



## तकनीकी पत्रिका विषय-सूची

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Vol.3 No.8, August, 2019

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# Down to Earth, Vol. 28 No. 3, 16-30 June, 2019

## **Down To Earth**

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INDIAN BUR

CENTRAL

Close to 90 per cent of India's population reels under heat waves that have already claimed over 300 lives



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INDIAN BUREAU OF MINES

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Economic & Political Weekly, Vol.54 No's 26 & 27, June 29, 2019

# Economic&Politicalweekly

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# Review of Rural Affairs

The need to address the multidimensional nature of agrarian distress and the crises affecting the rural economy has been much deliberated upon. However, the proposed policies often deflect from the core structural problems that have a bearing on the issues besetting Indian agriculture, in general, and the farmers, in particular. A set of five papers discusses the dampers and drivers for building a resilient farming system in the country, such as the importance of the rural economy in the budgetary outlays of an agrarian state; the role of the Mahatma Gandhi National Rural Employment Guarantee Scheme as a coping mechanism for households facing increasing climate vulnerability; the ecological sustainability of agriculture across India; the performance of crop insurance and its adoption at the household level; and the impacts of capitalist development on rural livelihoods.



## **Rural Crisis in Punjab**

The public expenditure on the rural sector in Punjab bypasses key sectors of rural development for administrative spending. Has this led to the unending rural crisis in the state? page 6

## **Risk Reduction in Telangana**

The little amounts earned from the Mahatma Gandhi National Rural Employment Guarantee Scheme turn into the main source of income for households' sustenance during droughts. page 12

## **Ecological Sustainability**

Any plan for sustainable development of agriculture must be cognisant of the need to preserve natural resources such as soil, arable land, and water. page 19

## **Crop Insurance**

Farmers in India facing losses are often compensated only for the cost of cultivation, and even this amount is received after much delay. page 28

## **Cohesive Development Approach**

An alternative development paradigm that explores the routes for diverting the capital inflow in the rural sector towards the protection of agriculture-related livelihoods is required. page 36

## Economic & Political Weekly, Vol.54 No's 26 & 27, June 29, 2019

#### **Review of Rural Affairs**

Over the past several years, Indian agriculture has undergone significant changes by moving towards input-intensive cropping systems. However, the path of high external input agriculture has not only been unsustainable, but has also adversely affected agriculture-dependent livelihoods and the natural resource base of the economy. Developing a balanced and integrated agricultural system with limited use of chemical inputs would require a greater emphasis on climate-resilient crops. This edition of the Review of Rural Affairs brings together papers that help identify and formulate solutions to some of the problems that plague agriculture and the rural economy.

#### **Towards a Resilient Farming System**

The major growth episodes of Indian agriculture are closely associated with the initiation and spread of the green revolution paradigm and technology. This has placed enormous strain on the natural resource base leading to land degradation, decline in the levels of soil organic matter and loss of soil fertility. The alternative path for agriculture that takes agroecology as its core, however, makes a decisive shift away from the production-centric approach of the green revolution paradigm towards an ecosystem-centric view of agriculture. — P S Vijayshankar

#### Rural Economy, State and Public Policy: Exploring the Rural Crisis of Indian Punjab

The contemporary situation of Punjab's rural economy has been a subject of serious concern. Analysing the evolving levels and patterns of the public expenditure on the rural sector over time, it is found that there has been a progressive diversion of the public spending on the rural sector towards local-level administration, bypassing key sectors of rural development such as human resources development. This aspect has been a major driver of the unending rural crisis in the state. — Baldev Singh Shergill, Ramanpreet Kaur

#### Uncertain Climate, Vulnerable Livelihoods: Role of MGNREGS in Risk Reduction

Livelihoods in the semi-arid tropics are particularly vulnerable to climatic uncertainties and frequent droughts. The low levels of development of diversified livelihood options in the non-farm sector and a lack of skill base compel households to seek multiple low-income livelihoods in lean resource years. Among these, the Mahatma Gandhi National Rural Employment Guarantee Scheme has provided the most significant coping mechanism for most households, particularly the poorest and most backward sections. However, as the study of rural Telangana shows, challenges of implementation arise when the policy manifests on field realities which tend to reduce the effectiveness and weaken its impact. — *Manoj Jatav, Shreya Chakraborty* 

