Süreli Yayınlar 1987

Mining Magazine

APRIL 1987

261 Panorama
British Coal’s Southside preparation plant; Construction of Czech nuclear power plant; AIME’s 116th Annual Meeting; Modular crude oil processing plant in Alberta; Go-ahead for Red Dog Zn Pb concentrator, Alaska.

276 New Denmark
Operations at a new 10Mt/y colliery in South Africa which was officially opened late last year.

284 Vernejoul
Charbonnages de France’s highly automated coal preparation plant, where computers help control the plant and prepare the waybills.

293 Plant Control
The authors describe lessons learnt in control and automation from three generations of large coal preparation plants.

300 Turnkey Manufacturers
A review of the companies worldwide which can undertake design and construction of complete coal preparation plants.

316 Automatic Process Control
Camborne’s Barry Wills discusses the concepts and review the practice of process control, particularly as applied to flotation and grinding.

321 MINPREP87
A preview of the mineral processing/coal preparation exhibition taking place early this month in Doncaster, England.

MAY 1987

361 Panorama
Mining in Panama; World’s largest zinc roasting facility in Belgium; Another South African platinum mine; Perlite evaluation in Northern Ireland; Reopening of Kilembe mine, Uganda, a possibility?

370 LaCaridad
Mexicana de Cobre runs a major copper/molybdenum mining, concentrating and smelting operation in Sonora State, Mexico. Recent modifications have expanded concentrator throughput, while the new flash smelter came on-stream last year.

387 BWEs at Omarska
Overburden at Yugoslavia’s newest iron ore mine is soft and water-bearing. Bucket wheel excavators proved the most economical means of overburden removal.

393 Gold Beneficiation
The need to treat lower grade and/or more refractory gold ores has led to a wide variety of innovations in gold beneficiation technology. The authors review the most important developments.

402 Gold in Costa Rica
Were the early Spaniards right to call it “The Rich Coast”? The author gives up-to-date information on the gold deposits of the Osa Peninsula.

JUNE 1987

445 Panorama
Outokumpu’s growth and investment; Tin dredging in Brazil; Improvements at San Manuel; U/g uranium mine, Wyoming; Shetland talc.

462 Kiruna
Sweden’s large underground iron ore mine mechanization 1987 style!

479 Spitsbergen
Mining coal within the Arctic Circle

489 Norwegian Smelters
Expansion projects in the Norwegian metallurgical industry.
Finland’s Geological Survey
The Survey constantly adapts its role to meet the nation’s needs.

Manufacturers
A survey of manufacturers of mining and associated equipment in Sweden, Finland, Norway and Denmark.

Exporting
Top executives from seven prominent companies in Sweden and Finland outline their success in selling to the mining markets.

Mining Engineering

APRIL 1987

241 Amax’s Sleeper mine exceeds expectations on all counts as low-cost gold producer

Warren D. Stanford

247 Kaolin and paper: Quality of both products will improve with more sophisticated printing techniques

Kenneth J. Hartman

251 Coal mining research—Growth in energy demand can be met while reducing injuries and fatalities

Wayne N. Marchant

255 Technology news:
o Goodyear introduces tear-resistant conveyor at US Borax mine
o Spray system improves dust control for continuous miners
o Handling systems move lignite, limestone at Texas plant
o Mobile conveyor helps increase gold leaching recovery

259 Base metal industry in Mexico—its current status and implications for the future

R.M. Campoy

262 Horizontal cyclone in closed-circuit grinding

R.E. Hochscheid

267 Surface mining of oil sands in Canada: Developments in productivity improvement

R.K. Singhal and R. Kolada

270 Coalbed methane: Conversion of a liability to an asset

J.J. Schwobel

MAY 1987

325 EXPLORATION

344 MINING

352 PROCESSING

363 COAL

370 INDUSTRIAL MINERALS

JUNE 1987

411 INDUSTRIAL MINERALS (continued from May)

427 1987 Jackling Lecture: Elementary geostatistical models applied in forecasting South Africa’s long-term gold production

D.G. Krige

433 Computer-aided schedule optimization in room-and-pillar and longwall operations

P.K. Chatterjee, G. Johnston, and S. Holguin

437 Rib pillar extraction—an alternative to longwalling and shortwalling

H. Habenicht and E. Urschitz

441 Discussion: Mineral resource objectives of the Continental scientific Drilling Committee’s dedicated drill holes and add-on science to solve mineral deposit problems

