# Süreli Yayınlar 1986

# Mining Magazine

## **JUNE 1986**

#### 465 Panorama

First gold and silver bars from Paradise Peak, Nevada; Omai—a possible gold mine in Guyana; Operations at Coalfield North opencast site, England.

#### 475 Tin

A review of the current situation following the price collapse.

#### 478 Lorraine Coal

In Charbonnage de France's most productive area, Wendel Colliery mines steep seams (p. 478), while the output from La Houve Colliery's high productivity faces is cleaned in the new highly-automated Vernejoul washery (p. 485).

#### 492 Liddell Colliery

This N.S.W. mine is expanding output by adding longwall faces to bord-and-pillar extraction.

#### 502 Free steered vehicles

Coal mining applications are a growth area in mining equipment development and are making an impact on materials handling.

#### 517 Mineral Processing

The Director of the NATO Advanced Study Institute; 'Mineral Processing at a Crossroads' gives his personal account of proceedings at this event, held recently in Cornwall, England.

## **JULY 1986**

- 1 Computers take control
- 8 Panorama

ACM's golden double; New talc development in Shetland, U.K.; Development of beach sand deposits in Madagascar.

#### FOCUS ON HUNGARY

- 16 Overview
- 19- Bauxite mining
- 27 Lignite mining
- 32 Underground coal
- 36 Ore and minerals mining
- 41 Manufacturers, organizations etc.

#### 45 Drilling & Cable bolting

Metalliferous mines in Finland employ highly productive mechanized and computerized drilling and rock bolting equipment.

# **AUGUST 1986**

#### 72 Panorama

Metallurgice Hoboken-Overpelt, Belgium, has major investment programme; Mexico's La Caridad copper smelter starts up; Finland expands use of peat for energy; High productivity at Canada's Roberts Bank coal port; U.K. to monitor acid rain.

#### 82 Consolidated Rutile

The company's new Gordon high dune dredge mining operations on North Stradbroke Island yield rutile and zircon, after which the dunes are fully restored.

#### 91 Aerial Prospecting

A comprehensive review of commercially-available airborne geophysical and geochemical surveying methods and remote sensing techniques.

#### 114 Canadian Gold

The Archaean greenstone belts of the Superior structural Province of the Canadian Shield have accounted for some 80% of Canada's total gold production. This article reviews the current picture.

- 120 Prospecting in Glaciated Terrain

  A preview of next month's IMM symposium in Kuopio, Finland.
- 125 Digital Image Processing

  Details of GIS A the Geochemical Interactive Systems Analysis service now available
  from the British Geological Survey.

## SEPTEMBER 1986

157 Panorama

Summitville — leaching at its peak; N. American gold mine ventures of B.C. -based company; Impressive production at Black Thunder coal mine; Norwegian iron ore pellet plant conversion.

#### 174 Pinson

A successful gold operation based on low grade deposits.

184 World Gold Projects

An overview of the major mine developments and expansion programmes currently underway worldwide in gold mining.

207 Muruntau

A review of operations at the U.S.S.R.'s major gold producer.

212 Silverdale Colliery

Extensive use of FSVs aids productivity at this U.K. coal mine.

221 Longwall Mining

A two-part feature covering the latest advances in longwall technology followed by a review of manufacturers.

248 Coal Mines Survey

Eileen Ashworth

A listing of 1,330 mines accounting for 90% of Western World coal and lignite output.