#### Statewise Report Cards on Ecological Sustainability of Agriculture in India

In the context of increasing farmer distress and vulnerability to risks associated with climate change, the dependence of agriculture on natural resources requires that these are sustainably managed. Using a framework of indicators in the domains of pest management, fertiliser use, soil health, water conservation, biodiversity, and efficient use of inputs, statewise report cards on ecological sustainability of agriculture across India are provided. Much variation is found in the sustainability of production practices across the country, with some states characterised by high use of pesticides, low soil organic content, depletion of groundwater levels, low crop diversity, high energy use, and widespread nitrate contamination of groundwater.

— Divya Veluguri, Ramanjaneyulu G V & Lindsay Jaacks

#### Crop Insurance in India: Where Do We Stand?

Programmes extending insurance cover for crops in India have long been in operation, but have not been able to include the majority of the agricultural sector within their ambit. Analysing the 70th Round Situation Assessment Survey data, the performance of crop insurance at the household level is examined and factors that determine its adoption are identified using an econometric analysis. The Pradhan Mantri Fasal Bima Yojana is then analysed by looking more closely at the structure of the scheme. The experiences of certain countries are also highlighted to provide a global perspective on improving crop insurance adoption in the country. — Meenakshi Rajeev, Pranav Nagendran

#### Capitalist Development and Rural Livelihoods: In Search of a Cohesive Development Approach

Indian agriculture has been facing an intrusion of large capital into its domain in various forms, such as contract farming, industrialised agriculture, and forcible acquisition of agricultural land for industrial plants. But, what are the impacts of such types of capitalist development on rural livelihoods? The study argues that reform in agriculture—through setting up of special agricultural zones and other similar means—needs to be undertaken for further rural economic development, in general, and for protection of agriculture-related livelihoods, in particular. Looking into the prospects of the rural industrial sector, it emphasises that the clustering of rural non-farm enterprises can pave the way for an alternative development paradigm. — Subrata Dutta

भारतीय खान ब्यूरो INDIAN BUREAU OF MINES

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- Corporate Governance in Banks in India
- Gold Jewellery and Migrant Labour Force
- The Enduring Legacy of Lenin

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No Breather for Food Subsidy Bill

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## **How to Talk about Caste**

Three accounts delve into the style, substance and aesthetic of Aniket Jaaware's *Practicing Caste: On Touching and Not Touching.* pages 17, 19 and 23

## **Composition of Public Debt**

Most policymakers, including economic technocrats in government, have come to believe that public debt, fiscal deficits and interest rates are objectives in themselves rather than the instrumentalities that they actually are. page 89

## **Benchmark Index for Banks**

An attempt to prepare a composite benchmark index with legal requirements and best practices available in literature on corporate governance in banks page 96

## **Resource of Genetic Wealth**

The greatest asset in combating the effects of uncertain climate is agro-biodiversity because genetic diversity distributes risk and enhances the coping capacity of farmers. page 14

## Kerala's Gold Jewellery Workers

A look at the migrant workers who are employed in the burgeoning gold retail houses, and the many facets of their service conditions page 106

