Süreli Yayınlar 1987

Mining Magazine

JÜLY 1987

8 Panorama

Associated minerals increases output of synthetic rutile; Shaft freezing at Asfordby; Further news on Northern Ireland lignite; Meeting in Budapest discusses utilization of gallium in microelectronics; U.S.S.R.-Mongolian co-operation in mining.

20 Balangero

This mechanized openpit mine in northern Italy is Europe's largest indigenous source of asbestos. Over 2.5 Mt/y of ore are handled through an in-pit crushing system.

26 Wankie Colliery

Operations at Zimbabwe's colliery, which has both openpit and underground workings, are described. Its output of coal is crucial to the economy of Central Africa.

33 Heading Machines

A comprehensive review of machines for driving headings in mines: continuous miners, face cutting machines and roadheaders.

52 Coal Preparation Some thoughts for the future on the whole range of coal preparation from coarse coal to the treatment of fines.

61 AIMEX 87 A preview of Australia's International Mining Exhibition to be held in Sydney this month.

AUGUST 1987

106 Panorama UN co-operates in African gold projects; Development plans for massive coalfield in the PRC; Flue dust processing at Anaconda; Pressurized fluid bed combustion for Escatron power plant, Spain; Nuclear power generation strategies and options.

122 Ashanti

This long-established gold mine in Ghana is undergoing a major programme of expansion and modernization.

- 133 Gold in sub-Saharan Africa Basic geological, legal, financial and institutional information to aid would-be investors in six African countries.
- 139 MNCsandDCs Multinational companies and developing countries can create mutual benefits, though conflicts of interest may seem to exist.
- 142 African Mining Papers being presented at this conference taking place in Harare, Zimbabwe at the end of August are listed.
- 144 Roof reinforcement in longwalls Rock reinforcing by bonding agents is widely practised in Polish longwall coal mines.
- 149 Coal preparation A review of Polish coal prep methods, plants and equipment.
- 165 SIMMEX '87 Poland's important mining event taking place in Katowice at the end of this month is briefly previewed.

SEPTEMBER 1987

- 188 Panorama Small scale underground mining, Apex, Canada; World's largest gravity-flow slurry pipeline; Progress at Lac des Iles, etc.
- 206 Aredor Makes the Grade After initial teething troubles, Aredor diamond mine is making a vital contribution to the Guinean economy.
- 217 Diamond Deposit Evaluation The problem of evaluating a deposit where the valuable constituent represents 20 parts per billion.

226 Point of Ayr Colliery

A decline being driven through water-logged ground will permit increased production from gassy seams under the sea.

238 Jet-Assisted Coal Cutting "Epytensic' system of supplying high pressure water to shearers.

243. Coal Mines Survey

Western World mines accounting for 90% of coal output.

258 Computer Graphics

An interactive system is more than a drafting machine.

266 Computer File

Mining Engineering

JULY 1987

- 481 Electrochemical and column flotation technologies can mean higher recovery at lower operating costs Garrett R. Hyde and Aleksandar Stojsic
- 485 What it's worth: A review of 1986 mineral royalty information *H. Lyn Bourne*
- 488 Economics of electric power may make cogeneration a major future power source Early Rau
- 489 California's Foothill Gold Belt: Some famous lode mines are showing signs of renewed interest Peter Joralemon
- 495 Mica—a summary of 1986 activity

AUGUST 1987

- 775 Island Creek's feeding-to-zero concept simplifies coal prep circuit at Providence plant *Elza Burch*
- 779 Mining industry wins one—Interior Department ruling rejects "independent mine requirement" concept R. Rimoth McCrum
- 781 Scrubbers and remote control allow North River No. 1 mine to extend cutting depth of continuous miners Steve O. Green
- 785 Inability to communicate: How technical professionals cut short their management careers

H. Richard Eisenbeis and Donna M. Watkins

- 788 US Bureau of Mines research update
- 793 An open-pit production scheduler: algorithm and implementation *M.E.* Gershon
- **796** Canonical diagram as a graph representation of a mine ventilation network *A.M. Wala and T. Altman*
- 800 Economic and environmental implications of leakage upon in situ uranium mining R.S. Popielak and J. Siegel
- 804 TECHNICAL NOTE: Increased value of refined, high-sulfur coal *P.R. Dugan*
- 807 DISCUSSION: Use of a microcomputer in the design and selection of materials hoisting systems *G.T. Lineberry and J.D. Patsey*

