

SÜRELİ YAYINLAR

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65 Some aspects of implementing the European potentially explosive atmospheres (ATEX) Directive No. 94/9/EC in the Birtish mining industry
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777 The elasto-plastic response of underground excavations in rock masses that satisfy the Hoek-Brown failure criterion
C. Carranza-Torres and C. Fairhurst

811 Hydraulic fracture reopening pressure and the estimation of maximum horizontal stress
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Der-Her Lee, C.H. Juang, Jin-Wen Chen, Hung-Ming Lin and Wen - Hwang Shieh

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F. T. Suorineni, D. D. Tannant and P.K. Kaiser

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W.G. Pariseau

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981 Rotary and percussive drilling prediction using regression analysis
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995 Authors' reply to discussion
M. S. Diederichs and P. K. Kaiser

999 Erratum

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AUGUST 1999

25 A view to changing horizons

Germany's minerals reviewed
Germany is a leading industrial nation and the world's third largest trader of manufactured goods. But the country's mineral reserves are gradually disappearing, and apart from a self-sufficiency in a handful of minerals, Germany is largely dependent on imports. During June, IM visited over 20 mineral producers, processors and traders in Germany to review their operations and acquire an insight into this particular industry sector. The cover picture this month depicts Castle Montabaur in the Westerwald region-one of the world's biggest ceramics clay centres. Montabaur was built in 1217 on the order of Archbishop Dietrich II von Wied, and today hosts the German Guilds Academy for further Education. (Photo : courtesy of Marcus Kraul³)

22 Nice to see you!
Euromin '99 meeting report

45 Absorbent pet litters
Swell times ahead

50 Improvements in the field of AIF and HF technologies

57 Perlite producers

Heavy hitters in a lightweight bussiness

64 Six month index

SEPTEMBER 1999

25 Nervous of steel
Calcined tabular alumine market review
Calcined alumina has a strong competitive position in a diverse range of markets and is used as a feedstock in tabular and white fused alumina production. However, around 60% of calcined alumina, and 90% of tabular alumina, is consumed by

refractories. As with all refractory raw materials the downturn in the steel industry has had a negative impact on demand. The good news is that despite the overall contraction in demand for refractory raw materials, high-alumina refractories are gaining market share. This feature details the operations of the major calcined and fused alumina producers and discusses the important trends that are driving demand. The cover photo this month shows refractories in service at a ferro-niobium plant and is reproduced by kind permission of Metallurg.

51 Tricks of the trade
Germany's mineral traders

59 White minerals in plastics
Market developments

67 Taking a cold bath
Italian sanitaryware reviewed

73 Filling the gap
A review of European GCC

89 Process technology
A key to increasing profits in industrial minerals

101 Optimising control systems
Improving profitability in minerals processing

109 Increasing profits through improved comminution

OCTOBER 1999

60 Lime Carbonates Abstracts
October 26-27th, San Francisco, California
The 4th North American Industrial Minerals Annual Meeting, to be held at the Hyatt Regency Hotel in San Francisco, 25-26th October, will be an opportunity to discuss some of the most topical issues facing the largest and most important mineral sectors in North

America-the lime, limestone and carbonate industries. A two day programme consisting of 20 papers presented by many of the leading producers, technology suppliers, and government bodies will discuss new developments in processing technology and market opportunities for limestone, quicklime/burnt lime, hydrated lime, GCC and PCC. The cover photo this month shows the new rotary kiln and preheater at Carmeuse North America's Longview, Alabama plant - courtesy of the company.

18 The state of China's mining industry
Cause for concern?

21 Dalian'99 -3rd Chinese Industrial
Minerals Conference
Abstracts & biographies

30 Chinese fluorspar
An overview of production and market
trends

43 Feldspar and nepheline syenite
In a state of flux

57 Powder processing
The dry way to two microns for limestone
and talc

NOWEMBER1999

25 High grade kaolin fillers
Production review
More than 50 countries produce an
estimated 40m, tpa of kaolin which may be
divided broadly into two categories:
relatively low - cost unprocessed "common
clays", and refined or processed grades of
kaolin. Included in the refined or processed
kaolins are the high - grade functional
fillers and/or pigments used in paper, paint,
plastics, and to a lesser extent rubber that
command a premium price and penetrate a

broader geographical market area. High grade
kaolin fillers are the focus of this contributed
review which will appear in two parts; this
month will cover world production, including
commercial specifications; next month will cover
international trade, methods of distribution,
sales and marketing, and prices. This month's
cover photo taken by Roger Dovey, shows
kaolin workings at Goonvean Ltd's Trelavour
pit, Cornwall

