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# भारतीय खान ब्यूरो समाचार

# Indian Bureau of Mines NEWS

## 40

ANNIVERSARY  
Since 1978

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# IBM News

Quarterly Newsletter of the Bureau

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“ On this Earth do I stand, unvanquished, unslain, unhurt. Set me, O Earth, Amidst the Nourishing Strength That emanates from thy Body. The Earth is my mother, her child am I ! ”

**-The Atharva Veda**

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*Shri Ranjan Sahai*

**T**he second quarter of the year 2017 has been quite engaging for IBM. From opening of Skill Development Centres in Udaipur and Kolkata to hectic talks with Wipro Ltd – our Implementation Agency and System Integrator for the launch of Mining Tenement System (MTS) – the Bureau has walked an extra mile in its endeavour to make the mine surveillance and mineral administration fully automated.

A series of meetings amongst the Mines Ministry, the Bureau, the National Informatics Centre (NIC) and Wipro has zeroed in on availing cloud services of Meghraj, the Cloud Services arm of NIC. The Bureau along with the Implementation agency has already finalised project plan and FRS document for four modules in Phase I, through which the MTS has achieved its first milestone. We expect to begin trial of the project on a pilot basis no sooner the cloud service is activated.

Whereas the Mining Surveillance System (MSS) received a shot in the arm with the setting up of Skill Development Centres for Sustainable Development. These centres basically aim to impart training to the officials of Department of Mines and Geology (DMG) of State governments in MSS and other IT applications and establishing a regime responsive mineral administration to curb illegal mining. There has been overwhelming response from the State Governments for attending the first batches of the training.

These Skill Development Centres are ought to bring in its fold more training modules in future like MTS, Sustainable Development, Remediation of Abandoned mines and expanding services to the mines & mineral industry and allied fraternity.

To make the optimum utilisation of mineral resources, the IBM & The Energy and Resource Institute (Teri) exchanged proposals which lay a roadmap for the MoU signed in February this year. The proposals entail an action plan for mined out areas and abandoned mines and capacity building and training in Sustainable Mining. Both the organisations would soon come out with actionable points on which the IBM and Teri would jointly work on implementation.

Meanwhile, the IBM officials availed accolades for efficiently managing the Mines Pavilion of the Ministry of Mines at the 3rd International Exhibition & Conference on Steel Industry, India Steel 2017, held in Mumbai. I Congratulate the officers who represented IBM in the expo and got the Ministry's reward of excellence in showcasing the good governance initiatives. Also, 12 of our senior officers underwent a successful training at the National Remote Sensing Centre (NRSC) for project 'Sudoor Drishti' in the second batch of the training programme. I believe the skills learnt at NRSC shall come in handy for IBM in implementation of Sudoor Drishti which paves for monitoring Mining activity through satellite imageries and keeping vigil against any violation.



**Ranjan Sahai**  
Controller General In-charge



*Shri Arun Kumar, Secretary (Mines) chairing a meeting with the officials of Indian Bureau of Mines and DGM, Gujarat during his visit to IBM Gandhinagar office. S/Shri Prithul Kumar, Director, Ministry of Mines, K.S. Yadav, RCOM, D.D. Bharadwaj, Sr. ACOM and DGM officials are seen. (right) Shri Arun Kumar, Secretary (Mines) along with Shri Prithul Kumar, Director (Mines) touring the IBM Gandhinagar office during their visit to the IBM Gandhinagar Regional Office.*

#### VISITS GANDHINAGAR OFFICE

## Secretary (Mines) reviews MSS project

**S**hri Arun Kumar, Secretary (Mines) visited the Gandhinagar Regional office of Indian Bureau of Mines (IBM) and chaired a review meeting on Mining Surveillance System (MSS). Shri Prithul Kumar, Director, Ministry of Mines accompanied the Secretary.

The Secretary asked the IBM and state government officials to further improve the quality of triggers generated under MSS. S/Shri K.S. Yadav, RCOM (Gandhinagar), D.D. Bharadwaj, Sr. ACOM and others attended the meeting.

#### OffMSS

The Mine Surveillance System (MSS), an

ambitious project of IBM aims to establish a regime responsive mineral administration, through public participation. Curbing instances of illegal mining activity through automotive remote sensing detection technology is also making rapid progress. So far, various state governments have submitted 255 trigger reports out of which 47 cases are observed as unauthorised mining.

The IBM is also organising a series of workshops to impart training to the state government officials on the use of MSS App and field verification of triggers for unauthorised mining.

The Secretary asked the IBM and state government officials to further improve the quality of triggers generated under MSS. S/Shri K.S. Yadav, RCOM and others attended the meeting.

#### APPOINTMENT

## Bipul Pathak is Joint Secretary (Mines)

**S**hri Bipul Pathak, an Indian Administrative Service Officer of Jammu and Kashmir Cadre took charge as Joint Secretary (Mines) on 28 June, 2017. A 1992 batch officer, he is presently serving central deputation in Ministry of Mines.

Shri Pathak served as Commissioner of Inquiries in Jammu before moving to his current posting. He served as Commissioner & Secretary of Transport Department in Srinagar and Chairman, Jammu Tribunal and Commissioner of Housing & Urban

Development Department in Jammu. As a Commissioner of Information Technology and Science & Technology department in Jammu and Kashmir between 2012 and 2014, Shri Pathak carried out a slew of IT reforms in the State.

He had also served as Managing Director of Jammu and Kashmir Power Development Corporation.

On central deputation during 2001-2007, Shri Bipul Pathak was the Director of Information and Broadcasting ministry and



*Shri Bipul Pathak*

served in the Union Ministry of Social Justice and Empowerment.

*Congratulations Sir.*



## MINING LEASE AUCTIONS

# States told to plan in advance

**S**hri Arun Kumar, Secretary (Mines) called upon the state governments to prepare their plans in advance for the large number of merchant mining leases that will come up for auction in year 2020. "The States need to prepare their plans latest by September 2017 and share it with Mines Ministry so that production slack can be met and the supply of essential minerals and iron ore remain smooth," the Secretary told the representatives of major mineral producing State Governments at the Coordination-cum-Empowered Committee (CCEC) meeting at Vigyan Bhavan in New Delhi.

Chairing the CCEC meeting of 17 Major Mineral States on 2 June, 2017, Shri Arun Kumar reviewed the progress of the e-auctions of minerals blocks for 2017-18. The discussion mainly focused on the states' preparedness for e-auction of mineral blocks for 2017-18.

The seven states informed the Secretary that as many as 71 blocks were identified for e-auctioning during the remaining part of the year 2017-18. These blocks include: 6 blocks (2 Gold, 4 cement grade Limestone) in Andhra Pradesh, 11 blocks (4 Bauxite, 7 Limestone) in Chhattisgarh, 12 blocks (3 Bauxite, 9 Limestone) in Gujarat, 9 blocks (1 Bauxite, 3 Limestone, 1 Gold, 1 Graphite, 2 Emerald, 1 Iron ore) in Jharkhand, 18 blocks (4 Bauxite, 7 Limestone, 1 Gold, 2 Manganese, 2 Iron Ore, 2 Copper) in Maharashtra, 7 blocks (1 Limestone, 1 Graphite, 5 Iron Ore) in Odisha and 8 blocks (7 Limestone, 1 Copper) in Rajasthan.

Addressing the CCEC meeting, the Secretary said a large number of leases had

## THE ROADMAP

The GM & MM Cell of IBM is preparing a roadmap for the auctioning of the leases expiring in 2020. A list of leases expiring in 2020 is received from the IBM offices of Ajmer, Bengaluru, Bhubaneswar, Dehradun, Gandhinagar, Goa, Hyderabad, Jabalpur, Nagpur and Ranchi.

elapsed due to Section 10A (2) (c) of the Mines and Minerals (Development & Regulation) Act, 1957. All such leases should come up only through auction route. The States should expedite and monitor these auctions. The auctions conducted so far would fetch ₹85,250 crores to States of which additional contribution due to auction was ₹ 67,501 crores over the licence period of 50 years. He said only four states constituted 90 per cent of the takeaway of the money. Therefore, other states need to expedite their mining auctions, Shri Kumar pointed.

