



तकनीकी पत्रिका विषय-सूची

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(A Monthly Current Awareness Service from Technical Journals)

Vol.3 No.12, December, 2019

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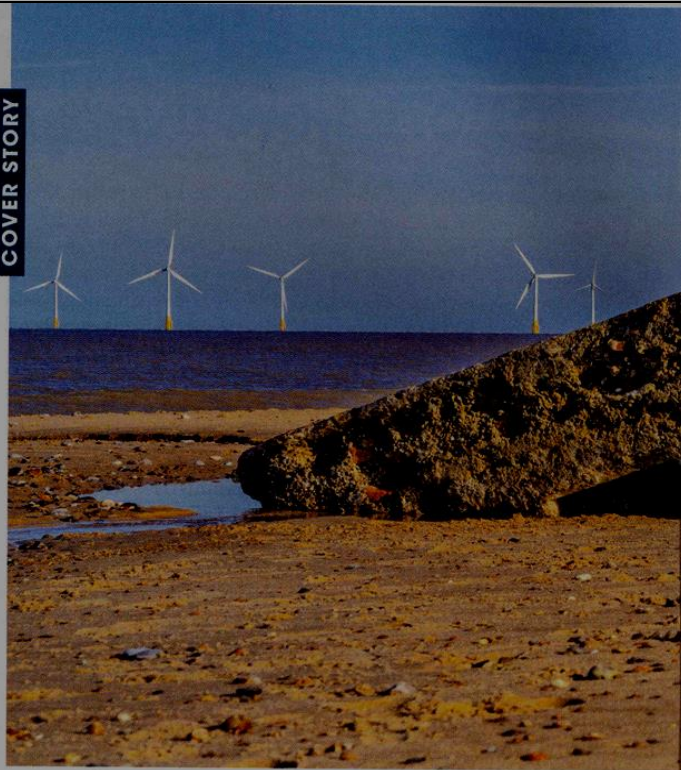


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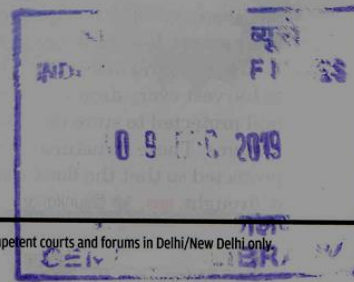
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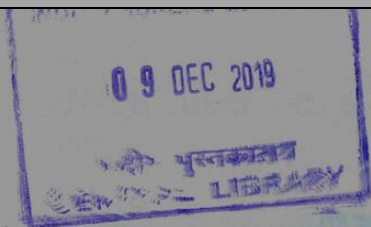
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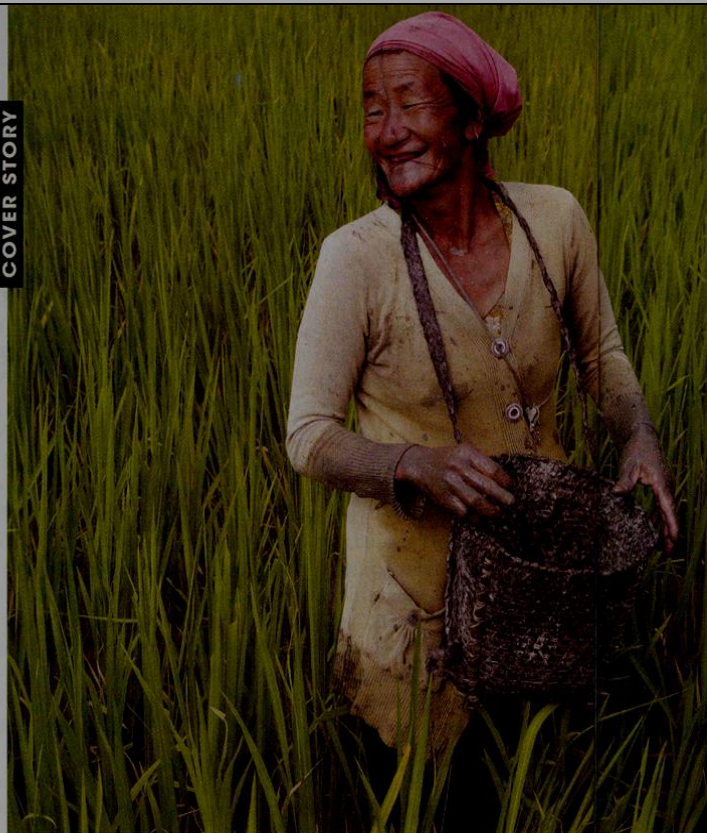