SEPTEMBER 1987

- 849 Petrography studies can aid in coal mine planning and in estimating methane yields in coal beds *G.J. Jansen*
- 853 Masbate gold operation is site of first commercial heap leaching plant in Philippines. R.S. Pizarro, Victorio V. Pato, and Libby R. Ricafort
- 857 The witchcraft and logic of gold pricing—politics, inflation, speculation, and the value of the dollar are all contributing factors *Thomas D. Kaufmann*
- 859 Current use of continuous monitoring systems in coal mines discussed Kevin G. Stricklin

- Technology news: Techbase software system 864 offers variety of mining applications
- 867 Chino mine modernization R.D. Wunder and A.D. Trujilo
- 872 Recent insight into longwall strata movements deduced from subsidence analysis K.A. Heasley and L.W. Saperstein

Industrial Minerals

JULY 1987

- 20 Pakistan's mineral potential. Prince orpauper?
- 45 World kaolins Genesis, exploitation, and application.
- 62 Kaolin Paper underpins current demand.

AUGUST 1987

19 Turkey's Salda Lake A genetic model for magnesite

- 877 Perlite expansion and testing at the New Mexico Bureau of Mines and Mineral Resources, Soccoro, NM J.Af. Barker, J.S. Hingtgen, and M.R. Bowie
- 882 DISCUSSION: Lime substitutes for the treatment of acid mine drainage G.W. Heunisch

- 33 Glass markets Added value impetus
- 6 5 White carbonate fillers An ocean of difference
- A weekend in Westport 75

SEPTEMBER 1987

- 25 Phosphate Rock Trends in processing and production
- 61 Minerals in fire protection Construction supports market
- Turkish meeting Abstracts and biographies 75
- 83 Zeolitisation of perlite A prospective route

Institution of Mining and Metallurgy

JULY 1987

- A95 Presidential address: The Law of the Sea: personal reflections on the deep-sea mining issues A.G. Moncrieff
- A104 Platinum-group metals: report of the eleventh

Platinum-one of the world's most strategic metals F.D. Collender

Platinum-group element exploration: targets and guidelines D.L. Buchanan

Investigation and exploitation of platinum in UG2 Reef at Western Platinum mine I.M. Hossy and A.A. Saffy

Refining of platinum-group metals B.F. Rimmer

Developments in the market for platinum A. Austin

Technological trends in industrial applications of the platinum-group metals G.J.K. Acres

Processing of platinum-group metals mined from Merensky Reef B.M. Symes

- A129 Development of modelling techniques in petroleum exploration and production Jack Birks
- A136 Technical notes Mining technique for high-level nuclear waste repository Ivar Sagefors
- A137 New railway tunnels of Deutsche Bundesbahn P.M. Sanders

AUGUST 1987

- **B97** Exploration geochemistry in some low-latitude areas—problems and techniques *G.J.S. Govett*
- B117 Alteration associated with volcanogenic sulphide ores at Mount Chalmers, Queensland, Australia *R.K. McLeod*
- B128 Lower Proterozoic stratiform sulphide deposits in Loch Maree Group, Gairloch, northwest Scotland *E.M. Jones, CM. Rice and J.R. Tweedie*
- B141 Interpretation of drilling parameters for ground characterization in exploration and development of quarries J.Pech, M.J. Scoble and M.Carter
- B149 Exploration and extraction of structurally and lithostratigraphically controlled fluorite deposits in Castleton-Bradwell area of Southern Pennine Orefield, England N.J.D Butcher and J.D.Hedges
- B156 Computer-aided evaluation of cement raw materials in southern Africa—a case history D.P. Jefferson
- B165 Technical notes Auger drilling W.L. Barrett
- B169 Conservation of geological features in extractive sites—legislation and case histories L.E. Richards
- B173 Middle Dalradian Corrycharmaig serpentinite, Perthshire, Scotland: an ultramafic intrusion CA. Hawson and A.J.Hall

SEPTEMBER 1987

C115 Factors influencing behaviour of flotation froth M. Szatkowski

C123 Cobalt recovery from Kelex 100 by hydrogen stripping N.M. Stubine and P.A. Distin

- C130 Mathematical model of the Stokes hydrosizer R.I. Mackie, P.Tucker and A. Wells
- C137 Thermal regeneration of activated carbonseffect of temperature, time and steam addition on carbon activity J. Avraamides
- C144 Characterization and separation of metallurgical residues from Kidd Greek zinc processing plant *R. Lostra et al.*
- Cl 51 Current trends in smelting and refining of secondary copper materials W.S. Nelmes
- C156 Leaching behaviour of copper converter slag obtained under different cooling conditions *R.P. Dos et al.*
- C163 Technical notes Method of automating semi-bach flotation T. Yalcin and A.M. Reilly
- C165 Development of contact angles on hcazlewoodite J.K. Critchley and C.J. Hunter
- C168 Comparison of performance of various laboratory flotation cells *CT O'Connor, R.C Dunne and R.B. Duncan*
- C171 Discussion
 - Improved gold and silver recovery from Spanish gossan ores by sulphidization prior to cyanidation