# Mining Engineering

## **JULY 1986**

- 489 Western Australia stamp batteries are operating museums of mining history Richard Addison
- 492 Pittsburgh again hosts annual AMC coal convention

  Tim O'Neil
- 495 Battle Mountain describes the geology of its Fortitude gold-silver deposit at Copper Canyon *P.R.Wotruba*, *R.G.Benson*, and *K.W.Schmidt*
- 500 Agglomerated and unagglomerated heap leaching behavior is compared in production heaps

  G.E.McClelland

## AUGUST1986

805 Results given of studies concerning methane extraction from coalbeds

M.A.Trevits and G.L.Finfinger

- 809 Study shows downward trend in mining engineering enrollments, suggests courses of action
- 813 Design and construction outlined for the Cannon mine tailings impoundment

  Jack Caldwell, Don Moore, Ian Hutchison,
  and Ted Sluder
- 816 What it's worth: A review of mineral royalty information

  H.Lyn Bourne
- 818 Dominican Republic and Haiti continue to explore their alluvial gold deposits Gerald M.Ellis
- 823 Jackling Lecture: Recent lessons that have been learned in open-pit mine stability *C.O.Brawner*
- Physical coal cleaning to reduce Illinois No.6 seam coal's slagging potentialC.D.Harrison and J. W.Parkinson

- 834 Technical note: Subsidence and time N.B.Aughenbaugh and C.D.Elifrits
- 837 Discussion: Lemniscate-guided powered roof supports adapted for proper operation with the roof on longwall faces J.B.Gwiazda

# MAY 1986

- 879 Canadian coal industry: Developments in resource conservation and productivity improvement

  R.K.Singhal and H.Sahay
- 885 Mineral processing developments outlined for various areas of concentration technology *D.R.Nagaraj*

- 888 Conversion of the Cortez gold mining CCD circuit to CIL

  A. L. Crandell
- 893 Technology news: Deeper Australian mines ares requiring bigger trucks

  Paul B.Harder
- 897 Regional comparison of postmining land use practices

  \*R.J.Sweigard and R. V.Ramani\*
- 905 Treatment methods of difficult-to-float copper porphyry ores S.G.Malghan
- 911 Discussion: Selective flocculation for the recovery of iron in Kudremukh tailings K. Hanumantha Rao, A.Nayak, S.N.Mahapatra, and K.S.Narasinihan
- 912 Discussion: Commercialization of eastern US oil shales a review *V.Rajaram*

# **Industrial Minerals**

## JULY 1986

- 8 World of Minerals
- 20 Tunisia Developing downstream industries
- 29 A user view of challenges for the magnesite industry
- 43 Synthetic and natural magnesias Their past, present, and future
- 50 New York's Industrial Minerals
- 69 1st International AC Conference A show of solidarity
- 72 South African industrial mineral statistic

## AUGUST 1986

- 8 World of Minerals
- 19 Turkey's Minerals Potential still there

- 39 European Glass Seeking batch cost-efficiency
- 60 United Nations and mineral development
- 64 Could every acid rain cloud have a limestone lining?

## SEPTEMBER 1986

- 8 World of Minerals
- 20 Synthetic mineral fibres From rocks to riches
- 45 Restructured and rationalised The world's major refractory producers
- 69 Feldspar and Hepheline Syenite Filling a need?

# Institution of Mining and Metallurgy

## **JULY 1986**

## **AUGUST 1986**

- A101 Cost-reducing innovations in the mining and metal processing industries

  Sir Alistair Frame
- A104 Operations research as an aid to management of Barega barite mine, Sardinia *R.Ciccu et al.*
- A115 Tunnel collapse in fault-disturbed mudstone rocks analysed by stereographic projection *P.M. Varley*
- A119 Phosphate rock: report of the tenth annual commodity meeting

Phosphate rock: regional supply and changing pattern of world trade *W.Lavers* 

World phosphate resources, with particular reference to potential low-grade

A.J.G.Notholt and D.E.Highley

Phosphate discovery at Al Jalamid, Saudi Arabia *G.P.Riddler* 

BRGM phosphate prospecting methods and results in West Africa G.Sustrac

Mining and benefication practice at Siilinjarvi, Finland *K.Kiukkoja* 

Recent trends in phosphate mineral benefication

C.T.Hollick and R.Wright

Treatment of carbonate-phosphate rock by selective magnetic coating

P.Parsonage

Industrial phosphates: technology and trends

J.C.McCoubrev

B125 Deposition of galena in relation to detrital feldspar at Laisvall, central Sweden *H.de Boorder* 

