

SÜRELİ YAYINLAR

CİM BULLETIN

DECEMBER 2002

67 Aggregation index and a methodology to study the role of magnesium in aggregation of sulphide slurries

E.El-Amomouri, M. Mirnezami, D. Lascelles and J. A. Finch

76 Gas dispersion measurements in floatation machines

C.O.Gomez and J. A. Finch

79 Kiruna mineral processing starts underground-Bulking sorting by LIF

A. Kruukka and H. F. Broicher

85 The development of processmineralogy at Falconbridge Limited, and application to the Raglan Mill

N. O. Lotter, P. J. Whittaker and L. Kormos

93 Approximating diamond drill rod wear

P. Radziszewski

97 Copper in Poland (Technical Note)

F. Habashi

JANUARY 2003

49 Information technology in mining: An overview of the Mining IT User Group

M. G. Lipsett

52 The need for technology standards for mobile equipment in the mining industry

T. Skinner, R. Hall and M. Sahebkar

57 Achieving business results through IT: insuring controller performance benefits with web-enabled monitoring at Noranda

D. Shook, R. Khalili, M. Grenier and L Lariviere

78 New technology for hoist conveyance monitoring and analysis

60 The development of an integrate IT system at Albian Sands Energy

L H. Michaud

65 Total systems approach to design for underground mine mill integration

B. Klein, R. Hall, M. Scoble and M. Morin

72 CERM^A and its contribution to providing sustainable research for the mining industry

82 Rotating equipment reliability for surface operation Part II: Oil analysis in a mine

G. Nollet and D. Prince

FEBRUARY 2003

39 Enhancements in the interpretation of geochemical data using multivariate methods and digital topography

E. C. Grunsky and B. W. Smee

44 Distinguishing ore types at the Lac des Iles PGE-gold-copper-nickel mine, Ontario: Implications for resource modelling, mining and processing

M. J. Michaud and M. J. Lavigne

48 System Thinking for quality management and continuous improvement in mining

M. Vallée

59 Considerations regarding the definition of remotely located cogeneration plants. Part 1

D. Berkeley

64 The Red Dog VIP optimization project. Part A: Rectifying the shortage of flotation capacity

B. Lacouture and G. Hope

INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES

DECEMBER 2002

945 Analysis of shearing of a rock ridge, Y. M. A. Hashash, E. J. Cording and J. Oh

959 Blast vibration damage to underground coal mines from adjacent open-pit blasting

P. K. Singh

975 A Unified Strength criterion for rock material, Mao-Hong Yu, Yue-Wen Zan, Jian Zhao and Mitsutoshi Yoshimine

991 Brazilian test: stress field and tensile strength of anisotropic rocks using an analytical solution

J. Claesson and B. Bohloli

1005 Determination of the natural stress state in a Brazilian rock mass by back analysing excavation measurements: a case study

J. A. de Mello Franco, J. L. Armelin, J. A. F. Santiago, J. C. F. Telles and W. J. Mansur

1035 Elastic wave propagation in and permeability for rocks with multiple parallel fractures

M. S. King

1045 The shear strength of planar joints in mudstone

A. J. Geertsema

JANUARY 2003

3 Anisotropic strength and deformational behavior of Himalayan schists, *Pages 3-23*

M. H. B. Nasser, K. S. Rao and T. Ramamurthy

25 Constitutive law for the shear strength of rock joints based on three-dimensional surface parameters

G. Grasselli and P. Egger

41 A constitutive model for rock interfaces and joints

J. G. Wang, Y. Ichikawa and C. F. Leung

55 Estimating the deformation modulus of rock masses: a comparative study

A. Kayabasi, C. Gokceoglu and M. Ercanoglu

65 Adverse effects of pore-pressure drainage on stress measurements performed in deep tunnels: an example from the Lower Kihansi hydroelectric power project, Tanzania

T. Dahlö, K. F. Evans, A. Halvorsen and A. Myrvang

95 Influence of faulting on a mine shaft—a case study: part I—Background and instrumentation, G. Bruneau, D. B. Tyler, J. Hadjigeorgiou and Y. Potvin

113 Influence of faulting on a mine shaft—a case study: part II—Numerical modelling G. Bruneau, M. R. Hudyma, J. Hadjigeorgiou and Y. Potvin

127 Sleeve-fracturing limitations for measuring *in situ* stress in an anisotropic stress environment

A. D. Charsley, C. D. Martin and D. R. McCreath

137 Error-in-variables for rock failure envelope, O. Zambrano-Mendoza, P. P. Valkö and J. E. Russell

145 Fatigue properties of cracked, saturated and frozen sandstone samples under cyclic loading, Ning Li, Ping Zhang, Yunsheng Chen and Gunter Swoboda