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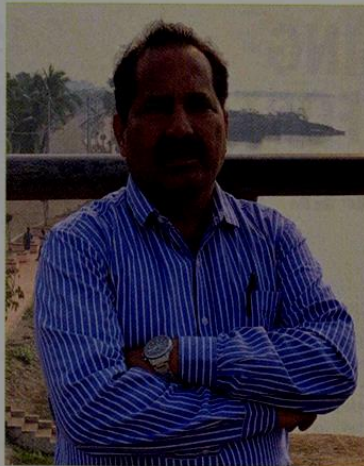
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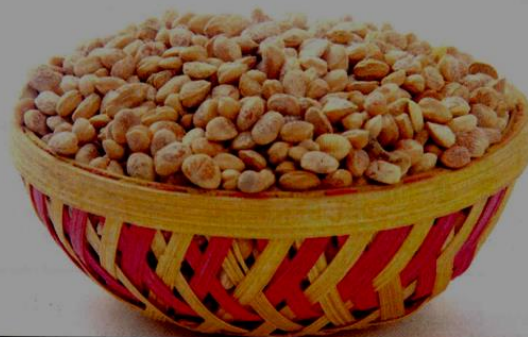
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- 10 The uncritical extension of legislations to scheduled areas has been in violation of the constitutional provisions enshrined in the Fifth Schedule and has had disastrous consequences for tribes. — *Virginus Xaxa*

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- 12 The run-up to the Maharashtra state assembly elections as well as the immediate aftermath has been anything but smooth between and for the BJP–Shiv Sena alliance. — *Dhaval Kulkarni*

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- 15 Ethnographic insights about the devotional percussion instrument, *khol*—made by untouchables, but touched by all castes—are used to analyse the complex sensory and linguistic underpinnings of caste. — *Sukanya Sarbadhikary*

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The Curious Case of Cocktails, Weedicides, and Tonics

- 53 This study uses primary survey data collected from Vidarbha, Maharashtra, to analyse pest attacks and pest management practices among cotton farmers who are at the risk of long-term exposure to toxic pesticides. — *Thiagu Ranganathan, Sarthak Gaurav*

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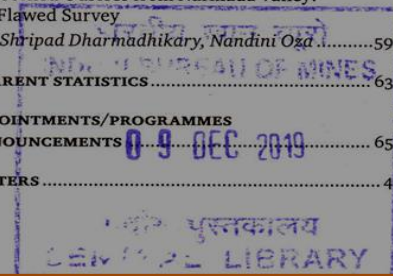
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Labouring in Tea Estates

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Economic & Political Weekly, Vol.54 No.45, November 16, 2019

Non-financial Private Debt Overhang

- 10 The global non-financial private debt to global income ratio is above 150%, making a global non-financial private debt deleveraging inevitable.
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Recusal Refusals: Determining Bias and Impartiality

- 12 Through an examination of various tests of determining bias and examples of other countries, a critical examination of the propriety of judges' refusals to recuse has been made. — *Faizan Mustafa*

Forest Rights in the North East: Inching towards Exclusion

- 17 The sweeping expansion of how "forest" is defined in law by the Supreme Court and its proposed incorporation into the Indian Forest Act has threatened the customary forest rights of these peoples. — *C R Bijoy*

Risk-based Audits for Transfer Pricing: Some Key Concerns

- 20 In view of the serious risk faced by the Indian exchequer on account of transfer mispricing practices by multinational corporation-affiliated firms, a more thorough and stricter scrutiny of their transactions in future is required.
— *Swati Verma, K V K Ranganathan*

Need for Restructuring the Tea Plantation System in India

- 31 The only way to bring a positive change to the deplorable conditions of tea estates is by dismantling the deep-rooted colonial structure and ethos of the plantations and thereby restructuring them. — *Virginus Xaxa*

How Real Is the Crime Decline in India?