The meeting also discussed key issues like Minor Mineral Rules, Status of project implementation under Pradhan Mantri Khanij Kshetra Kalyan Yojana and the creation of District Mineral Foundation and the MMDR Amendment Act with effect from 12 Jan 2015 to address the development goals of the people affected by mining. The meeting also reviewed the progress of MTS implementation, MSS, Star rating of mines and action plan for auctioning the mining leases expiring in March 2020.

Shri Ranjan Sahai, CG In-charge represented IBM at the CCEC meeting.

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**Chairing the CCEC meeting of 17 Major Mineral States on 2 June, 2017, Secretary (Mines) reviewed the progress of the e-auctions of minerals blocks for 2017-18.**

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## MTS PROJECT ON FAST TRACK

# To make use of Cloud Services of Meghraj



**I**n a bid to make the launch of the Mining Tenement System (MTS) project smooth and timely, the Indian Bureau of Mines (IBM) in association with the Mines Ministry is all gearing up to the D-Day. Hectic parleys are on between various stakeholders and agencies to launch MTS soon.

The IBM hosted to a meeting-cum-discussion with state government representatives for Software Requirement Specifications (SRS) on 20 & 21 April, 2017. The agreement for Project Management Unit (PMU) and other related services was signed between IBM and National Institute of Smart Government (NISG) on 4 May, 2017 at New Delhi. NISG would coordinate with IBM in managing the MTS project with its expert advice and recommendations time-to-time. The officials from both the sides held a series of meetings with Implementation Agency Wipro during May, 2017 to finalise Project Plan and FRS document of four modules in Phase I.

To make the process hassle-free during the implementation stage, Shri Prithul Kumar, Director, Ministry of Mines, chaired a meeting with officials of IBM, Wipro and NISG at the Wipro office, Bengaluru. The meeting finalised to avail the NIC cloud services for the hosting of the MTS project. Shri P.N. Sharma, RCOM & TS and Shri G.K. Jangid, DCOM attended the meeting along with the Director. Shri Jangid, DCOM attended a meeting with the NIC Cloud team at New Delhi to finalise hosting of server and cloud on Meghraj, Government of India's Cloud Service Agency.



*Shri Sahai (third from right) at a workshop organised as part of the inauguration of Skill Development Centre in Udaipur. Shri K.S. Yadav, RCOM, Gandhinagar and officials from State DGMs are seen. (right) The CG In-charge plants a sapling at the Udaipur office during his two-day visit to inaugurate the Skill Development Centre and the first workshop.*



### TRAINING THE TRAINERS

## Skill Development Centers in Udaipur, Kolkata

The Indian Bureau of Mines added one more feather to its cap with the establishment of Skill Development Centers for Sustainable Development in Udaipur and Kolkata. Shri Ranjan Sahai, CG In-charge, IBM inaugurated the first Skill Development Center at Udaipur (Rajasthan) on 15 May, 2017 and the second at Kolkata, West Bengal on 7 June, 2017. As part of the opening of these Centers, the IBM conducted a two-day workshop on Application of Mining Surveillance System (MSS) and Star Rating of Mines under SDF at Udaipur and Kolkata for the capacity building of State Government officers.

Following a series of measures to enhance use of technology in mine surveillance and management, these Skill Development Centers would be imparting training to state government officers and personnel from the mineral industry. In a first such training programme, officials from the Department of Geology and Mines of Rajasthan Government attended, while the second workshop was held at Bengaluru on 29 & 30 June, 2017. The Kolkata Center hosted the two-day workshop during 8-9

These Skill Development Centers would be imparting training to state government officers and personnel from the mineral industry. In a first such training programme, officials from the Department of Geology and Mines of Rajasthan Government attended, while the second workshop was held at Bengaluru on 29 & 30 June, 2017. The Kolkata Center hosted the two-day workshop during 8-9 June, 2017. The Skill Development Center at Kolkata would also cater to the training/skill development need of North East States. The Kolkata workshop gave a special reference to minor minerals available in the region.

June, 2017. The Skill Development Center at Kolkata would also cater to the training/skill development need of North East States. The Kolkata workshop gave a special reference to minor minerals available in the region.

### Good Response

There has been overwhelming response

from the State Governments for attending the workshops. IBM received 53 numbers of nominations from Jammu & Kashmir, Madhya Pradesh, Chhattisgarh, Andhra Pradesh, Telangana, Goa, Tamil Nadu, Karnataka and Kerala. A total 49 officials from 9 states participated in the workshop held in Bengaluru during May 2017.



## SUSTAINABLE MINING SUMMIT

# Utilise mineral resources optimally: CG In-charge

**S**hri Ranjan Sahai, Controller General In-charge, Indian Bureau of Mines called upon the mine owners to achieve optimal utilisation of mineral resources to attain self-sufficiency in production of metals and spur economic growth. He was speaking at the Sustainable Mining Summit, organised by the Federation of Indian Mineral Industries in Goa on 20 April, 2017.

Addressing the delegates, Shri Sahai espoused the mineral fraternity to invest in mineral exploration, mining area infrastructure development and in beneficiation and extraction metallurgical technologies. Such investment besides supporting the economic growth would also provide for job opportunities in the country. The recent initiatives of the Central Government brought favourable, ease-of-doing business and transparent climate, he said.

“The Make in India programme in India gave a boost to all primary sectors. While the Digital India, Skill India and use of Space Technology has brought transparency in mineral sector regulation and places the Indian Mineral sector at par with international standards,” he stated.

The CG In-charge said the Amendment to Mines and Minerals (Development and Regulation) Act 1957, the National Mineral Exploration Policy, the National Mineral Exploration Trust, Skill Development plans ushered in a new age of reforms in the

mineral sector. The implementation of Star Rating of Mines under the Sustainable Development Framework (SDF) brought optimisation in development of mineral resources, transparency in actions and application of global best practices leading to environment and socio-economic welfare. The entire gamut of reforms target to increase the contribution of mineral sector to the national GDP, he added.

The future holds bright for the mineral sector in India. IBM is in the process of finalising Mining Tenement System (MTS) for automation of mineral concession cycle, Sudoor Drishti and Drone Application for mine management and MoU with TERI will bring Best Practices for Reclamation and Rehabilitation of Mines and initiation of Skill Development Centers. Other measures like online filing, publishing monthly prices of minerals provide for ease-of-doing business, he said.

## Technical Session

On the occasion, Dr. Y.G. Kale, RCOM, Goa presented a paper, “Sustainable Development Framework and Recent Initiatives” co-authored with Shri Ranjan Sahai. He gave a broad perspective of Sustainable Development vis-à-vis Sustainable Mineral Development issues incorporated under National Mineral Policy, 2008 and rolling out of SDF through Star Rating of Mines. The

“The future holds bright for the mineral sector in India. IBM is in the process of finalising MTS for automation of mineral concession cycle, Sudoor Drishti and Drone Application for mine management and MoU with TERI will bring Best Practices for Reclamation and Rehabilitation of Mines.

- Ranjan Sahai  
Controller General In-charge

paper elaborated on policy approach for SDF implementation at Lease, Regional, State and National levels. He briefed on the performance criteria under Star Rating of Mines.

Shri Deepak Kumar Sinha, Inspector General of Forest, Ministry of Environment, Forest and Climate Change was present as a guest of honour. More than 100 delegates representing the mineral industry, regulatory bodies and academic institutions attended the day-long summit.