B130 Back analysis of a large planar failure in rock *P.G. D.Whiteside* 

Drilling and the year 2000—texts of presentations at January, 1986, meeting

- B137 Design of drilling facilities for minimumweight platforms N.G. Boyd
- B138 Polycrystalline diamond drilling tools *P.E.B. Arn*<*i*>
- B140 MWDatanet—acquisition and processing of down-hole and surface data during drilling R.T.Dickinson, C.M.Jones and J.D.Wagstaff
- B148 Oil-based muds for development drilling in the year 2000—a review M.H.Hodder
- B151 Future trends in land drilling operations

P.D.H.Nichols

B154 Discussion

Discussion

Geology of Tunstead quarry, Derbyshire, England.

P.R.Ineson and P.F.Dagger

Reappraisal of geological setting and potential of Kilembe copper mine. Uganda *A.J. Warden* 

- B155 Regional setting, geology and metal distribution patterns of Navan orebody, Ireland C.J.Andrew and J.H.Ashton
- B162 Regional geochemistry—potential developments

  J.A.Plant and D.Slater

# SEPTEMBER1986

- C127 Kinetic model of the oil agglomeration process

  D.Dunstan, L.R.White and T.W.Healy
- CI33 Automatic hindered-settling classifier for hydraulic sizing and mineral benefication A. Littler
- C139 Oxidation kinetics of curprous sulphide in a fluidized bed Song Qingshuang and Liang Ningyuan
- C149 Copper and cobalt recovery from slags by top-injection of different solid reductants O.Addemir, J.Steinhauser and W.Wuth
- C156 Flame cyclone reactor process (FCR)—a new development in non-ferrous oxygen smelting G.Berndt and K.O.A.Emicke

Technical notes

- CI56 Importance of reagent purity in evaluation of flotation collectors

  P.K.Ackerman et al.
- C168 A laboratory wet and dry sample divider

  T. Yalcin
- CI70 Reactions of potassium ethyl xanthate on mercury

  J.K.Critchley and C.J.Hunter
- CI 73 Solubility products of ferric xanthates

  J.K.Critchley and C.J.Hunter

Discussion

CI76 Structure—activity relationship for copper depressants

D.R.Nagaraj et al.

# International Journal of Mineral Processing

# **JULY 1986**

- 161 A superconducting high-gradient magnetic separator with a current-carrying matrix J.H.P.Watson and C.H.Boorman
- 187 On the selective flocculation of coal using polystyrene latex

  M.J. Little fair and N.R.S.Lowe
- 205 Vacuum filtration and dewatering of alumina trihydrate — the role of cake porosity and interfacial phenomena S.J.Puttock, A.G.Fane, C.J.D.Fell, R.G. Robins and M.S. Wainwright
- 225 The effect of clay slimes on coal flotation, part I: the nature of clay

  B.J.Arnold and F.F.Aplan
- 243 The effect of clay slimes on coal flotation, part II: the role of water quality *B.J.Arnold and F.F.Aplan*
- 261 Hydrophobic agglomeration and spherical agglomeration of wolframite fines Wei Dawei, Wei Kewu and Qiu Jicun

- Validation des mesures par équilibrage des bilans-matière (Data validation by massbalance equilibration)
  M.Darouach, J. Ragot, J.Fay olle and D. Maquin
- 287 Modelling of dense-medium cyclones treating coal

  T.C.Rao, M.Vanangamudi and S.A.Sufiyan
- 303 Influence of ultrafine grain size in differential flotation of galena and sphalerite
  FA.Lopez-Gomez, J.C.Riuz Sierra, F.Garcia
  Carcedo, F.Medina Garcia and J.Medina
  Carcia

## SEPTEMBER 1986

- 3 Spectroscopic study of the adsorption of thiol collectors on lead sulphide in the presence of sodium sulphide