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#### EDITORIALS **Tribal Politics in Jharkhand** Nudge to Fudge..... The realisation that the interest of tribes does not lie in division but in forging an alliance, opens up the space for an alternative political path A Preventable Loss..... in Jharkhand. — Virginius Xaxa A New Development Model for the New Economy The role of the government is to not only be a more effective provider of learning and health, but also an agent for greater access to opportunity and changing patterns of ownership at all levels. - Avinash Persaud Agro-biodiversity as a Resource It is important to move away from an exclusive focus on techno-fixes when dealing with climate change. — Suman Sahai н **Destitute Thinking** Ethical impoverishment, Aniket Jaaware's Practising Caste: On Touching and Not Touching tells us, is a precondition and the initial form of new thinking C and living. Destitution prepares the ground for inventing new forms of sociality. - Udaya Kumar Rejecting the politics of identity and victimhood, Practicing Caste articulates the politics of radical narcissism of a "just us" that tries to disinherit the knowledge received from the classical Sanskrit texts, philosophy, sociology and anthropology. - Sanil V **Aesthetics of a Text** Aniket Jaaware's text has an aesthetic of simplicity of thought and language, removing the moral coercion that forces one to refer to the scholarly work of the "Academic Aakas" or the little gods of academia. — Gopal Guru **Amalgamation of Existing Laws or Labour Reform?** A close reading of the Draft Labour Code on Social Security, 2018 suggests that neither have redundant provisions been removed, nor existing ones

overhauled to make employment benefits available in a more effective manner. - Santanu Sarkar

#### **Kuki Perspective on Migration**

The Kukis's unique pattern of migration is described and the formulation of a "wave model" of all migration taking place in a similar pattern is attempted. - Haoginlen Chongloi

#### **How Much Public Debt Is Too Little?**

89 The entire literature on public debt is on determining "how much is too much." However, both the level and composition of public debt should be considered while framing fiscal rules. — Pronab Sen

#### Corporate Governance in Banks in India

While several committees have examined ways to improve corporate governance in banks in India, an attempt is made to prepare a benchmark index for the board composition of corporate governance. — Rekha Misra, Anwesha Das

#### Gold Jewellery Making and Migrant Labour Force in Kerala

106 Resorting to a labour process framework, the process of recruitment and the composition of the workforce in the gold jewellery market in Kerala is elucidated. - Sumeetha M

#### Beyond Marx, the Enduring Legacy of Lenin

114. The "Organisation question" is faced by those whose goal is to carry out the project of reducing various human relations of oppression while establishing an ecologically stable balance between human society and nature. — Achin Vanaik

#### No Breather for Food Subsidy Bill

122 The inferences made in "Price Deficiency Payments and Minimum Support Prices: A Study of Selected Crops in India" (EPW, 19 May 2018) by T Haque and P K Joshi about why price deficiency payment schemes will not reduce the food subsidy bill are debated. — Sudhakar Gummula

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Exasperating Justice

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- Harvest of Uteruses
- Universal Basic Cash

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- Braverman's Legacy: Degraded Labour, Automation and Information Technology in the Era of Globalisation
- Innovations in Public Administration in India

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- In Times of Drought: Adaptation Decision-making in Sala Budha

## **Losing Their Wombs**

Not just has the uterus become a "disposable" entity, but the labour of migrant workers and the bodies of women are also being ruthlessly exploited. page 10

## **Challenges of Public Administration**

An examination of innovations in public service through the Prime Minister's Awards for Excellence in Public Administration for 2005–06 to 2016–17 page 100

## **What Is Skill Degradation**

A look at how capital ensures that there is division and internal conflict of labour within and between national borders, and that labour competes with automated systems in terms of profitability page 92

## **Crime-fighting Strategy**

An outline of problems with the currently available repository of crime data, and suggestions for conducting a nationally representative crime victimisation survey to meet the goal of eradicating sexual violence page 23

## **Healthier or Just Long-lived?**

An analysis based on a nationwide panel survey during 2005–12 shows a marked surge in the burden of disability and its different types and their severity among the elderly. page 83

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#### **Harvest of Uteruses**

Women workers face multiple reproductive health problems due to the back-breaking work and poor sanitation and hygiene conditions in Maharashtra's sugar belt, where private healthcare facilities provide unnecessary and extreme treatments, including the removal of their wombs. — Abhay Shukla, Seema Kulkarni

#### **Universal Basic Cash**

14 A critique of the notion of universal basic income is presented, using a basic microeconomic model, while the consequences of the monetary authority's golden rule of consumption for work, saving and investment are ambiguous, and the price level is indeterminate. — Romar Correa

#### Why India Needs a Crime Victimisation Survey

23 To be effective, policies on sexual violence against women must be evidence-based, for which a national crime victimisation survey supplementing the National Crime Records Bureau could be used for further research. — Nithya Nagarathinam

#### Debating the 'After' of Subaltern Studies

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#### Has Disability Risen among the Elderly in India?