Shri Ranjan Sahai (fourth from left) at the inauguration of the Sustainable Mining Summit organised by the Federation of Indian Mineral Industries in Goa. (centre) Shri Ranjan Sahai delivering the keynote address at the Summit. (right) Dr. Y.G. Kale, RCOM, Goa presenting the paper, Sustainable Development Framework and Recent Initiatives, co-authored with Shri Ranjan Sahai, CG In-charge, IBM during the summit.





The officers of Indian Bureau of Mines along with the NRSC officials pose for a group photograph on the concluding day of the Training Programme organised as part of the Sudoor Drishti project at NRSC, in Hyderabad.

## SUDOOR DRISHTI

# IBM officers attended training

The Indian Bureau of Mines (IBM) signed a Memorandum of Understanding (MoU) with National Remote Sensing Centre (NRSC), Department of Space, Government of India for project "Sudoor Drishti" on 21 January, 2016. The project entails monitoring of Mining activity through satellite imageries and watching for periodic changes in the mining areas within the mining lease boundary. IBM is gearing up for the early implementation of the project post pilot study.

As part of MoU, a second batch of 12 officers from IBM underwent five-day training at NRSC, Hyderabad during 19-23 June, 2017. The MoU provides for NRSC imparting training to IBM officials on the methodology of processing and interpretation of satellite data so that the activity can be taken forward by IBM independently after the pilot study being conducted at NRSC. During the week-long training, the topics such as Introduction to Remote Sensing, Satellite Orbits and Sensor Systems, Concepts of Digital Image and Processing, Image Familiarisation & Interpretation, Demo on Image Processing

System were covered.

The faculties of NRSC also dwelt on Overview of GIS and Data Structures, GIS data conversion & analysis, Demo on GIS, GPS and DGPS concepts and applications, Principles of Photogrammetry and Stereoscopic Viewing, Digital Photogrammetry and its Applications, Hands-on training on DEM Extraction and Editing, Orthophoto Generation, Bhuvan and Gagan application usage and Hands-on Mine Boundary generation. Dr. V. Raghu Venkatraman, Deputy Director, ASDM & OA, NRSC, presented certificates to the participants during the valedictory.

The IBM officers who attended the training include S/Shri S.K. Adhikari, Chief Mining Geologist, P.N. Sharma, RCOM, Dr. Y.G. Kale, RCOM, Goa, Jayakrishna Babu Varigonda, RCOM, Chennai, Shri Babulal Gurjar, RCOM, Raipur, Shri Suresh Prasad, DCOM, Goa, Dr. A.Z. Khan, SMG, Ajmer, Hapatgara Philips, SMG, GM & MM Cell, Nagpur, D.R. Gurjar, ACOM, Ajmer, Ashish Mishra, ACOM, Nagpur, Mithilesh Purohit, ACOM, Jabalpur and S.K. Muduli, JMG, Hyderabad.

## IBM, TERI exchange proposals to develop action plan

Following the MoU between IBM and TERI, a meeting was organised between the officials of both the sides to discuss the roadmap for the Terms of Reference laid down in the agreement. Shri N.K. Singh, Joint Secretary (Mines) chaired the meeting. The IBM submitted a set of proposals vide a letter dated 17.4.2017. Shri Pushpendra Gaur, DCOM, IBM attended a meeting with officers of

TERI. TERI, on its behalf has submitted two proposals (i) to develop an action plan for mine out areas and abandoned mines of India (ii) Capacity Building and Training in Sustainable mining.

### Beneficiation of KGF Dump

Shri Ranjan Sahai, CG In-charge chaired a meeting to discuss the status of

## SNIPPETS

## CG (I/c) holds review meet

As part of Annual Plan I, Shri Ranjan Sahai, CG In-charge, IBM reviewed the activities of all regional and zonal offices during zonal/regional heads meeting held on 14-16 June 2017 at IBM Headquarters in Nagpur. The meeting formalised various important guidelines and modalities for uniform implementation of various statutes all over the country. Shri Sahai also held a video conferencing with zonal heads and regional heads to review the status of SDF, Star Rating, MTS & MSS Project on 22 June, 2017.

## Bauxite sale price

The IBM Headquarters hosted to a meeting to fix the average sale price for Bauxite on 23.6.2017. The meeting discussed the methodology suggested by JNARDDC, Nagpur for deriving the average sale price (ASP) of metallurgical grade Bauxite through LME price of Aluminum metal. The representatives of BALCO, NALCO and IBM were present at the meeting and a proposal is submitted to the ministry.

## IBM proposal to NMET

The IBM has sent a proposal to National Mineral Exploration Trust (NMET) seeking financial assistance towards upgrading and capacity building of IBM and holding Annual National Mining Conclave for Star Rating of Mines. The other programmes in the proposal include, holding of workshops for notifying threshold value of minerals, national level action plan for reclamation of abandoned mine site.

beneficiation study of KGF gold samples being jointly carried out by Mineral Processing Division of IBM and MECL. Dr. Gopal Dhavan, CMD, MECL, Smt. Indira Ravindran, Director (OD), IBM, Nagpur, Shri S.K. Adhikari, Chief Mining Geologist, IBM, Nagpur, Shri S.K. Thakur, General Manager (Exploration), MECL Nagpur attended the meeting and discussed the early submission of the report.



## MANAGING MINE WASTE



Shri Ranjan Sahai, Controller General In-charge attended an International Seminar on Management of Mine Waste with Value Addition organised by the Mining Engineers Association of India, Ahmedabad chapter during 9-11 June, 2017 at Gujarat Mineral Development Corporation (GMDC), Ahmedabad, Gujarat. He delivered a keynote address on mine waste management and value addition. More than 100 delegates from various mining agencies and institutes attended the two-day conference.

BY 2035

## IBM to create database of all natural resources

Shri Ranjan Sahai, CG In-charge, IBM said scientists and technocrats should expand and explore technologies for sustainable and inclusive growth, suiting the requirements of the country.

"Technology plays a major role in the development of a country. All efforts should be made to enhance and update technological knowledge to achieve higher progress," he said while delivering a guest lecture organised by CSIR-National Environmental Engineering and Research Institute (Neeri) to mark the National Technology Day on 11 May, 2017 at Neeri auditorium.

He said the IBM envisions developing a vast spectrum of database of all natural resources in the country by 2035. It would bring to fore smallest of the resources not known till date. The Bureau plans to have eco-friendly excavation of resources and restoration of covered forests by 20 per cent in the next two decades. Any such system should be backed under the surveillance of technology. It would also bring transparency



Shri Ranjan Sahai, CG In-charge, IBM delivering the keynote address at the National Technology Day celebrations at Neeri in Nagpur. Dr. Rakesh Kumar, Director, CSIR-Neeri and others are seen.

and win the trust of the people and community at large on the government mining plans, he said explaining IBM's role in adoption of technologies towards achieving these objectives.

Dr. Rakesh Kumar, Director, CSIR-Neeri said his organisation celebrated National Technology Day every year to commemorate technological breakthroughs with reference to environment protection. Senior scientists of Neeri, faculties, research scholars and students were present.

## IRON ORE &amp; CHROMITE

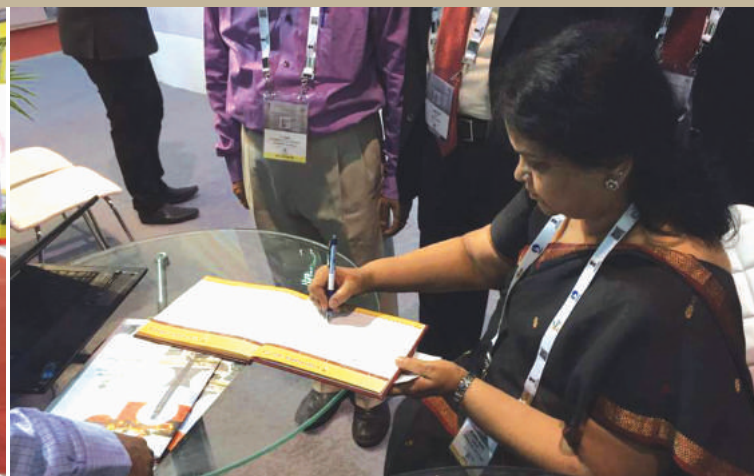
## Study on lump & fine ratio makes progress

The Geological Mapping & Mineral Map Cell of Indian Bureau of Mines would carry out a study to establish percentage of lump & fines present in run off mine ore in the iron ore and chromite mines in the country. As a prelude to the study being carried out under Rule 46 of MCR 2016, the Cell has started to receive draft Geological report from various regional offices of IBM.