  J.Leppinen and J.Mielczarski
- 21 The effect of collector emulsification using non-ionic surfactants on the flotation of coarse coal particles

  N.T.Moxon and R.Keast-Jones

- 33 The performance of 'racetrack' superconducting magnetic separators

  J. Kopp
- 47 A heuristic model of the Tromp (distribution) curve

  M. Tamilmani and P. C. Kapur
- 57 Effect of temperature and oxygen on oleate adsorption by fluorite

  J.S.Hu, M.Misra and J.D.Miller
- 73 Characterization of adsorbed oleate species at the fluorite surface by FTIR spectroscopy *J.S.Hu, M.Misra and J.D.Miller*

- 85 The effect of grate design on the behaviour of grate-discharge grinding mills M.H.Moys
- 107 Ore texture and magnesium contamination in ores from Pine Point, N.W.T., Canada *G.S.Hill, N.Rowlands and J.Finch*
- 119 Hydrophobic effects of sulfur and xanthate on metal and mineral surfaces G. W. Walker, C.P. Walters and P.E.Richardson
- 139 Oleate adsorption on hematite: problems and methods

  L.J.Morgan, K.P.Ananthapadmanabhan and P.Somasundaran

# **CIM Bulletin**

## **JULY 1986**

# 49 Cape Breton Development Corporation's experience with a tunnel-boring machine in coal measures; J.Coady Marsh, Dan Currie, Gary Landry, and Tom Lamb

- 56 Fording Coal Limited silo explosion; *D.A.Stokes*
- 61 The Coalspur Beds; regional variations and correlations;

  R.F.Engler
- 67 The Gulf of St.Lawrence Carboniferous Basin; the largest coalfield of eastern Canada; Peter A.Hacquebard
- 79 The effects of geological features on coal mining, Sydney coalfield, Nova Scotia;

  Steve Forgeron, Brendan MacKenzie and Kevin MacPherson
- 88 Design of steel arch supports for gate roadways;
  Pierre Choquet
- 97 Ouest for corporate tax reform heating up; Robert B.Parsons

# AUGUST 1986

- In-pit crushing and conveying reduces haulage costs;Heinz Althoff and R.D. Clark
- 62 An integrated Truck Management Information System (Truck MIS) concept;

  Leroy G.Hagenbuch
- 69 Vacuum enhancement of horizontal drainholes at Afton; George Thornton and Gregory Reid
- 73 A regressive mode of highwall failure in coal strip mines, K.Barron, B.Stimpson and K.Kosar
- 79 Mine waste dumps constructed in mountain valleys;
  Frederic B.Claridge, Robert S.Nichols and Alan F.Stewart
- 88 Processing fine fractions of low-rank coals; P.Carbini, R.Ciccu, C.Del Fa and M.Ghiani
- 95 Construction of prime coking coal washeries in India;
  D.D.Ball and S.Chattopadhyay

## SEPTEMBER1986

- 47 Simulation of a multi-seam operation in a sub-arctic mine;
  Sukmar Bandopadhyay and Aranapuram Sundararajan
- 55 Computer-aided mine design and planning for underground mines;

  Prashanta K. Chatterjee and Chaluvadi K.
  S rid har
- The Baker Mine Operation;

  D.A.Barr, T.J.Drown, T.W.Law, G.A.Mc
  Creary, W.W.Muir, J.M.Paxton and R.L.
  Roscoe

- 69 Variable filling fluid couplings for mining applications:

  J.Elderton
- 76 A flexible computerized maintenance program for a micro, mini or mainframe; Ken Musgrave
- 79 New technology in conveyor transmission systems;

  L.R. Bower
- 83 Coal-stratigraphic geochemistry: trends in coal samples from Sydney Coalfield, Upper Carboniferous, Nova Scotia; Erwin L.Zodrow
- 86 Eagle Mountain, modelling and mining; *J.H.Gray*
- 98 A feasibility study of ferrochromium extraction from Bird River concentrates in a submerged-arc furnace;

  W.Drester