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#### **Degraded Labour, Automation and Information Technology**

92 The idea that skill degradation is one of the means by which capital ensures there is continued division and internal conflict of labour as well as labour competition with automated systems is explored through the lens of Harry Braverman's seminal work. — Jamshed Sheriyarji

#### Innovations in Public Administration in India

100 The state of innovation in public service and administration in India is analysed through the Prime Minister's Awards for Excellence in Public Administration for the period 2005–06 to 2016–17, indicating some degree of direction in good governance and replicability. — Dipti Gupta, Ashok Kumar Pandey & Amit Garg

#### The Bru-Mizo Conflict: A Rejoinder

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"The Bru–Mizo Conflict in Mizoram" (EPW, 3 November 2018) questions their
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— Roluahpuia

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case to US Supreme Court Fluorspar market divided about extent of China's environmental

US considers 25% import tariff on Chinese minerals

controls

China misses customs data release for third month running while trade tensions rise

Almatis expands India presence with tabular alumina plant

China's electric-vehicle output up nearly 100% in H1 2018; battery-grade lithium prices dip

Trade in battery metals companies starting to accelerate, EY says

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The refractory industry is back with a bang. After several years of weakness, demand is rising across the board and the sector is evolving fast, with high-profile M&As but also long-term uncertainties on raw material sourcing. Myles McCormick takes stock of a changed landscape.

Panasonic seeks return to longer-term lithium supply contracts at lower prices

Rio Tinto's Quebec slag business declares force majeure

RBM zircon customers 'told to expect delays, no guarantees on Q4 volumes' 14

Titanium dioxide producers downplay chance of price increases

China's refractory materials output up 4.8% in H1 2018

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September 2018

INDUSTRIAL MINERALS

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# Industrial Minerals, No.604, September 2018









#### Features

The rise of the superabrasives

Automotive manufacturers are demanding better accuracy and longer life from abrasive tools, and this has created an opportunity for a new family of high-performance synthetic abrasives, as *Industrial Minerals correspondent Rose Pengelly* discovers.

Out of the melting pot: A year of change in refractories

After a year of reorganization and changing narratives in the refractories industry – from significant M&A activity to raw material price spikes, and from booming end-market demand to uncertainties in global trade – Industrial Minerals correspondent Myles McCormick takes stock of a changed landscape for companies operating in the sector.

Z ) Dissecting alumina supply

The non-metallurgical alumina market is diverse and complex and, over the past year, its main subsectors have been under pressure from rising costs and hiccups in supply, limiting availability of white fused, alumina hydrate and calcined alumina to the wider market, independent consultant, Ted Dickson, discovers.

40 Carol Jackson: 'We are going to be unstoppable'

In a quest to make HarbisonWalker International its customers' 'first and only call,' Carol Jackson has pulled out all the stops. "We are not your old refractory company," she tells *Jo Isenberg-O'Loughlin*.

Fluorspar market on edge as new participants step in

Moves by Canada Fluorspar and Sepfluor to enter the global fluorspar market have raised questions about how this will affect the worldwide supply and demand dynamic, and how fluorspar prices may be affected, as market reporter Michael Greenfield discovers.

47 Demanding supply

China has long been a major force in the global magnesia market. The entry of low-priced magnesia exports from China almost 30 years ago disrupted supply market dynamics. The growth of the Chinese steel and refractory industry since 2005 has equally influenced the way magnesia demand worked. Now, pollution regulations and their enforcement in China, coupled with the maturity of the steel and refractory industries, are causing a third major disturbance to the global magnesia market, independent consultants Richard Flook and Ian Wilson report.