The GM & MM Cell has received the Action Plan to carry out Geological study for Chromite Mines in Odisha state from Bhubaneswar Regional office. Accordingly, field visit of 10 chromite mines was completed as per the action plan. The study of two mines could not be undertaken due to temporary discontinuation of the mines till date. While, the data on lumps and fines ratio in ROM samples of chromite from Odisha state was received from Bhubaneswar regional office. The draft report is under preparation for the study in Odisha.

The draft geological report has been received from Bhubaneswar, Bengaluru, Hyderabad, Goa, Jabalpur, Raipur and Ranchi Regional office. Final reports are awaited after scrutiny and comments from the concerned zonal offices.





(Clockwise) Shri Prithul Kumar, Director (Mines) inaugurating the Mines Pavilion at the 3<sup>rd</sup> International Exhibition & Conference on Steel Industry, India Steel 2017 at Bombay Exhibition Centre in Mumbai on 19 April. Dr. Somani, Regional Mining Geologist, S/Shri Manish Maindiratta, DCOM, Mujeeb Siddiqui, DME and other officials from IBM and other agencies of Ministry of Mines are seen. Dr. Aruna Sharma, Secretary, Ministry of Steel records her opinion in the visitor's book during her visit to the Mines Pavilion during the three-day exhibition. The participants from Indian Bureau of Mines. Shri Manish Maindiratta, DCOM and Shri Mujeeb Siddiqui interacting with the foreign delegates at the Mines Pavillion.

INDIA STEEL 2017

## IBM showcases good governance initiatives

Under the aegis of Mines Ministry, Indian Bureau of Mines (IBM) in association with Mineral Exploration Corporation Ltd (MECL), National Aluminium Company Limited (NALCO) and Hindustan Copper Limited (HCL) participated in the 3<sup>rd</sup> International Exhibition & Conference on Steel Industry, 'India Steel 2017' held during 19 - 21 April, 2017 at Bombay Exhibition Centre in Mumbai. The three-day exhibition was organised by Ministry of Steel, Government of India.

The IBM which was entrusted to manage the pavilion exhibited the digital India efforts like Mining Surveillance System (MSS), Star Rating of Mines and the proposed Mining Tenement System, even as MECL, NALCO and HCL also showcased their prowess at the International exhibition.

Dr. M.K. Somani, Regional Mining Geologist, S/Shri Manish Maindiratta, Deputy Controller of Mines, Mujeeb Siddique, Deputy Mineral Economist, D.D. Bhargava, Sr. ACOM, Rituparno Majumdar, SMG represented IBM and showcased the latest reforms in policies and programmes of the Ministry of Mines and the new initiatives launched under Digital India.

A number of dignitaries visited the Mines pavilion and appreciated the efforts of IBM in devising policy reforms.

Dr. Aruna Sharma, Secretary, Ministry of Steel, Shri Prithul Kumar, Director, Ministry of Mines, Shri Naresh Kumar, IAS and former joint secretary (mines) were among the prominent people who visited the pavilion. Mine entrepreneurs from India and countries like China, Japan, Syria, Sudan etc

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The mines pavilion exhibited the digital India efforts like Mining Surveillance System (MSS), Star Rating of Mines and the proposed Mining Tenement System along with other prowess of Mines Ministry.

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visited the pavilion and were apprised of latest developments, programmes and good governance practices in mineral & mines administration.



## MEETINGS ATTENDED

- Shri Ranjan Sahai, Controller General (I/c) (i) Attended final day function of MEMC Week of Kolkata Region as chief guest on 30 April, 2017 at Shilong (ii) attended a meeting with officers of Regional office Guwahati & NER States at Guwahati on 1.5.2017 (iii) Attended MTS meeting under the chairmanship of Secretary (Mines) on 2.5.2017 at New Delhi (iv) Attended Conference of State Ministers of Power, Coal & Mines at New Delhi on 3 & 4 May, 2017 (v) Attended meeting on review of previous minutes under the chairmanship of Secretary (Mines) at New Delhi on 5.5.2017 (vi) Attended meeting with the officers of East Zonal office and reviewed the action taken regarding setting up of Zonal office at Kolkata on 8.5.2017 (vii) Attended Review meeting with officers of Udaipur Zonal office, RCOM Ajmer & Gandhinagar at Udaipur on 14.5.2017 (viii) Inaugurated Skill Development Centre in Udaipur office & a workshop on MSS at Udaipur office on 15.5.2017. Visited HZL mine on 16.5.2017 (ix) Attended a follow up meeting with COM, Udaipur zonal office, RCOM Ajmer & Gandhinagar, at Udaipur on 17.5.2017. (x) Attended meeting under chairmanship of Secretary (Mines) on MTS project, at New Delhi on 3.4.2017 along with Shri M. Biswas, Controller of Mines (xi) Attended review meeting with officers and staff of zonal/regional/MP divisions of IBM at Bengaluru on 10.4.2017 (xii) Attended meeting with officers of Dehradun office and discussion with mining Engineers of State Government of Haryana at Chandigarh on 15.4.2017 (xiii) Attended meeting with Joint Secretary (mines) on 17.4.2017 in New Delhi (xiv) Chaired a meeting with the officers & staff of the Goa regional office of IBM on 19.4.2017 in Goa (xv) Visited the Codli Iron Ore Mine of M/s Vedanta on 22.4.2017 (xvi) Attended review meeting under the chairmanship of Secretary (Mines) at New Delhi on 1.6.2017 (xvii) Attended CCEC meeting of 21 major mineral producing states under the chairmanship of Secretary (Mines) at New Delhi on 2.6.2017 (xviii) attended meeting on illegal mining of Iron Ore & Manganese Ore on 19.6.2017 at New Delhi.

- Smt. Indira Ravindran, Director (OD) (i) Attended meeting under the chairmanship of Shri Ranjan Shai, CG (I/c) at IBM HQ on 12.5.2017 to discuss the status of beneficiation study of KGF Gold samples. Dr. Gopal Dhavan, CMD, MECL, Shri S.K. Adhikari, Chief Mining Geologist, IBM & Shri S.K. Thakur, General Manager, (exploration), MECL, Nagpur attended the meeting.

- Shri J.R. Choudhary, COM (i) Attended a meeting along with Shri Prithul Kumar, Director, MoM regarding progress of MTS project at Wipro office, Bengaluru on 25.5.2017 (ii) Attended meeting convened by Central Empowered Committee on 12 & 13 June 2017 at Vidhana Soudha, Bengaluru and Khanij Bhavan, respectively in connection with compliance of Hon'ble Supreme Court order dated 21.3.2017 in W.P.No. 562/2009.

contd. on page 13

## SUSTAINABLE DEVELOPMENT

# MEMC week observed

**T**he Mines Environment and Mineral Conservation Week (MEMC) celebration season that kicked off last quarter continued to be observed across various regional and zonal offices during the second quarter of 2017.

### Bengaluru

The Bengaluru Region organised the MEMC week celebrations for the Karnataka zone, wherein 51 mines participated. The mine owners were sensitised on systematic mining and the recent programmes/schemes of Indian Bureau of Mines.