FEBRUARY 2003

151 The Kaiser effect in rocks: principles and stress estimation techniques

A. Lavrov

173 Methodology for tunnel and portal support design in mixed limestone, schist and phyllite conditions: a case study in Turkey

M. K. Koçkar and H. Akgün

197 Quantifying topography and closure deformation of rock joints

C. C. Xia, Z. Q. Yue, L. G. Tham, C. F. Lee and Z. Q. Sun

221 Post-failure behavior of two mine pillars confined with backfill

D. R. Tesarik, J. B. Seymour and T. R. Yanske

233 More accurate stress intensity factor derived by finite element analysis for the ISRM suggested rock fracture toughness specimen—CCNBD

Q. Z. Wang, X. M. Jia, S. Q. Kou, Z. X. Zhang and P. -A. Lindqvist

243 A chemical damage model of sandstone in acid solution

Li Ning, Zhu Yunming, Su Bo and S. Gunter

251 Analysis of coal mine roof fall rate using fuzzy reasoning techniques

D. Deb

259 Testing conditions and geomechanical properties influencing the CERCHAR abrasiveness index (CAI) value

R. Plinninger, H. Käsling, K. Thuro and G. Spaun

265 Validation of block theory and three-dimensional discontinuous deformation analysis as wedge stability analysis methods

M. R. Yeung, Q. H. Jiang and N. Sun

277 Development of a local degradation approach to the modelling of brittle fracture in

heterogeneous rocks: [By Z. Fang and J.P. Harrison, International Journal of Rock Mechanics and Mining Sciences 39 (2002) 443-457]
H. Ozturk

279 Authors' reply
Z. Fang and J. P. Harrison

MINERALS ENGINEERING

DECEMBER 2002

1027 Fracture toughness and surface energies of minerals: theoretical estimates for oxides, sulphides, silicates and halides
D. Tromans and J. A. Meech

1043 Inferential measurement of SAG mill parameters II: state estimation
T. A. Apelt, S. P. Asprey and N. F. Thornhill

1055 Inferential measurement of SAG mill parameters III: inferential models
T. A. Apelt, S. P. Asprey and N. F. Thornhill

1073 Exploring total media wear
P. Radziszewski

1089 Evaluating the Nakajima et al. model for rectangular-aperture screens
A. Dehghani, A. J. Monhemius and R. J. Gochin

1095 Application of neural networks to predict locked cycle flotation test results
E. C. Çilek

1105 Effect of ultrasonic treatment on zinc removal from hydroxide precipitates by dissolved air flotation
B. C. Qi and C. Aldrich

1113 The influence of the oxidation state of pyrite and arsenopyrite on the flotation of an auriferous sulphide ore
M. B. M. Monte, A. J. B. Dutra, C. R. F. Albuquerque, Jr., L. A. Tondo and F. F. Lins

1121 Magnetic properties of ilmenite, hematite and oilsand minerals after roasting
Z. Cui, Q. Liu and T. H. Etsell

1131 Geopolymerisation of multiple minerals,
Hua Xu and Jannie S. J. Van Deventer

1141 Inhibition of acid rock drainage from uranium ore waste using a conventional neutralization and precipitation treatment
Y. N. Mata, F. Gonzalez, A. Ballester, M. L. Blázquez and J. A. Murioz

1151 A study on the chemical stability of the Versatic 10-Acorga CLX50 synergistic system,
C. Y. Cheng, K. R. Barnard and M. G. Davies

1163 The use of ion exchange resins for the treatment of cyanidation tailings part 1—process development of selective base metal elution,
K. Fernando, T. Tran, S. Laing and M. J. Kim

1173 A kinetic and electrochemical study of the ammonia cyanide process for leaching gold in solutions containing copper
M. I. Jeffrey, L. Linda, P. L. Breuer and C. K. Chu

1181 Effect of solids on viability of acidophilic bacteria
H. Deveci

1191 Purification of north Brazilian kaolin by selective flocculation
F. Larroyd, C. O. Petter and C. H. Sampaio

1193 A preliminary research on acid pressure leaching of pyritic copper ore in Kure Copper Mine, Turkey
A. Akcii

1199 Influence of a jiggging action on the gravity separation achieved in a teetered bed separator,
K. P. Galvin, S. J. Pratten, N. Lambert, A. M. Callen and J. Lui

