



### तकनीकी पत्रिका विषय-सूची

### **CURRENT CONTENT**

(Technical Journals)
(A Monthly Current Awareness Service from Technical Journals)

Vol.6 No.07, July, 2022

The Central Library, IBM, Nagpur is subscribing the technical journals and also receiving them on complimentary basis on various subjects like Geology, Mining, Mineral Economics etc. These Technical Journals make up an important collection of latest scientific information. The library is rendering Reference Service to its users from these technical Journals (Article Indexing is one of them). Central Library, IBM provides Current Content Service from these technical journals in the name of "GEM" since 2006 on half yearly basis in print form. To expand this service to the IBM Offices all over India i.e. H.Q., Zonal & Regional Offices and to take a call of time, the Controller General, IBM desired to make this service online on monthly basis. The library staff made efforts to make it successful. This is the 7<sup>th</sup> issue of Volume-6 for this service named "तकनीकी पत्रिका विषय

- सूची" (Current Content- A Monthly Current Awareness Service from Technical Journals) Vol.6 No.07, July 2022.

It will be highly appreciated if the valuable feedback is reciprocated. If some article as per content list is found to be of use by the reader the same may be requested and the library will send the scanned copy of the article to the interested reader.

Mrs R S Wakode
Assistant Library & Information Officer
library@ibm.gov.in
0712-2562847
Ext. 1210, 1206

## $\underline{I}\;\underline{N}\;\underline{D}\;\underline{E}\;\underline{X}$

<u>S.No</u>	<u>Title</u>	Page No
1)	Down to Earth	3-4
2)	Iron & Steel Review	5-6
3)	Journal of the Geological Society of India	7-8
4)	Mining Engineers' Journal	9

### Down to Earth, Vol.31 No.03, 16-30 June 2022



Founded in 1992 to arm you with knowledge critical to shaping a better world

FOUNDER EDITOR Anil Agarwal

**EDITOR** Sunita Narain

MANAGING EDITOR Richard Mahapatra

CHIEF COPY EDITOR Snigdha Das

SENIOR ASSOCIATE EDITOR Vibha Varshney

ASSOCIATE EDITORS Aditya Misra, Rajit Sengupta
MULTIMEDIA EDITOR Arnab Pratim Dutta

CREATIVE DIRECTOR Ajit Bajaj

SUPPLEMENT EDITOR Souparno Baneriee

CHIEF CARTOONIST Sorit Gupto

**REPORTING TEAM** Shagun, Akshit Sangomla, Pulaha Roy, Taran Deol, Shuchita Jha,

Rohini Krishnamurthy, Zumbish **SUB EDITOR** Dakshiani Palicha

WEB EDITORS Joyjeet Das, Rajat Ghai,

Preetha Banerjee

**DESIGN TEAM** Chaitanya Chandan (Art Editor), Sanjit Kumar, Mukesh Kumar Singh (Deputy Art Editors), Ritika Bohra, Yogendra Anand (Illustrators), Shri Krishan

PHOTO EDITOR Vikas Choudhary

PHOTO LIBRARY Anil Kumar

PRODUCTION Rakesh Shrivastava, Gundhar Das

TECH SUPPORT Rajendra Rawat, Jaidev Sharma

MULTIMEDIA Joel Michael, Aishwarya Iyer, Sunny Gautam, Midhun Vijayan

### INFORMATION AND RESEARCH SUPPORT

Kiran Pandey, Susan Chacko, Madhumita Paul, Sheeja Nair, Lalit Maurya, Dayanidhi Mishra

CONSULTING EDITOR Anumita Roychowdhury

### Vol 31, No 3; Total No of Pages: 60

Editorial, subscriptions and advertisements:
Society for Environmental Communications,
41. Tughlakabad Institutional Area, New Delhi 110 062.

Phone: 91-11-40616000, 29955124, 29956110, 29956394, 29956399 | Fax: 91-11-29955879. Email: editor@downtoearth.org.in

© 2022 Society for Environmental Communications. All rights reserved throughout the world. Reproduction in any manner is prohibited. Printed and published by Richard Mahapatra on behalf of Society for Environmental Communications. Printed at International Printo-Pac Limited, B-204, 205, Oktha Industrial Area, Phase I. New Delhi-110020, India, and published at 41, Tughlakabad Institutional Area, New Delhi 110 062.