The final day function was held at Bengaluru on 8 April 2017. Shri Ranjan Sahai, CG In-charge, IBM graced the occasion as a chief guest and addressed the mining fraternity. Shri J.R. Chaudhary, COM (SZ), Shri C. Parameshwaran, DCOM and OIC of Bengaluru region and representatives of mining industry were present.



### Chennai

The 25<sup>th</sup> MEMC week celebrations of Chennai Region concluded with the final day function hosted at Ultratech Cements Ltd, Ariyalur, Chennai. Shri Ranjan Sahai graced the occasion as chief guest. Shri J.R. Choudhary, COM (SZ), Shri V. Jaya Krishna Babu, Regional Controller of Mines, IBM, Chennai and Shri V. Ganesan, Unit head of Ultra tech cements were present. Prizes were distributed to the winners under various categories. The CG In-charge released a souvenir to mark the occasion.

### Gandhinagar

The MEMC week celebrations under the Gandhinagar Regional office concluded with a valedictory function at Ambuja Cements on 23 April 2017. CG In-charge Shri Ranjan Sahai was the chief guest. Shri K.S. Yadav, RCOM, Gandhinagar Region and Shri S.K. Thakore, Cluster Head, Ambuja Cement and Shri Mukesh Gautam, Executive President Unit Head, UltraTech were present.



(Clockwise) Shri Sahai, CG In-charge speaking at the valedictory of the MEMC week celebrations held at UltraTech Cements, Ariyalur in Chennai. Shri Sahai inaugurating the MEMC celebrations organised in Bengaluru. Shri Ranjan Sahai lighting the lamp at the concluding ceremony programme of MEMC Week celebrations held in Gandhinagar, Gujarat.



## IBM News, a witness to historic moments

**T**he early days of IBM News were coinciding with the growth of the Indian Bureau of Mines. Among the higher echelons of the Bureau and Ministry in New Delhi, a need to re-introduce and recast the Bureau to suit the changing times began. The result was the constitution of the IBM Review Committee under then Additional Secretary of Mines and Steel Shri R. Ganapati. The Controller Shri D.N. Bhargava was appointed Member Secretary and eight other eminent bureaucrats and technocrats from Mineral Industry were nominated the members of the panel.

The Committee constituted in November 1978 held a series of meetings in Nagpur, Bangalore and New Delhi. The Committee met for the fifth and sixth time in New Delhi to discuss the draft report and consider modifications. The final report was reviewed and adopted in the sixth meeting on 20 November 1979 and the Committee submitted its final report to the Government on 20 December, 1979. The IBM Review Committee was responsible for many of the landmark reforms in functioning of Bureau – including existing structure, role and functions.

As the churning to re-invent IBM was underway, the IBM News took its baby steps to constantly engage the policy makers and stakeholders in discussing the ways to improving mineral sector productivity. The dedication of IBM and its officers for conservation of minerals is palpable in the excerpts from 'From the Controller's Desk' by Shri D.N. Bhargava from Oct-Dec 1978 issue:

*"It is satisfying to note that encouraging results are emerging from the initiative taken by the Bureau in creating awareness in the mining industry with regard to the attention to be paid to the material excavated during mining operations other than mineral of economic value..... The manganese mining industry has recognised the significance of stacking separately the low grade manganese ore and manganese ore fines, which have hitherto been unsalable. The Bureau has demonstrated that manganese ore fines can be upgraded as well as agglomerated*



In this photograph taken from the Jan-March, 1979 issue of IBM News shows then Prime Minister Shri Morarji Desai visiting the IBM stall at the Indian Engineering Trade fair on 16 Feb, 1979.

*for rendering them usable in ferro-manganese plants. Similarly, it has been established that in limestone mines the limestone hitherto rejected as under-size, can be gainfully utilised as raw material for cement, chemical and steel industries....."*

### A fillip

*The Bureau received another fillip when Department of Science & Technology recognised it as Mines & Minerals Data Bank and for the purpose a new Division was created – Mineral Statistics – in November 1979. The new Division was an offshoot of Mineral Economics Division, formed to cope with the increasing statistical activity. "IBM emerged as only organisation in the country authorised statutorily and otherwise, to draw information from all available sources and publish authentic data covering the mining industry and trade. An important function of IBM is the collection and dissemination of information relevance to everyone in the country and abroad howsoever remotely connected with the interests of the Indian mining and mineral industry and trade," read an important article titled, Information Resources in IBM, in July-Sept 1979 issue.*

## OFFSHORE MINING: THE BEGINNING

Shri D.N. Bhargava, Controller of IBM, Shri N.N. Subrahmanyam, Chief Ore Dressing Officer along with Shri R.S. Jain, Director (Mines), Ministry of Steel, Mines & Coal participated as delegates in the Eleventh Offshore Technology Conference at Houston, Texas (USA) held during 30 April – 3 May, 1979. The conference focused on the Research and Development advancements in Offshore Technology, which proved to be an initial exposure for the technologists from IBM.

While, Shri Krishna Kumar, Regional Controller of Mines attended the Tenth World Mining Congress at Istanbul, Turkey between 17 and 21 September, 1979. In another important, Law of the Sea Conference held in Geneva during 19 March – 27 April 1979, Shri S.L. Rai, Mineral Economist represented IBM along with Shri Sivaramakrishnan, Joint Secretary, Ministry of Mines and this delegation intensely deliberated on mining of manganese nodules from oceans. Besides, Shri N. Bhargava, Controller actively participated in an International Conference on Small Scale Mining of the World organised by the United Nations at Queretaro, Mexico in November 1978, while IBM officers continuously engaged in the annual India International Trade fairs, Engineering fair, National Book fair and the ISO Technical Committee meetings.



## FITNESS

# International Day of Yoga observed

**A**s the world celebrated the International Day of Yoga on 21 June, 2017, the Indian Bureau of Mines and its offices across the country also observed the Yoga Day organising a Training programme. At the Headquarters, Shri Vinay Kumar Saxena, Senior Library and Information Assistant, IBM and a trained Yoga exponent conducted an hour-long training programme at the IBM campus. Officers and staff of IBM attended the event and were apprised of various Yoga Aasanas and were made perform the Aasanas.

## Goa

The Goa office of IBM also hosted to a

*contd. from page 11*

- Shri S.K. Adhikari, Chief Mining Geologist (i) Attended the National Technology Day function inaugurated by CG (I/c), IBM at CSIR-NEERI, Nagpur on 11.5.2017 (ii) Attended meeting regarding the standardisation of mineral names in various database of IBM at CSIR-NEERI, Nagpur (iii) Attended meeting held under the chairmanship of CG (I/c), IBM to discuss the status of beneficiation study of KGD dump samples on 12.5.2017 (iv) Attended as a faculty for the workshop on UNFC & MMDR Act 2015 held at RTI, Jaipur on 17.5.2017 and visited the limestone, iron ore and lead-zinc mines of Rajasthan State (v) Attended a meeting of the officers of NIC (Mines Information Division, Cloud Division and GIS Division), IBM and Wipro on 16.1.2017 at New Delhi to discuss the various issues pertaining to NIC cloud services and NIC base map services to be used by the IBM for the MTS project. (vi) Attended a meeting regarding strengthening of administration; periodical review in respect of grade B (Gaz.) officers of IBM on 20.4.2017 in Nagpur (vii) attended the 34<sup>th</sup> meeting of Standing Committee on Promotional Projects of MECL on 16.6.2017 at New Delhi. (viii) attended a meeting with Shri Kuldip Solanki, AGM, Head, Geology regarding the reserves resources of lead Zinc ore of the mines of M/s HZL on 29.5.2017 (ix) attended meeting with Wipro (IA) & NISG (PMU) to finalise the SRS document from 29 May to 31 May 2017 at CG Conference room, IBM (HQ) Nagpur (x) attended an annual general meeting of Mining Engineers Association, Nagpur chapter on 26.5.2017.