JANUARY 2003

1 Liner wear in jaw crushers
M. Lindqvist and C. M. Evertsson

13 Ore characterisation for—and simulation of—primary autogenous grinding
R. Hahne, B. I. Pålsson and P. O. Samskog

21 Copper catalysed oxidation of thiosulfate by oxygen in gold leach solutions
P. L. Breuer and M. I. Jeffrey

31 Iron recovery from sulphate leach liquors in zinc hydrometallurgy
M. R. C. Ismael and J. M. R. Carvalho

41 Study on the recovery of zinc from Moore cake: a biotechnological approach
A. Gupta, K. Birendra and R. Mishra

45 Arsenic leaching by Na₂S to decontaminate tailings coming from colemanite processing, M. Delfini, M. Ferrini, A. Manni, P. Massacci and L. Piga

51 Bioleaching of copper ore flotation concentrates
Z. Sadowski, E. Jazdyk and H. Karas

55 Optimizing the design of flotation circuits: an economic approach
M. H. Abu-Ali and S. A. Abdel Sabour

59 Coagulation and flocculation characteristics of talc by different flocculants in the presence of cations
A. Ozkan

95 "First application of cyanidation process in Turkish gold mining and its environmental impacts"
A. Akcil

FEBRUARY 2003

75 Solid-liquid separation equipment selection and modelling
R. G. Holdich

85 Software for the design and simulation of gravity thickeners
P. Garrido, R. Burgos, F. Concha and R. Bürger

93 Flow visualisation and computational prediction in thickener rake models
I. D. Sutalo, D. A. Paterson and M. Rudman

103 Historical use and future development of chemicals for solid-liquid separation in the mineral processing industry
M.J. Pearse

109 The importance of flocculant choice with consideration to mixing energy to achieve efficient solid/liquid separation
S. Weir and G. M. Moody

115 Hydrocyclones in dewatering circuits
B. Firth

121 Clarification by slotted surface microfilters, R. G. Holdich, I. W. Cumming, S. Kosvintsev, A. J. Bromley and G. Stefanini

129 Sedimentation of clay in ultrasonic medium, Güven Önal, Mustafa Özer and Fatma Arslan

135 Interference of coarse and fine particles of different shape in mixed porous beds and filter cakes
M. Mota, J. A. Teixeira, W. R. Bowen and A. Yelshin

145 Fluid flow in thickener feedwell models, R. B. White, I. D. Sutalo and T. Nguyen

151 On-line moisture determination of ore concentrates 'a review of traditional methods and introduction of a novel solution'
P. A. Cancilla, P. Barrette and F. Rosenblum

165 Automatic pressure filtration in mining and metallurgy
I. Townsend

INDUSTRIAL MINERALS

DECEMBER 2002

22 Specialities shine in SiC market

32 Primed for minerals

36 Fillers in the fast lane

40 The state of flux

52 A new direction for magnetic separation

58 The story of the blues

61 Minerals Inspection in China

JANUARY 2003

24 REgeneration in autocatalysts

34 Sink or swim

40 Ti-ming it right

46 Construction chemicals

58 Bulking up

62 Clear winners- Advances in pigment and filler dewatering

FEBRUARY 2

- 24 Name that **dü**
- 34 Winds of change
- 42 Swell times ahead?
- 46 Driven by dynamic ceramics
- 52 French ceramics market
- 61 Growing opportunities
- 66 Performing in overdrive
- 69 Travancore turns to sulphate TiO₂

MINING ENGINEERING

DECEMBER 2002

- 17 Raw materials and technology fuel U.S. economic growth
Thomas D. Kelly
- 22 Cresson Mine completes two-year expansion
William R. Yernberg
- 24 Data and monitoring systems improve pit operations
Eduardo Nebot and Greg Sheppard
- 27 Missouri-Rolla's online program gains popularity
Tad S. Golosinski and R. Larry Grayson
- 31 Invensys Showcase highlights process control technologies
Steve Krai

TECHNICAL

- 33 Pilot plant demonstration of the Platsol process for the treatment of the NorthMet copper-nickel-PGM deposit
C.J. Ferron, C.A. Fleming, P.T. O'Kane and D. Dreisinger
- 40 Active proximity warning system for surface and underground mining applications
W. H. Schiffba

JANUARY 2003

- 17 New miner training for the 21st century Daniel H. McClain
- 22 Controlling conveyor dust before it becomes a problem
Neil F. Archer
- 24 **TECHNOLOGY NEWS:** Using satellite technology to find precious metals Beverly Cramp
- 29 Cincinnati features aggregates and industrial minerals programming

TECHNICAL PAPERS

- 33 U.S. Geological Survey resource assessment of selected Tertiary coal zones in Wyoming, Montana and North Dakota D.J. Nichols and M.S. Ellis
- 39 Profile of Ghana's mining industry K. Grubaugh

- 45 Leica Dozer 2000 at the San Miguel lignite mine: the uses of GPS grade control in surface mining M. Heger

FEBRUARY 2003

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