### To subscribe, sms'dte Subscribe'to 56070 or visit www.downtoearth.org.in/subscribe

FOR ADVERTISEMENTS Jyoti Ghosh

ighosh@cseindig.org

#### FOR SUBSCRIPTIONS

K C R Raja, raja@cseindia.org



COVER

Chhattisgarh trains people to curb conflicts with elephants

कालाता भारताकार

4 Yet another price rise Farmers abandon dairy and livestock due to fodder price hike

Time to make thermal

comfort integral to all

building design

### 20 Rapid move

Monkeypox disease has spread to 34 countries in just one month

### 42 Up in flames

Unsafe battery cells and pack design lead to e-scooter fires

### 58 Civil Lines

Gram sabhas key to strengthening local governance in India



**◆ Cover design:** Ajit Bajaj

Down To Earth does not endorse the content of advertisements printed in the magazine. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only.



### Iron & Steel Review, Vol.66 No.01, June 2022

### Features

#### Editor & Publisher:

Santosh Mahanti

#### Directors:

Sabita Mahanti Abhishek Mahanti

### **Director & Content Strategist:**

Kritika Mahanti

### Editorial:

Megha Ghosh

#### Marketing:

Shyamalendu Banerjee Angan Chatterjee Sanjana Tiwari

### Design & Layout:

Dipak Adhikari Sambaran Karmakar

### Sambaran Karmakar

Editorial & Corporate Office: Merlin Links, Block 5E/5F, 5<sup>th</sup> Floor

166B, S. P. Mukherjee Road

Kolkata - 700 026 Phone: 91-6292241782/6292241783/

033-2463 8088

Fax: 91-033-2465-3790 E-mail: contact@isrinfomedia.in Website: www.isrinfomedia.com

#### Registered Office:

10, Chowringhee Road Kolkata - 700 013

### Subscription Rate

### Domestic

Print Copy

₹ 12,000 (Yearly) ₹ 1,000 (Single Copy)

### Digital Copy

₹ 8,500 (Yearly)

#### Overseas

Print Copy \$ 1,500 (Yearly)

€ 1,250 (Yearly)

### Digital Copy

\$ 800 (Yearly) € 500 (Yearly)

o ooo (rearry)

Shipping Charge ₹ 1200 (Yearly)

• 5 % GST on advertisement as applicable

Owned & Printed by Santosh Mahanti at M/s. Kalpana Offset Private Limited 123, Tarak Pramanick Road, Kolkata 700 006

and published by him from 10, Chowringhee Road Kolkata - 700 013, India.

Reproduction of matter published here, in whole or in parts, is prohibited without written permission from the publisher.

The publisher and printer do not accept any responsibility for statements, data and opinions expressed by the author.



Cover Courtesy: Vezzani

Articles/write-ups may be forwarded to: contact@isrinfomedia.in

### **Cover Story**

### 16

Vezzani VS — Latest Innovation Pushes You to New Limits

### **Special Feature**

### 20

Steel Reinforcement Bars

### **National Trends**

### 32

SAIL Reports the Highest-Ever Revenue in FY'22

### **Global Trends**

### 40

Danieli Bags Steckel Mill Plant Revamp Contract from Aperam

### गरतीय खान द tobe & Wire 2022

NDIAN SUREAU OF MINES

1 8 JUL 2022

"Digital solutions are shaping the next industrial revolution"

### कंद्रीय पुरतकालय CENTRAL LIBRARY

### **Focus**

### 56

The Steel Industry to Face Challenges with Export Duty Hikes

### **Market & Product**

### 69

ABB Launches Next-Generation Mine Hoist Control System

### **Steel Market**

### **70**

Iron & Steel Performance for April 2022

### **Steel Technology**

### 82

Intrinsic Safety of Energiron® Plants

### Refractory

### 94

A Case Study – Life Enhancement of RH Snorkel through Improved Quality of Rebonded Magnesia Chrome Bricks



### Iron & Steel Review, Vol.66 No.01, June 2022



### Journal of the Geological Society of India, Vol.98 No.07, July 2022

### of THE GEOLOGICAL SOCIETY OF INDIA

(Abstracted/Indexed in AGI's Bibliography and Index of Geology, Chemical Abstracts, Current Contents, GEOBASE, GEoRef, Mineralogical Abstracts, GeoArchive, Thomson ISI database (SCIE, CC/PC & ES))