- Shri M. Biswas, COM (i) Attended a meeting on MTS held at Ministry of Mines on 2.5.2017 (ii) Attended conference on Power, Coal, Non-renewable Energy and Mines and also meeting on MTS held at New Delhi on 3 & 4 May, 2017 (iii) Attended a review meeting on MTS chaired by

Yoga Day programme in which Smt. Kamala Fulari, Chief of Patanjali Mahila Yogapeeth, Goa presided as chief guest. Shri Prem Prakash, Deputy Controller of Mines chaired the function. Shri M.N. Prasannan, Superintendent of Goa office delivered welcome address.

In her address, Smt Kamala emphasised on the basic principles of yoga and its importance in day-to-day life. Her disciples Ku. Kanchan Lotlikar and Ku. Sushama Desai conducted a practical yoga session for the officers and staff of the office. The IBM officers performed different Aasanas and Pranayam. N. Sheshadri, AAO offered vote of thanks. Shri Bharat Anant Zambauliker,



*The officers and staff of Indian Bureau of Mines participated in an early morning Yoga session to mark the International Day of Yoga on 21 June.*

ASK(T) compered the event. Likewise, the Yoga Day programme was organised for the officers and employees in the regional offices.

Shri N.K. Singh, Joint Secretary (Mines) at Ministry of Mines on 19.5.2017.

- Dr. P.K. Jain, CME (i) Attended a workshop on UNFC and MMDR Act 2015 organised by the Regional Training Centre, Central Region, GSI, Nagpur as a guest faculty on 26 April 2017 and 18 May 2017 delivered lecture on Mineral Economics (ii) Attended a workshop on UNFC and MMDR Act 2015 (iii) Attended a meeting of 101<sup>th</sup> Departmental Rajbhasha Working Committee meeting as Rajbhasha Adhikari on 31 March, 2017 (iv) Attended a meeting to prepare Rajbhasha Technical Dictionary at Ministry of Mines, New Delhi on 22-23 May, 2017 (v) Attended Nagar Rajbhasha Committee (NARAKAS-2) meeting on 24 May 2017 on behalf of CG, IBM and collected 3<sup>rd</sup> Prize for IBM (Nagpur) in-house magazine Khan Bharati and consolation prize for Rajbhasha working (vi) Held discussion with the Director, JNARDDC for ASP of Buaxite (Metallurgical) along with Shri K. Thomas, Dy DG (S) (vii) Attended a round table discussion in presence of Shri Anoop Kumar, Divisional Commissioner & Chairman of Inter Regional Committee (IRC) on recommendation of Study Group for Industrial Development of Vidarbha & Marathwada at VIA Udyog Bhavan, Nagpur on 19.6.2017 (viii) Delivered lecture on Khanij Niti at the two-day Hindi workshop held on 19 June, 2017 organised by Rajbhasha Division, IBM Nagpur.

- Shri P.N. Sharma, RCOM & TS (i) Attended meeting of Hon'ble Minister of Mines & Secretary (Mines) on 5.5.2017 at New (ii) Attended Parliament Standing Committee meeting at New Delhi on 19.5.2017 (iii) Attended Annual Conference on Mining Technology in India on 18.4.2017 at New Delhi (iv) Attended meeting with Prithul Kumar, Director, Ministry of Mines regarding setting of a Pavillion of Ministry of Mines at India Steel 2017, 3<sup>rd</sup> International Exhibition &

Conference on Steel Industry held on 20-22 April 2017 in New Delhi. (v) attended CCEC meeting at Vigyan Bhavan, New Delhi on 2.6.2017 along with Shri G.K. Jangid, DCOM (vi) attended inaugural function of Skill Development Centre & Workshop on MSS on 8.6.2017 and delivered two lectures at Direct Taxes Regional Training Institute, Kolkata (vi) attended meeting on Mining Tenement System held at WIPRO office, Bengaluru on 13 & 14 June, 2017 along with Shri G.K. Jangid, DCOM. Shri Prithul Kumar, Director, Ministry of Mines chaired the meeting wherein IBM, Wipro and NISG officials participated.

- Shri Y.G. Kale, RCOM (i) Prepared comments on anticipated problem for implementation of Mines and Minerals (Development & Regulation) Amendment Act – 2015 and rules made there under (ii) Prepared comments on an urgent basis on Report of the Supreme Court Expert Committee in Macro EIA study to ceiling of Annual Excavation of Iron Ore from State of Goa (iii) Attended an interactive meeting with DGM official at IBM Goa regarding implementation of MSS & Star Rating of Minor Minerals in Goa.

- Shri G.K. Jangid, DCOM (i) Attended a meeting with NIC Cloud and GIS Division held on 31.5.2017 at New Delhi to know the VMS available, DC location and infrastructure required for the server in connection with MTS Project.

- Shri Ramakrishna R., Sr. ACOM, Bhubaneshwar RO attended screening committee meeting to examine the cases under 10A(2)(b) of MMDR Act, 1957 held on 16.6.2017 at Directorate of Mines, Government of Odisha.

- S.M. Dorle, AME attended training on Users Mobilisation and Roll of Employees Information System at Mumbai on 12-13 June, 2017.

## Beneficiation of Manganese ore from Ivory Coast

A typical manganese ore sample from Ivory Coast, Africa, was received from Shiloh Industries Pvt. Ltd, Chennai at Regional Mineral Processing Laboratory, Bengaluru to carry out detailed beneficiation studies. The objective of the study was to improve the percentage of Mn  $\geq 45\%$  with satisfactory level of recovery - preferably at coarser size range.

The mineralogical analysis of original sample indicated that it contains predominantly todorokite and pyrolusite with subordinate amounts of garnet (spessartine) and lithiophorite. Minor amounts of cryptomelane/manjiroite, psilomelane/ manganomelane, nsutite and very minor to traces of quartz, manganite/groutite, mica (muscovite, biotite), braunite and clay.

This was a typical sample where number of garnet grains are altering/breaking to lithiophorite and cryptomelane/manjiroite and to minor extent to psilomelane along the grain boundaries, cracks and fracture planes. The degree of alteration of garnet varies from



grain to grain. Due to textural complexity i.e fine intermixing, very thin colloform bands, micro and cryptocrystalline phases, alteration of minerals and overlapping optical properties, exact quantification of Mn-oxide & hydroxide minerals was a challenging job.

The original sample assays 38.88% Mn, 52.80 %  $\text{MnO}_2$ , 13.05%  $\text{SiO}_2$ , 10.09%  $\text{Al}_2\text{O}_3$ , 5.7%  $\text{Fe}_2\text{O}_3$ , 12.12 % LOI, 1.56 % Cao, 0.29% MgO, 0.32 %  $\text{K}_2\text{O}$ , 0.65%  $\text{Na}_2\text{O}$ , 0.05% S (T) & 842 ppm of Ba.

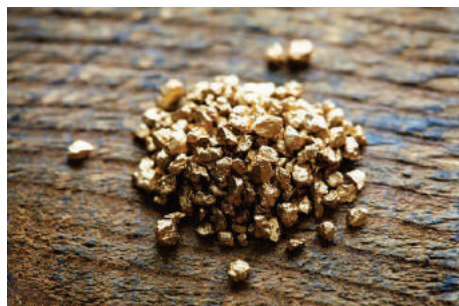
The process scheme was the as received sample size was reduced in stages to all passing 35 mesh (0.42 mm) size. This

product was classified into a) Minus 35 Plus 150 mesh b) Minus 150 plus 400 mesh c) Minus 400 mesh. Minus 35 Plus 150 mesh size and Minus 150 Plus 400 mesh size was subjected to wet magnetic separation. The minus 400 mesh size fraction was untreated. This fraction analysed 43% Mn.