45 Handle with care
Reflections on the UK glass industry

53 Australasian Minerals & Markets 2000
Abstracts and biographies

61 Paint technology
Its impact on pigments and minerals

68 IM Forum - ChemMarkets 2000
Prospects for minerals in chemical applications
Abstracts and biographies

71 Mineral transport
A view on logistic concepts

DECEMBER 1999

49 Bowed down with imports
A review of japan's mineral industry
Other than its vast resources of limestone and
dolomite, significant deposits of bentonite and
pyrophyllite, and synthetic raw materials such
as soda ash and fused minerals, Japan lacks any
sizeable mineral wealth. Japan's important
manufacturing sectors such as the cement,
glass, foundry and electronics industries are
however important consumers of minerals,
many of which need to be satisfied by imports,
notably from China. This article examines the
impact of Japan's economic misfortune on the
volumes of industrial minerals consumed. This
month's front cover shows one of the buildings
at Heian - Jingu shrine built in 1895 to
commemorate the 1, 100th anniversary of the

founding of Kyoto. The colourful building is a replica of the imperial palace that existed in Heian times showing architectural influences from the Chinese Tang dynasty.

18 Dailan delights

3rd Chinese Industrial Minerals Conference meeting report

25 Lifting the lid off glass recycling
Impact of glass recycling across Europe

35 Markets for Turkish feldspar
A look at Turkish feldspar and the Labranda group of companies

40 Industrial minerals of the Arab world
The economic importance of industrial minerals in Arabic countries

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AUGUST 1999

851 The characterisation and behaviour of carbonaceous material in a refractory gold bearing ore
B. L. Pyke, R. F. Johnston and P. Brooks

863 An acidic pressure oxidation pre-treatment of refractory gold concentrates from the Kwekwe Roasting Plant, Zimbabwe
F.P. Gudyanga, T.Mahlangu, R.J. Roman, J. Mungoshi and K.Mbeve

877 The role of metal - cyanide species in leaching gold from a copper concentrate
K. L. Rees and J.SJ. van Deventer

893 Bioleaching of copper sulphide concentrate using extreme thermophilic bacteria
M. Gericke and A. Pinches

905 Removal of cadmium from a liquid effluent by ion flotation
LB. Scorzelli, A.L. Fragomeni and MX. Torem

919 Mechanism of adsorption of sodium dodecylsulfonate on celestite and calcite
A. Martinez - Luévanos, A. Uribe-Salas and A. Lopez-Valdivieso

937 A statistical model for the concentrate water in flotation columns
A. Uribe S., D. Vazquez V., R. Pérez G. And F. Nava A.

949 Integrated simulation of grinding and flotation application to a lead - silver ore
C. Sosa-Blanco, D.Hodouin, C.Bazin, C.Lara-Valenzuela and J.Salazar

969 Optimisation of the grinding circuit at Arafertil, Brazil
C. Fernandes and A.E.C. Peres

985 Rate of crud formation in a copper pilot plant settler
H.Aminian and C.Bazin

991 Book Reviews

995 Calendar of International Conferences, Symposia, Courses and Meetings of interest

SEPTEMBER 1999

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A.J. Teague, J.SJ. van Deventer and C. Swaminathan

1021 Pyrite consumption of xanthate in Hellyer base metal sulfide pulps
M.S. Morey, S.R. Grano and J. Ralston

1033 Effect of different collector dose rates on cobalt segregation
A.N. Mainza, S. Simukanga and L.K. Witjka

1041 A new flowsheet for processing chromite fines by column flotation and the collector adsorption mechanism.
A. Güney, G.Önal and M.S.Çelik

1051 Application of fluidization to obtain washability data
K. P. Garvin and S.J. Pratten

1059 dense medium separation using a teetered bed separator
K.P. Galvin, S.J. Pratten and S.K. Nicol