COMPANY PROFILE

Arciresa looks to Guyana for bauxite supplies

Spanish bauxite processor and distributor Arciresa has agreed a deal with North American partner First Bauxite for the importing of raw bauxite from Guyana, to serve refractory producers in Europe and elsewhere, in the hope of breaking the sector's dependence on China.

Next issue

TiO<sub>2</sub>
Rare Earth

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- SQM opposes agreement for share sale to competitor Tiangi

Ganfeng Lithium signs new contracts with LG Chem, Tesla

- Metallica, Melior to merge titanium, zirconium, bauxite assets in Australia
- China's refractory materials output up 5% in H1 2018

Unshaped refractory materials output up 10% in August

- All the news from the 7<sup>th</sup> Graphite & Graphene Conference 2018
- lofina expects fundamentals to take iodine prices higher

Lynas lashes out at Malaysian environmental probe



भारतीय खान ब्यूरो

2017 brought some sharp limitations to titanium dioxide supply, specifically from China. China has carved out a position as the largest producer of titanium dioxide, but tightening environmental controls have imposed restrictions on the producers in the East Asian country. But the exact scale of the resulting capacity closures has been hard to assess and now balance in the market comes from a shift in the situation in China

Liberty cancels
Select Sands frac
sand offtake deal

Black Mountain to open Oklahoma frac sand facility

US soda ash production hits 2018 high in July

FLUORSPAR 2018: current market trends to continue pressuring prices

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October-November 2018

## Industrial Minerals, No.605, October-November, 2018







#### Features

#### TiO, special

Titanium dioxide market settles in for winter on high plateau

Prices have built steadily over the past year in titanium dioxide, and despite seasonal fluctuations and one-off events the outlook is for a period of stability lasting at least into early 2019, writes William Clark, Fastmarkets IM market reporter.

It's complicated: How mineral scarcity and human ingenuity

shape the world of TiO<sub>2</sub> feedstocks Amid growing concern about the supply of titanium dioxide feedstocks, Fastmarkets IM correspondent Cameron Perks examines the scarcity of these minerals and how processors are adapting to changes in availability.

Crouching Tiger: 30 TiO, in Indian markets

Titanium dioxide (TiO.), in its 100th year of commercialization, has a strong presence in many industries due to its ability to provide opacity, high durability, color stability and most importantly the highest refractive index among all commercially available materials Fastmarkets IM correspondent Sunder Singh presents an overview of the TiO2 industry and major producers in India.

A colourful future - the rebound in iron oxide pigments

> As big players in the iron oxide pigment business reap the rewards of an upturn in the construction industry, Myles McCormick, Fastmarkets IM correspondent, takes a look at the state of the market.

Old king coal: The next rare earths rush? 36 With trade wars once again exacerbating conce over critical mineral supplies, Fastmarkets IM correspondent Rose Pengelly looks at whether new technologies can make coal a viable alternative source of rare earths.

#### COMPANY PROFILE

Holding out fluor a hero

The fluorspar market is currently undersupplied and in need of a new non-Chinese producer to bring relief to the tightness in Europe and North America - enter Canada Fluorspar



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2017 and 2018 have been characterized by supply shortages in many industrial minerals markets as Chinese mines were shut down by environmental laws. 2019 promises much of the same supply constraints, but new producers are now coming online which should provide some respite to buvers.

### **Top Stories**

- Henan province launches winter output cuts, 384 refractory enterprises involved
- Nabaltec profits rise on boehmite demand Bosai Group acquires 51% share of Qixing
- alumina refinery News from TZMI 18
- Tianqi buys 23.77% stake at SQM for \$4bIn SQM lithium revenues for Q1-Q3 up 7.7% despite lower sales
- Orocobre plans to more than double lithium production in Argentina

Albemarle considers joint-venture lithium hydroxide plant with Australia's MRL

- Frac sand news
- CHROMIUM 2018: Foundry chromite market 'on the cusp' as bearish sentiment persists
- Lynas bumps up against rare earth production cap China's NEV output up 36.9% in November vs last year