Vol. 98 **JULY 2022** CONTENTS JUL 2022 Uranium Resources and Production: Global Availability and Indian Scenario. RESEARCH ARTICLES Petro-physics Analysis and Rock Physics Modeling for Estimation of Gas Hydrate Saturation: A Case Study in the Mahanadi Offshore Basin. Pradeep Kumar Shukla, Dip Kumar Singha, Pradeep Kumar Yadav and Kalachand Sain ..... 883 Raman-XPS Spectroscopy, REE Chemistry, and Morphological Studies of Detrital Zircon and Monazite -Implications for Metamict state and Provenance. R.G. Rejith, M. Sundararajana, A. Peer Mohamed, M. Satyanarayanan ..... 893 Geologic, Geomorphologic, and Climatic Preparatory Conditions for the Evolution of the Dangkhar Landslide, Himachal Pradesh, India. Markus Kaspar and D. Scott Kieffer ..... 903 Environmental Changes and Geomorphological Factors Influencing the Sediment Flux to a Coastal Lake Spanning the Deglacial- Early Holocene Period in East Antarctica MAHESH, B.S., CHERYL NORONHA E.D. MELLO, ABHILASH NAIR, ANISH KUMAR WARRIER and RAHUL MOHAN ...... 911 Lithium Potential of the Indian Granitic Pegmatites. Yamuna Singh ..... 917 Temporal Distribution of Uranium and its Correlation with Varied Physicochemical Parameters in the Groundwater Samples of Panipat, Harvana, India. NARESH TANWER, POONAM ANAND, NEHA BATRA, KRISHAN KANT, Y.P. GAUTAM and S.K. SAHOO ..... 926 Health Risk Assessment of Gurdaspur, Punjab, India Using Field Experiments and GIS: A Groundwater Perspective. ADITYA VIKRMA and HAR AMRIT SINGH SANDHU 933 Rainwater Harvesting for Metro Rail Projects in India - Scope for Efficiency Improvement. Sanjay Raut, Bhushan R. Lamsoge and Nitin M. Labhane ..... 937 Identification of Groundwater Potential Zone in Poondi Micro-watershed, Thiruvallur, Tamil Nadu. ESHANTHINI PALANIVELU and NANDHAKUMAR SUNDARAMOORTHY.... 947 Study of DRASTIC Model and its Modification by LULC for Groundwater Vulnerability Assessment in Sonipat District, Harvana. Mohd. Arslaan Akhtar, Naima Akhtar and Mohd. Shoeb ..... 955 Application of RS and GIS to Capture the Interplay of Geological Units and Watershed Development Activities: Implications on Change in Groundwater Potential with Reference to Anjeni Micro-watershed. AKANKSHA PANDEY, RITESH PUROHIT and DEEPAK SHARMA ..... 961

### Journal of the Geological Society of India, Vol.98 No.07, July 2022

Environmental Geochemistry and Positive Impact of Covid-19 Pande Mining Industry: An Overview.	mic with Special Emphasis to Coal	
Madhulika Dutta and Binoy K. Saikia		971
T–X (Fe–Mg) Relations of Cummingtonite-sillimanite-cordierite-question of Metamorphic Rocks.  Thakur, S.S.		976
Channel Migration Detection and Landuse/Landcover Changes for B Wajahat Annayat, Kumar Ashwini and Briti Sundar Sil	arak River in Northeast India.	981
extraction and Characterization of Trona, a Non-marine Evaporite M	lineral, Originating from Semi-arid Soil	
Sediments.  Kannabiran Parthasarathy, Rajathurai Shailaja, Govindasamy Tam	IILARASAN, SATHYARAJESWARAN PARAMESWARAN	991
redimentology and New Paleo-geographic Data of the Upper Cretace in the Gafsa Basin (Tunisia) Southern Tethyan Margin.  ABDEL MAJID MESSADI		1000
BOOK REVIEW		
Atlas of Geomorphosites of Andhra Pradesh and Telangana by A.C. N Reviewed by K.N. Prudhvi Raju	Varayana and Vishwas S. Kale.	1009
NEWS AND NOTE	S	
Gully Erosion: An Underestimated Hazard. Anindya Majhi		101
Need for Development of AI-based Integrated Warning System (IWS lakes Related Hazards with Special Reference to Uttarakhand Hi	) for Mitigation of Glaciers/Glacial- malaya. Kalachand Sain	101
The Himalayan Foreland Basin- Stratigraphic Records of Continent- S.K. TANDON	to-Continent Collisional Processes.	101
naugural Function of the Geological Society of India Regional Centre	Odisha. Somnath Khaoash and J.N. Das	101
Hutti Gold Mines Co. Ltd.: The Pride of India, Completes 75 Glorio	Is Years. Prabhakar.Sangurmath	101
DISCUSSION	भारताब खान ब्या	
Reserves and Resources of Iron Ores of India – A Perspective.	INDIAN-BUREAU OF MINES	
Comment: Suresh Kumar	4 0 1111 2022	101
Reply: K.V. Krishnamurthy	J B JUL 7922	101
OBITUARY	कंदीच चुल्तकालच CENTRAL LIBRARY	
	Local Control	101