- 37 The examination of constituent units composed of a diverse selection of districts in India suggests that crime trends are generally similar across the country and are not an outcome of deliberate police practices.
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- 45 Using a comprehensive database on start-ups retrieved from Tracxn, the role of entrepreneurship policies is analysed and a shift of focus and resources towards the building of a more inclusive start-up ecosystem is argued for.
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- 51 The theatrical techniques used by the two main Greek political parties (New Democracy and Panhellenic Socialist Party) from 2000 to 2009 in televised political campaign presentations are explored. — *Anastasia Doukaki*

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- 59 With India's withdrawal from the Regional Comprehensive Economic Partnership, future participation in free trade agreements must be conditioned on improving the competitiveness of domestic entities.
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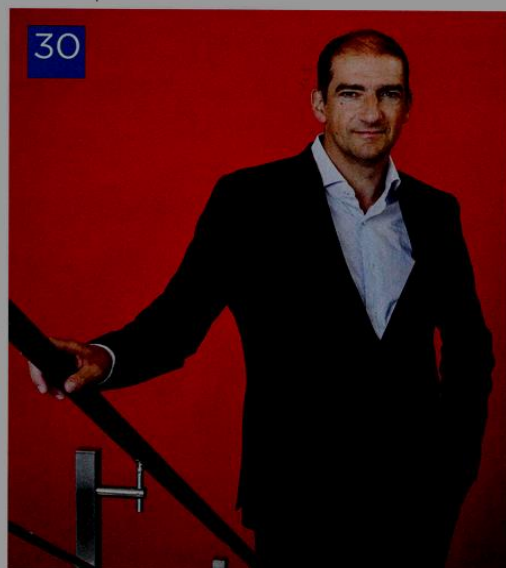
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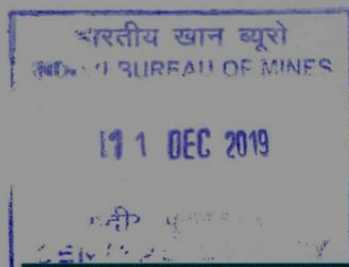
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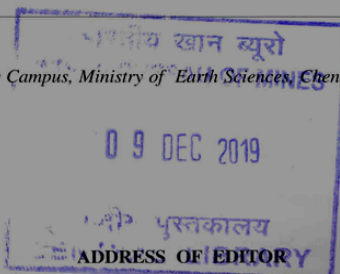
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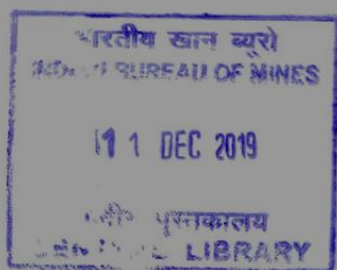
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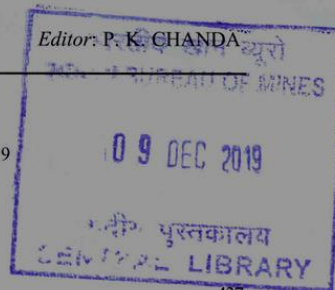
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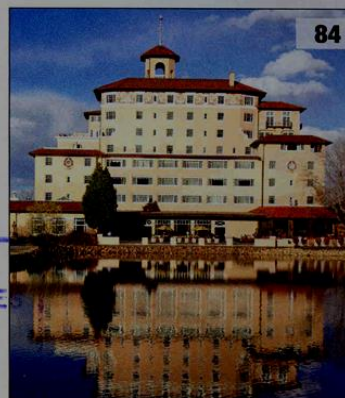
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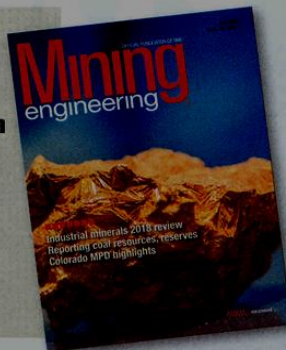
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In This Issue