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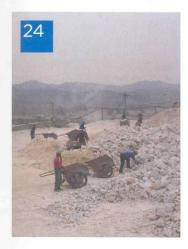
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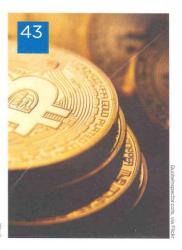


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24 China's magnesia: a year with restrictions and progress

2018 has seen magnesia prices out of China surge following draconian environmental restrictions. *Carrie Shi, Fastmarkets IM market reporter*, explains the background to the rise in prices.

26 Sibelco benefits from China's magnesia controls

Strict environmental regulation on magnesite and magnesia production in China has resulted in strong demand for imported products. *Cameron Perks, Industrial Minerals correspondent,* looks at how Sibelco's Australian operations are currently benefiting from this.

28 Industrial Minerals Year in Review
A look at the last 12 months in Fastmarket IM's key
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Unlocking the global graphite supply chain

The complexity of the graphite market is one of the main reasons why new producers struggle to establish profitable businesses in this sector, even if they manage get new mines into operation. *Correspondent Rose Pengelly* examines the intricacies of the graphite supply chain and considers who may be able to step in to help break China's dominance.

43 Industrial mineral juniors pay price for lack of market transparency

Funding remains a problem for almost all junior mining companies but, for industrial minerals developers, the market is particularly tough because new ways of raising money do not sit well with the sector's opaque and illiquid pricing practices, which makes it harder to communicate value, Rose Pengelly reports.

45 Andalusite edges towards market stabilisation

Improved production in most mining areas is prompting hopes that andalusite supply tightness may ease in the near to mid term, but prices are expected to stay firm due to strong end markets Davide Ghilotti, Fastmarkets IM editor, finds...



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Environmental restrictions have dogged the bauxite and alumina industry since 2016. But what does the future look like for the industry?

#### **Top Stories**

- NCM811 batteries 'not likely' to be
- Albemarle's Kemerton project remains on schedule

Alliance Mineral, Burwill Lithium reach new lithium offtake agreement

**US** government shutdown stalls Tronox-Cristal tie-up

> Rio Tinto's TiO2-slag production falls 15% vs 2017

Frac sand news round-up

- Syrah Resources achieves first spherical graphite production
- Alcoa forecasts 2019 alumina surplus on China production rises Soda ash exports from China fall for third year running, official data
- SPMP's antimony project in Oman "needs more funds"

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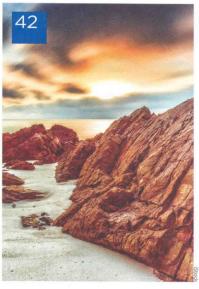
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Will the Chinese supply crisis continue during the Year of the Pig?

Refractories bounced back in 2018, driving demand for bauxite and alumina raw materials, but the market continues to face what is becoming a perennial state of crisis affecting supply from China, as Davide Ghilotti, Industrial Minerals editor, Europe, reports.

How portable processing is shaking up mineral beneficiation

The increasing use of moveable processing technology on mine sites that can be set up and shifted around at short notice and quickly packed up after use is revolutionizing the way mineral ores are sorted. Correspondent Rose Pengelly looks at how lower costs and faster turnaround times are fuelling the growth in demand for mobile mining equipment.

Prospects for ceramics shaping up nicely

Whether you call them technical ceramics, engineering ceramics or advanced ceramics, these materials have advanced steadily through the past year, and 2019 holds a great deal of potential for more widespread adoption, notably in the high performance industrial arena, as Charlie Wallin reports.

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Cartoon showing pattern of depositional environment during syn-rift phase. Highlands of Dharwar batholith hosted Gadwal schist belt in left, sedimentary basin is in right part of this diagram (for details see pp.149-161)

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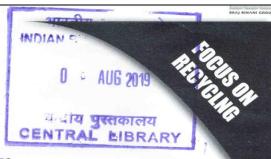
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