J.J. Eidel and C. Meyer
Industrial Minerals

APRIL 1987

25 Silica
   Is the choice crystal clear?

45 US white wares
   Battling imports

53 Special glasses
   The importance of raw materials

61 Raw materials for technical ceramics

67 A review of beryllium
   The metal, its oxide and alloys

75 Clay deposit account
   Money in the bank

MAY 1987

22 Diatomite - No skeletons in the cupboard

40 Value added in the mineral sands industry
   An industry for the future

JUNE 1987

22 Lithium
   No shortage in supply

40 Talc in Europe Optimistic views are prevailing

52 North American talc
   Competition in every direction

57 The port of Amsterdam IPPD

62 The Chilean Nitrate industry vs the US
   Department of Commerce

Institution of Mining and Metallurgy

APRIL 1987

A41 Ground control with use of cemented hydra­
   ulic fill at Kokkinorotsos chrome mine, Cyprus
   N. G. Terezopoulos

A47 Drift support techniques in weak rock and
   measurement of displacement around rock
   excavations
   YuCan

A51 Future concepts in surface mining operations
   T. Atkinson, M. D. Waller and B. Denby

Environmental effects of mining and restoration -
   presentations at September, 1986, conference

A66 Keynote address
   Sir Ralph Verney

52 All that glitters is not gold

56 Freight futures
   A tool for risk management

64 Industrial minerals transportation
   Delivering the goods

66 UK industrial mineral statistics

A68 Land restoration—what is the future?
   A.D. Bradshaw, G. D. R. Parry and M. S. Johnson

A72 Environmental impact of spoil disposal
   D. L. Sabey

A74 Restoration: practice and guidance
   R. Kell

A76 Tara Mines—an environmental case study
   W. G. Dallas

A79 Perspective of the minerals industry in rela­
   tion to minerals planning
   J. C. Taylor

A83 Minerals planning: recent and future develop­
   ments
   Robin Mabey
A88 Thrislington quarry—case history of compromise
R. W.Stanyon and D.G.Park

A91 A hole among friends
David Bellamy

A92 Technical note
Shotcreting system to reduce airborne dust generation
Zhou Heng-Qi

MAY 1987

B59 Fluid inclusion geochemistry of quartz-wolframite-sulphide veins of Chhendapathar, Bankura District, West Bengal, India
S.Jaireth

B65 Geochemistry of granites beneath the north Pennines and their role in orfield mineralization
G.C.Brown et al.

B77 Metallogeny, magmatism and structure in Jiangxi Province, China: a new interpretation
P.R.Simpson, Gong Youxun and Gao Bingzang

B84 Prospecting in areas of glaciated terrain 1986: report of September, 1986, symposium

B93 Abstracts of theses

B95 Discussion
High heat production granites of southwest England and their associated mineralization: a review
M.Stone and C.S.Exley

C55 Phase relations in the System CaO-chromhim oxide-SiO2 in air and solid-solution relations along the Ca3Si04-Ca3(CrO4)2 join
J.P.R. de Villiers, J.Mathias and A.Muan

C63 Effect of lattice cations, silicate ions and fluorosilicate ions on two-liquid flotation of tungsten minerals
K.I.Marinakis and G.H.Kelsall

C69 Mathematical modelling of zinc oxide leaching in dilute acid solutions
F.M.Doyle, N.Ranjan and E.Peters

C79 Dissolution of silver chloride in ferric chloride-hydrochloric acid media
J.E.Dutrizac

C87 Computer modelling of primary spiral circuit at South Crofty, Ltd., Cornwall, England
P.Tucker, K.A.Lewis and M.P.Hallewell

C93 Surface tension of matte and its measurement by sessile drop technique
M.Mandira, H.N.Dharwadkar and D.Kumar

C98 Studies in the system Mo-S
M.C.L.Patterson, L.J.R.Cohen and J.A.Charles

C103 Wetting behaviour, polar characteristics and flotation of inherently hydrophobic minerals
S.Kelebek

C108 Simplification of grinding equation for plant simulation
A.R.Laplante, J.A.Finch and R.del ^illar

C113 Technical note
Production of Straits tin
Lai Fook Hoy

International Journal of Mineral Processing

JUNE 1987

17 Liberation-volume and mass lockedness profiles derived—theoretical and practical conclusions
T.F.Meloy
35 The activation mechanisms of wolframite by Ca$^{2+}$ and Fe$^{3+}$ ions in hydrophobic agglomeration, using sodium oleate as collector
D. Wei, K. Wei and J. Qiu

45 Energy-size reduction "laws" revisited
P.C.Kapur and D.W.Fuerstenau

59 Factors affecting the selective flocculation of hydroxypatite from quartz and/or calcite mixtures
J.Rubio and A.M.Marabini