The composite manganese concentrate (non-mag fraction plus minus 400 size fraction assayed 42.57%Mn with 64.9% recovery, weight yield of 60%. The combined reject (Magnetics fraction) assayed 34.67% Mn with 35.1% distribution, weight yield of 40%.

Because of the inherent complex properties of manganese minerals, structural replacement, contained variety of manganese minerals contributing % Mn content in different proportions, alteration, intermixing affected the physical and surface properties of the minerals and hence minimised the degree of success by applying physical beneficiation techniques to obtain a manganese concentrate assaying  $\geq 45\%$ .

## Heap leaching on Gold ore sample



A gold ore sample from Jonnagiri, A.P was received from Geo-Mysore Services (India) Pvt. Ltd, Bengaluru for seven days bottle roll cyanidation to simulate heap leaching at the Regional mineral processing Laboratory, Indian Bureau of Mines, Bengaluru.

The as received sample assayed 1.10 g/t Au, 70.57%  $\text{SiO}_2$ , 11.53%  $\text{Al}_2\text{O}_3$ , 3.74%  $\text{Fe}_2\text{O}_3$ , 2.89% CaO, 1.87% MgO, 0.15%  $\text{K}_2\text{O}$ , 0.21%  $\text{Na}_2\text{O}$ , 1.46% LOI, 0.06% Zn, 0.14% Mn, 0.04% Ni and traces amount of S(T). The

objectives of the investigation was to (i) carry out size analysis and seven days bottle roll cyanidation by crushing the sample to 1,  $\frac{1}{2}$  and  $\frac{1}{4}$  inch of the original size and (ii) to check the recovery of gold by seven days bottle roll cyanidation to simulate heap leaching.

The as received sample was crushed to minus 1 inch size and subjected to seven days bottle roll cyanidation, resulted in a recovery of 58.1% Au in the solution. Leach residue assayed 0.36 g/t Au. The as received sample was crushed to minus  $\frac{1}{2}$  inch size and subjected to seven days bottle roll cyanidation, resulted in a recovery of 65.9% Au in the solution. Leach residue assayed 0.30 g/t Au. The as received sample was crushed to minus  $\frac{1}{4}$  inch size and subjected to seven days bottle roll cyanidation, resulted in a recovery of 62.5% Au in the solution. Leach residue assayed 0.30 g/t Au.

## Study on iron ore sample from Morocco

An iron ore sample (screen fines) from Morocco was received for limited beneficiation studies at the Regional Mineral Processing Laboratory, Indian Bureau of Mines, Bengaluru.

The objectives of the investigation was to reduce the % CaO content to maximum level by dry magnetic separation. The sample assayed 43.12 % Fe (T), 6.14% FeO, 16.72% CaO, 3.53% MgO, 3.35%  $\text{SiO}_2$ , 1.96%  $\text{Al}_2\text{O}_3$ , and 13.66% LOI. It contains Magnetite, Calcite, Dolomite etc. The dry magnetic separation studies on the sample could reduce the % CaO content from 16.72 to 9.05, with magnetic concentrate assaying 54.37 % Fe (T), 7.66% FeO, 9.05% CaO, 2.56% MgO, 3.15%  $\text{SiO}_2$  and 2.20%  $\text{Al}_2\text{O}_3$ , the Wt% yield was 75.8 and % Fe(T) recovery was 95.



- A Shri Ranjan Sahai, CG (I/c), IBM (i) attended Sustainable Mining Summit, organised by FIMI at Paula Panaji, as a chief guest on 20.4.2017 along with Dr. Y.G. Kale, RCOM. On this occasion, Dr. Kale presented a paper on "Sustainable Development Framework and recent Initiative of SDF," jointly authored with Shri Ranjan Sahai (ii) delivered keynote address at B.K. Anita Memorial Lecture Series-I held as part of the International Seminar on Waste Management at Ahmadabad on 10.6.2017 (iii) attended International Seminar on Management of Mine Waste with Value Addition organised by Mining Engineers' Association of India (MEAI) Ahmedabad Chapter on 9-11 June, 2017 at GMDC Auditorium, Ahmadabad and delivered keynote address on IBM's role in making policy framework for mining and mineral industry.

- Shri P.N. Sharma, RCOM & TS attended Workshop on MSS & Star Rating at Bengaluru on 29.5.2017 and field visit to Narrain Iron Ore Mine of M/s Vedanta in Chitradurga district on 30.5.2017.

- Dr. Y.G. Kale, RCOM, presented a paper, Sustainable Development Framework – Star Rating of Mines at the National Conference on Challenges in Environmental Management "Mines & Industry" (CEMMI)-2017 organised by Goa Engineering College in association with Institution of Engineers (India) and MEAI Goa Chapter.

- S/Shri Arun Kumar, DCOM, A.K. Ray, DME and Ibrahim Shariff, ACOM attended ASCI training programme on Environmental Impact Assessment for projects during 12-14 June 2017 at Hyderabad.

- Shri Ashish Mishra, ACOM and Hom Prakash, DODO attended International Conference on Integrated Solid Waste Management Practice in Developing Countries held at Neeri Nagpur, on 11 & 12 April, 2017.

Technical Updates Contd.

## Beneficiation study on Gold ore from Tanzania

A gold ore sample from Tanzania was received from Shiva Analyticals (India) Private Limited, Bengaluru for beneficiation studies at the Regional Mineral Processing Laboratory, Indian Bureau of Mines, Bengaluru.

The as received sample assayed 1.0 g/t Au, 91.26% SiO<sub>2</sub>, 3.33% Al<sub>2</sub>O<sub>3</sub>, 1.85% Fe<sub>2</sub>O<sub>3</sub>, 0.91% CaO, 0.19% MgO, 0.94% K<sub>2</sub>O, 0.29% Na<sub>2</sub>O, 0.14% TiO<sub>2</sub>, 1.46% LOI, 53 ppm Pb, 89 ppm Cu, 53 ppm Zn, 230 ppm Mn, 18 ppm

## WORKSHOP ON RTI



The CPIOs and Appellate Authorities of Indian Bureau of Mines at the one day workshop on "Working on RTI Portal" organised at the IBM HQs in Nagpur on 9.5.2017. Shri Agnihotri, Management Graduate associated with RTI Project Unit (DOPT, New Delhi) delivered lecture as a guest faculty. The Public Information officers and Appellate Authorities from various IBM offices participated in the workshop.

## ACADEMIC EXCELLENCE

### Siblings excel in CBSE Board exams

Ku. Neha Karoo and Ku. Ruchika Karoo, daughters of Shri Gangadhar Karoo, LDC, Non-Gazetted Section, Indian Bureau of Mines has come out with flying colours in the Class 12 and Class 10 examination conducted by CBSE in 2017. Ku. Neha Karoo passed the Class 12 examination scoring 95 per cent. She secured A1 grade in all the subjects in the commerce branch. While, Ku Ruchika Karoo, also secured a CGPA score of 10 with 94 per cent in class 10 Board exams. The IBM family congratulates



Ku. Ruchika & Ku. Neha

the sibling for their academic success and wishes a bright future ahead.

As, 528 ppm S(T) and traces amount of Ni. The objectives of the investigation were to (i) carry out detailed chemical analysis and mineralogical studies on the as received sample and (ii) to recover gold by ore dressing techniques with maximum recovery.

The as received sample ground to minus 200 mesh size and subjected to tabling yielded a concentrate assaying 11.48 ppm Au with 44.6 % Au recovery (Wt% yield is 5.3).

The as received sample was ground to minus 100 mesh size and subjected to Wet High Intensity Magnetic Separation. The concentrate (Mag- I & II) assayed 11.04 ppm Au with 40.6 % Au recovery (Wt% yield is 6.8). Direct cyanide leaching, adopting bottle roll procedure of ore at minus 200 mesh size, resulted in a recovery of 90.1% Au in the solution. Leach residue assayed 0.08 g/t Au. The study indicates that gold could be encapsulated form.