C. Nunez, A. Roca and F. Espiell

International Journal of Mineral Processing

AUGUST 1987

1 Turbelence in flotation cells *K. Fallenius* 25 Barium ion flotation with sodium laurylsulfate, I. Mechanisms controlling the extraction process

P. Bernasconi, J.E. Poirier, G. Bouzat,

P. Blazy, J. Bessiere and R. Durand

- 45 Barium ion flotation with sodium laurysulfate, II. A Model for the calculation of the recovery curves P. Bernasconi, J.E. Poirier, P. Blazy, J. Bessiere and R. Durand
- 57 Bacterial leaching—complex sulphides of copper, lead and zinc G.R. Chaudhury and R.P. Das
- 65 Mass balance calculations around mineral processing units using composition analyses within particle-size classes D. Hodouin and S. Vaz Coelho
- 83 Separation of germanium and arsenic from solutions by flotation
 - K.A. Matis, I.N. Papadoyannis and A.I. Zoumboulis

- 93 Anionic deprassant function in anionic flotation hematite *T.L. Wei and R. W. Smith*
- 105 Evalutation of flotation collectors for copper sulfides and pyrite, I. Common sulfhydryl collectors *P.K. Ackerman, G.H. Harris, R.R. Kilimpel* and F.F. Apian
- 129 Evaluation of flotation collectors for copper sulfides and pyrite, II. Non-sulfhydryl collectors P.K. Ackerman, G.H. Harris, R.R. Klimpel and F.F. Apian
- 141 Evaluation of flotation collectors for copper sulfides and pyrite, III. Effect of xanthate chain length and branching *P.K. Ackerman, G.H. Harris, R.R. Klimpel* and F.F. Apian

CIM Bulletin

JULY 1987

- 33 In situ testing in underground backfilled stopes; Malcolm Scoble, Luciano Piclacchia and Jean-Marc Robert
- **39** Centrifuge model studies for backfill desing at Westmin Resources Limited H.W. Mine; *H.J. Mitchell and J.D. Smith.*
- 45 A design philosophy for surface crown pillars of hard rock mines; Marc C. Betoumay
- 62 Simulation of a longwall development-extraction network; Sukumar Bandopedhyay and Amapuram Sundararajan
- 71 Development of the automatic GO-80 drill; J.Kelly and R. England
- 75 Changes in grade, volume and contained gold during the mining life-cycle of gold placer deposits; J.D. Bliss, G.J. Orris and W.D. Menzie
- 80 Influence of hydrogen pero-ide addition on the corrosion of carbon steel by concentrated sulphuric acid; *CM. Davidson and D.J. Drexler*

81 Successor corporation rules—an update; Robert B. Parsons

AUGUST 1987

- 37 Blast simulation, surface and underground, with the SABREX model; G.K. Jorgenson and S.H. Chung
- 42 Highland Valley Copper: a strategy for increased productivity; Poul Hansen
- 46 Explosives choice at East Kemptville Mine; J.M. Houston
- 51 Survival strategy: every bit counts; O.P. Garg
- 55 Optimization of open pit short and long-range production scheduling; Kostas Fytas, Charles Pelley and Peter Colder
- 62 The use of near surface materials in gold exploration—Kirkland Lake area Ontario; *CF. Gleeson, and V.N. Rampton*
- Jl A comparison of thermally alloyed Zn-Fe coatings produced by mechanical wiping to those produced by post-coating annealing; J.P. Landriault and F. W. Harrison

SEPTEMBER 1987

- **39** Cyclone modelling; a review present technology; B.C. Flintoff and L.R. Plitt and A.A. Turak
- 51 Fuzzy Logic: a potential control technique for mineral processing: C.A. Harris and J.A. Meech
- 60 Blended ANFO-based explosives: W.B. Evans, and D.P. Taylor

- 65 Computeraided dynamic analysis and control design for grinding circuits; *Y. Dube, D. Hodouin*
- 71 TransAlta's prestripping system selection; M.D. Gleghorn and P.R. Clark
- 78 Applications of geophysical methods to resource development in northern Canada; *P.T. Lafleche, A.S. Judge and A.E. Taylor*
- 88 Post-graduate theses in Canadian universities on geologic research related to mineral deposits, 1983-1986
- 115 Corrosion of test results and application of coil-coated Galfan; E.F. Godwin, A.F. Skenazi and R.F. Lynch