73 The surface characteristics and flotation behavior of anglesite and cerussite
M.C.Fuerstenau, S.A.Olivas, R.Herrera-Urbina and K.N.Han

87 A study of the surface oxidation of arsenopyrite using cyclic voltammetry
M.J.V.Beattie and G.W.Poling

**CIM Bulletin**

**FEBRUARY 1987**

29 The geology and economic potential of the Athabasca Basin in Alberta;
J. Wilson

37 Classification of quartz veins in turbidite-hosted gold deposits, greenschist facies, eastern Nova Scotia;
S.J.Haynes

52 Geochemical and geophysical gold exploration in the Timmins area, Ontario: a case history;
G.A.Harron, R.S.Middleton and R.B.Durham and A.Philipp

58 Humus and till geochemistry over the Doj, on, Bousquet and Williams gold deposits;
D.G.Sheehan

67 Placer exploration using radar and seismic methods;
J.L.Davis, A.P.Annan and C.Vaughan

73 Cut-off grades: statistical estimation and reality;
Michel Dagbert

83 Mineralogie des scories cuprifères produites par le reacteur Noranda:
M.A.Berube et M.Choquette, et P.W.Godbehere

**APRIL 1987**

25 Canadian silica resources: a study of the processing of selected Quebec silica samples for glass and foundry sand;
P.R.A. Andrews and R.K. Collings

32 Ontario and the mineral filter industry;
G.Robert Guillet

37 Plasma spray forming of coatings and parts;
S.Dallaire

43 Advanced ceramics in Canada;
T.A.Wheat

49 Production de poudre de ferrite a base de strontium par Maghemite;
Denis Landry

51 Gold mineralization and its position in the geological evolution of the Beardmore-Tashota area;
Derek E. McBride

58 Humus and till geochemistry over the Doj, on, Bousquet and Williams gold deposits;
D.G.Sheehan

67 Placer exploration using radar and seismic methods;
J.L.Davis, A.P.Annan and C.Vaughan

73 Cut-off grades: statistical estimation and reality;
Michel Dagbert

83 Mineralogie des scories cuprifères produites par le reacteur Noranda:
M.A.Berube et M.Choquette, et P.W.Godbehere

109 E-pH diagrams for stable and metastable phases in the copper—sulfur—water system
R.Woods, R.H.Yoon and C.A.Young

121 Modelling the effect of froth depth in flotation
S.M.Feteris, J.A.Frew and A.Jowett

173 Tungsten trioxide reduction-carburization with carbon monoxide—carbon dioxide mixtures: Kinetics and thermodynamics
F.C.Nava Alonso, M.L.Zambrano Morales, A. Uribe Salas and J.E.Bedolla Becerril

153 Technical Note
A simple flotation method for rapidly assessing the hydrophobicity of coal particles
M.C. Williams and D.W.Fuerstenau
MAY 1987

39 Continuous loading and conveying technology in mining;  
W.S.Cusitar, and Dale Letts.

44 Diggability of plains overburden with bucketwheel excavators;  
R.M.Krzanowski and T.S.Colosinski

46 Some new developments in monitoring, analysis and prediction of ground subsidence;  
Adam Chrzanowski and Anna Szostak-Chrzanowski

51 Analysis of coal and mineral processing circuits, signal flowgraph approach;  
A.I.A.Salama and M. W.Mikhail

54 Contract research in coals and minerals at the Atlantic Coal Institute;  
Dieter Birk

58 Carbofuel—an update;  
G.Landry and A. White

60 Application of a modified Plastofrost apparatus to coal rheology;  
P.D.Duever, P.L.Silverston and P.J.Readyhough

69 Development of nitrogen infusion technology for fighting and inhibition of fires;  
P.C.Garg

63 Minimum variance or maximum profitability?  
R.Mohan Srivastava

72 New Tax rules for northern allowances;  
Robert B.Parsons

JUNE 1987

31 Agglomeration heap leaching of precious metals;  
J.A.Eisele and D.L.Pool

35 Etude du gonflement des boulettes d’hématite additionnées de tourbe;  
E.Godin, M.Rigaud and S.C.Panigrahy, and I.Malinsky

41 Selective flotation of sphalerite from Pb-Zn ore without copper activation;  
M.Leroux, S.R.Rao and J.A.Finch

45 Gold mineralization associated with archean stratabound sulphides in the Cheminis deposit near Larder Lake, Ontario;  
R.J.McH.Clark and R.Bonnar

51 Labour occupational and mobility trends in the Canadian metal mining sector,  
C.Knowles and G.Fletcher, and G.Kendall and R.Keys

109 Galvanizing plant trial using the nickel-zinc process;  
C.J.Allen, L.Battiston and R.J.Mills