Industrial minerals, while not as sexy as gold, platinum or copper, are vital for most everything society needs. In 2018, that value of industrial minerals production from mines in the United States amounted to \$56.3 billion, according to the U.S. Geological Survey. This July issue of ME includes its annual review of industrial minerals activity during 2018. About 30 commodities are covered, page 35. The article beginning on page 18 addresses the prevalence of poor public reporting practices of coal exploration results, coal resources and coal reserves in southern Africa. Cover photo shows a pyrophyllite specimen. (Shutterstock photo.)

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Making it mainstream

The idea of advanced technologies being 'mainstreamed' in the mining industry has been floated a fair few times during interviews and recent events I've attended.

The common comparison used has been the smartphone, a device we never knew we needed until we had one of our own – and now many of us don't know how to navigate, communicate or access information without it.

New, innovative equipment and solutions being introduced to mining operations – whether in the form of fleet management systems or positioning technology – might initially also fall into the why-exactly-do-we-need-this category.

Hans Wahlquist, vice president of business development and strategic product management for Mobilis Mining & Civil Engineering, told me the company's new product, Mobilis Onboard, was at first greeted with scepticism by mine workers. The system, which can be run on a tablet or smartphone, gives mining vehicle drivers a similar overview of underground operations as the control room.

During the first trials, the operators at Boliden's Kristineberg mine in Sweden thought the tablet would be in the way and didn't see any reason for using it. However, after a couple of weeks, when Mobilis returned for another meeting, Wahlquist claimed they'd completely changed their minds, and the drivers who didn't take part in the original tests also wanted access to one.

"If we would remove it now, it would be the same situation as removing a smartphone from your teenage daughter: you would be killed," Wahlquist joked.

At the Future of Mining EMEA conference in London, UK, in early September, Jon Wylie, president of global natural resources at consultant Proudfoot, brought up an example where workers had been introduced to a new fleet management system but decided to create their own workaround – by turning the thing off.

Wylie put this reaction down to a lack of knowledge and understanding among the mine workers – and, in particular, a lack of communication within the company about the capabilities of the new technology.

Indeed, technology adoption can be a tricky, time-intensive process, and workers in different parts of the world will react to it differently.

"[However], as more and more people in their personal lives use smartphones, miners have accordingly become more comfortable with the thought of implementing these kinds of technologies on site, as actually these people are using these kinds of technologies anyway," Rachael Bartels, senior managing director and global lead for Chemicals and Natural Resources at Accenture, told MM for this month's 'Collaboration in innovation' feature.

Nonetheless, even the successful implementation of individual machines, gadgets or wearables doesn't mean we're witnessing a real transformation. The fragmented nature of the mining industry and the siloed nature of individual operations often translate to slow adoption and a lack of standardisation.

"These technologies have to be scaled. If you're going to actually make the step change, then they need to be at every mine site, at every location; they need to be used everywhere," Bartels said.

And many industry players are in agreement with her that mining companies that take advantage of the latest technologies and scale rapidly will see "disproportionate benefits".

NIA KAJASTIE, EDITOR

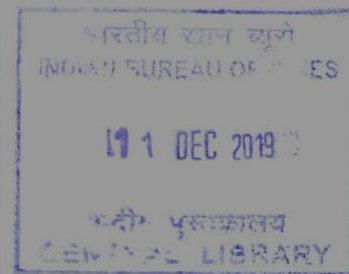
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"The successful implementation of individual machines doesn't mean we're witnessing a real transformation"



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Tailings management
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