1083 Dephosphorisation of Western Australian iron ore by hydrometallurgical process
C.Y. Cheng, V.N. Misra, J.Clough and R. Mun

1093 A modified paired t-test for the analysis of plant trials with data autocorrelated in time
T.J. Napier - Munn and D.H. Meyer

1101 The conditions for sampling of particulate materials to be unbiased - investigation using granular flow modelling
G.K. Robinson and P. W. Cleary

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R.J. Deshpande and K.A. Natarajan

1127 Plant trials with the multi gravity separator for the reduction of graphite
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1147 Quantification of flotation activity by means of excess Gibbs Free Energies
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1163 Simultaneous determination of collection zone rate constant and froth zone recovery in a mechanical flotation environment
M.A. Vera, J.P. Franzidis and E.V. Manlapig

1177 The flotation behaviour of chromite with respect to the beneficiation of UG2 ore

1185 The effect of high intensity conditioning on the flotation of a nickel ore. Part 1: size - by - size analysis
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1201 Enhanced hydrochloric acid leaching of cobalt
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1213 Formation of TiB_2 from rutile by room temperature ball milling
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1225 Classification and breakage of flocs in hydrocyclones
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1245 Industrial monitoring of hydrocyclone operation using electrical resistance tomography
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1301 Monitoring of metallurgical reactors by the use of topographic mapping of process data

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1313 An amperometric method for measuring cyanide in CIP/CIL circuits

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1327 Assessment of expert fuzzy controllers for conventional flotation plants

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1339 Dynamic characterization of column flotation process. Laboratory case study

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1347 Contact angles of quartz by capillary penetration of liquids and captive bubble techniques

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1359 The effect of high intensity conditioning on the flotation of a nickel ore, part 2: mechanisms

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1375 Design of a stationary guide vane swirl air cleaner

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1393 Separation of feldspar from quartz using EDTA as modifier

N.Shehu and E.Spaziani

1399 New construction materials from Spanish jarosite processing wastes

V.Mymrin and A.Vazquez Vaamonde

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1407 Process development for treatment of complex pyrochlore, ilmenite and rutile ores

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1419 The development of a composite collector for the flotation of rutile

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1431 Low pH cyanidation of gold

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Joseph L. Petrillo and Paul A.Hilbelink

32 Remediating historic mine sites in Colorado

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24 Closing the historic Alaska - Juneau Mine

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32 Remediating historic mine sites in Colorado

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36 Cattle aid reclamation at Rabinson Mine in Nevada

38 Prospectors and developers meeting - some reflections

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40 Six to be inducted into National Mining Hall of Fame

49 Mitigation of water contamination at the historic Ferris-Haggarty mine, Wyoming
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54 New P.T. Freeport Mine ventilation system - basic requirements (25 kt/d plan)
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34 Coal mine ventilation returns to centrifugal fans

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37 Mining Foundation of the Southwest selects 1999 honorées

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46 Dense - sludge process for reduced AMD sludge disposal
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51 Sorption of uranium, strontium and cesium on pozzolan
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15 Information technology aids Soda Springs phosphate mine
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21 Floodplain aggregate mining in western Oregon
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30 Safety framework for programmable electronics in mining
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34 McAlpine Mill and Haileybury School of Mines: a co-op that works
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52 Improved seat reduces jarring / jolting for operators of low-coal shuttle cars
A. Mayton, R.Merkel and S.Gallagher



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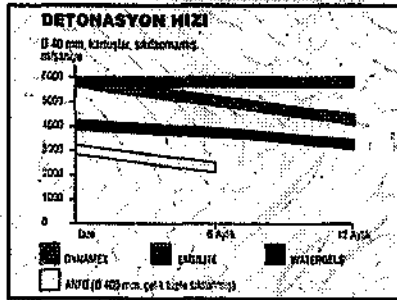
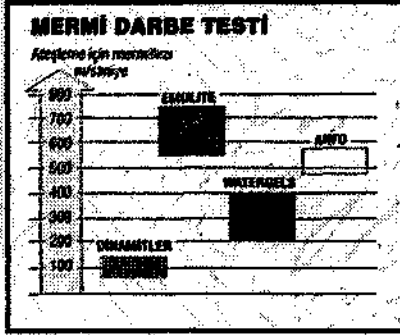
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