### Cover

Location and physical setting of the study area (Dangkhar Landslide) within Himachal Pradesh. Top right insert (Neumayer et al. 2004) illustrates geologic framework of the Himalaya. For details see pp.903-910

### ADDRESS OF EDITOR

All papers intended for publication and also related correspondence should be addressed to:

B. Mahabaleswar, Editor, Geological Society of India, No.30 & 31, B.P. Radhakrishna Bhavan,

1st Main, 3rd Cross, Byrappa Garden, Kathriguppe, BSK 3rd Stage, Bengaluru - 560 085, India.

Email: editorjournalgsi@gmail.com; Editor\_JGSI@geosocindia.org; Mobile: 09341264052;

Telephone: 080-2672 3943; Website: http://www.geosocindia.org.

074

### Mining Engineers' Journal, Vol.23 No.12, July 2022

# Engineers' Journal





Official Publication of Andia

Vol. 23 No. 12 MONTHLY July - 2022

#### President K. Madhusudhana

Vice President-S.N. Mathur Vice President -0.P. Gupta

Vice President - III
D.B. Sundara Ramam

Secretary General M. Narsaiah

Jt.Secretary.cum.Treasurer B. S. P. Raju

Ex-officio Council Members Sanjay Kumar Pattnaik, Arun Kumar Kothari

### Council Members (Elected)

Anil Kumar Garg, Dr. T.N. Venugopal, Deepak Vidyarthi, D.A. Hiramath, V. Jayaprakash, Sanjeev Sahi, Sabyasachi Mohanty, R.S. Raghuwanshi, Prof. V.M.S.R. Murthy, G. Shirish, Pradip Kumar Satpathy, B. Surender Mohan, Shameek Chattopadhyay, Ravi Chandran Raj, Dr. Pradeep Kumar Jain, Prem Shankar Upadhyaya, P.C. Bakliwal, Anil Mathur, Sunil Kumar Parihar, Prof. S.S. Rathore, Dr. S.K. Vashisth, P.V. Krishnaiah Yadav, Kandukuri Laxminarayana, M. Palani kumaresan, G.R. Magesh, Manish Kumar Yadav, P. Ramakrishna, Bipin Kumar Giri

### Representatives of Life Institutional Members

A. Subramanyam, Thriveni Earthmovers (P) Ltd.(LIM-31), K. Rajasekhar Reddy, TSMDC Limited (LIM-75), M.S. Rachappa, Doddanavar Brothers (LIM-81), R. Kedarnath Reddy, APMDC Ltd. (LIM-12), Rajendra R. Harlalk, Khetan Business Corporation Pvt. Ltd. (LIM-79)

#### Nominated Members

Prof. B.B. Dhar, Rajendra Singh Rathore, B.R.V. Susheel Kumar, T.N. Gunaseelan, Dr. Abani Ranjan Samal

#### **Co-opted Members**

Dr. N.K. Nanda, V. Lakshminarayana, Dr. P.T. Hanamgond, Dr. K. Ram Chandar, P.N. Rao

### this issue contains...

President's Message	5
Editor's Desk	7
News from the Mining World	Ş
Good Practices in Mining for Ground Water Recharge - Niladri Bhattacharjee, Pankaj Satija	13
Special Issue : JSW	22
Vedic Nomenclatures on Occurrences of Gold - Their Mining and Riverine Connection - Dr. A. K. Grover	27
MEAI News	35
Conferences, Seminars, Workshops etc.	42

Correspondence Address

### **MEAI National Headquarters**

Contact: Secretary General,
Mining Engineers' Association of India

F-608 & 609, Raghavaratna Towers, 'A' Block, VI Floor, Chirag Ali Lane, Abids, Hyderabad - 500 001.

Ph.: 040-66339625, 23200510

E-mail: meai1957@gmail.com website: www.meai.org

The Views expressed by the authors in these pages are not necessarily those of Publisher / Editor / MEAI. Reproduction in whole or in part is strictly prohibited without written permission from the publisher.

Mining Engineers' Journal, Vol. 23, No. 12

- 3

July 2022