access to live data from process operations
Roland Heersink and Charles H. Wells

22 Technology news: Longwall coal mine sets Russian production record

TECHNICAL PAPERS (peer reviewed and approved)

25 Safer mine layouts for underground stone mines subjected to excessive levels of horizontal stress
A.T. Iannacchione, T.E. Marshall, L. Burke, R. Melville and J. Litsenberger

32 Mechanized cleaning of underground sumps for mines or concentrators
L.M. Tsinker, P.A. Philippov, V.V. Doroguntsov, B.Z. Rubezhov and A.P. Gaiden

35 Production scheduling at LKAB’s Kiruna Mine using mixed-integer programming
M. Kuchta, A. Newman and E. Topal
ORICA-NITRO
PATLAYICI MAD. SAN ve TİC. A.Ş.

Hülya Sokak No. 45, 06700 Gazişehirpaşa / 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