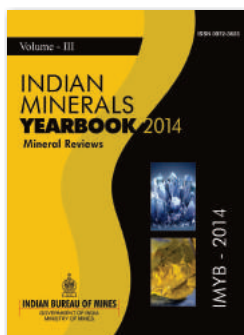


## RETIREMENT FAREWELL



Controller General In-charge Shri Ranjan Sahai felicitated retired officers and staff of IBM at his chamber. Those retired during the quarter ended April – June 2017 include: S/Shri S.K. Deshpande (Deputy Mineral Economist (S)), N.U.Kadu (Editor), Finny Abraham (AME), T.R. Purankar (AME), N.M. Chaudhary, Office Superintendent, R.T. Panchbhay [ASK(T)], J.N. Gondane & C.R.Thute (MTS). Senior officials of respective divisions of the officers and administration also wished the retiring officers on their superannuation.

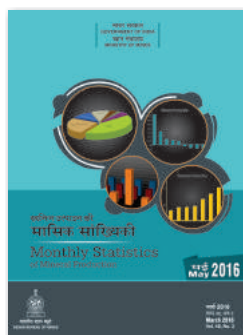
## Publication Corner



**Title:**  
IMYB 2014 Vol. III

**Date of release:**  
16/06/2017

**Price:**  
₹4675/-  
(Including Vol. I & Vol. II)



**Title:**  
Monthly Statistics  
of Mineral  
Production  
(May 2016)

**Date of release:**  
26/06/2017

**Price:**  
₹465/- Per Issue  
₹5580/-  
(Annual subscription)



**Title:**  
IBM News  
(Jan 2017 - March 2017)

**Date of release:**  
30/05/2017



## खनन-कौशल विकास प्रशिक्षण केंद्र उद्घाटित

भारतीय खान ब्यूरो के उदयपुर क्षेत्रीय कार्यालय द्वारा संधारणीय खनन-कौशल विकास प्रशिक्षण केंद्र का उद्घाटन महानियंत्रक (प्रभारी) श्री रंजन सहाय के करकमलों से 15 मई 2016 को संपन्न हुआ। इसी के तहत माइनिंग सर्विलेन्स सिस्टम एप्लीकेशन फोर माइनर मिनरल्स एंड एसडीएफ पर कार्यशाला का भी आयोजन किया गया था। कार्यक्रम में उदयपुर क्षेत्रीय कार्यालय के खान नियंत्रक श्री टी.के.रथ प्रमुखता से उपस्थित थे।

प्रशिक्षण केंद्र के उद्घाटन अवसर पर श्री सहाय ने अपने संबोधन में कहा कि भारत सरकार की महत्वपूर्ण योजनाओं में से एक कौशल विकास प्रशिक्षण है।

श्री सहाय ने आगे बताया कि इस विकास केंद्र से रोजगार के नए आयाम स्थापित होंगे। उन्होंने आगे कहा कि एक वर्ष में इस प्रशिक्षण केंद्र का नया भवन स्थापित होगा जहां देश-विदेश के प्रशिक्षणार्थी संधारणीय कौशल विकास का प्रशिक्षण प्राप्त करेंगे तथा देश के विकास में महत्वपूर्ण योगदान देंगे। खान नियंत्रक श्री रथ ने अपने स्वागत भाषण में कहा कि विभिन्न राज्य के खनन अभियंता तथा भूवैज्ञानिक इस प्रशिक्षण का लाभ उठा सकेंगे।

गौरतलब है कि भारतीय खान ब्यूरो के कोलकाता क्षेत्रीय कार्यालय में भी प्रशिक्षण केंद्र का उद्घाटन 7 जून 2017 को महानियंत्रक (प्रभारी) श्री रंजन सहाय के हस्ते संपन्न हुआ।

### कार्यशाला का आयोजन

प्रशिक्षण केंद्र के उद्घाटन के पश्चात माइनिंग सर्विलेन्स सिस्टम एप्लीकेशन फोर माइनर मिनरल्स एंड एसडीएफ पर कार्यशाला का आयोजन किया गया था। कार्यक्रम का उद्घाटन भारतीय खान ब्यूरो के महानियंत्रक (प्रभारी) श्री रंजन सहाय के हस्ते संपन्न हुआ। उद्घाटन के दौरान श्री टी.के.रथ ने कार्यशाला के दौरान दिए जाने वाले व्याख्यानों की जानकारी दी। श्री रंजन सहाय ने अपने भाषण में कहा कि आधुनिक तकनीक के उपयोग द्वारा



दीप प्रज्वलन कर एमएसएस कार्यशाला का उद्घाटन करते हुए भारतीय खान ब्यूरो के महानियंत्रक (प्रभारी) श्री रंजन सहाय। (बाएँ) भास्कराचार्य इंस्टिट्यूट ऑफ स्पेस एप्लीकेशन एंड जियोएन्फोमेटिक की परियोजना प्रबंधक श्रीमती पारु ठक्कर कार्यशाला में व्याख्यान प्रस्तुत करते हुए।

खनन संचालन एवं नियमन के क्षेत्र में दक्षतापूर्वक पूर्ण पारदर्शिता के साथ कार्य निष्पादन किया जा सकता है। श्री सहाय ने अंतरिक्ष तकनीक पर आधारित एवं भारतीय खान ब्यूरो द्वारा विकसित एवं संचालित महत्वपूर्ण परियोजनाओं 'खान पर्यवेक्षण प्रणाली' (Mining Surveillance System) तथा संधारणीय खनन हेतु तारक मूल्यांकन प्रणाली (Star Rating System) तथा अप्रधान खनिज क्षेत्र में विभिन्न राज्य सरकारों द्वारा इसके सुलभ उपयोग पर प्रकाश डाला। उन्होंने इसकी महत्ता बताते हुए सभी प्रतिभागियों से ध्यानपूर्वक विषय को ग्रहण करने की अपील की।

प्रथम सत्र में वरिष्ठ सहायक खान नियंत्रक श्री डी.डी. भारद्वाज ने एम.एस.एस.प्रोजेक्ट के बारे में अवलोकन प्रस्तुत करते हुए माइनिंग सर्विलेन्स सिस्टम के बारे में प्रारंभिक जानकारी दी। कार्यशाला के दूसरे सत्र में भास्कराचार्य इंस्टिट्यूट ऑफ स्पेस एप्लीकेशन एंड जियोएन्फोमेटिक की परियोजना प्रबंधक श्रीमती पारु ठक्कर ने अपने व्याख्यान में 'MSS Project software demonstration and mobile app for official and

citizen' विषय पर महत्वपूर्ण जानकारी दी।

तीसरा सत्र Sustainable development framework and concept of star rating of mines के संबंध में था। भारतीय खान ब्यूरो के तकनीकी सचिव श्री पी.एन.शर्मा द्वारा इस सत्र में केन्द्र सरकार द्वारा विकसित संधारणीय खनन रूपरेखा तथा खनन क्षेत्र के मूल्यांकन हेतु विषय आधारित तारक मूल्यांकन प्रणाली (Star rating system) के विविध पहलुओं एवं कार्यप्रणाली पर विस्तृत चर्चा की।

चौथे सत्र में 'Practical demonstration of process of scanning, geo & referencing digitization and super imposition on satellite image and familiarization with GIS' विषय पर भास्कराचार्य इंस्टिट्यूट ऑफ स्पेस एप्लीकेशन एंड जियोएन्फोमेटिक (BISAG) के परियोजना प्रबंधक श्री विजय सिंह ने सरल भाषा में विषय को समझाते हुए जी.आई.ए. तकनीक के महत्व के बारे में व्याख्यान प्रस्तुत किया।

## भा.खा. ब्यूरो के राजभाषा समिति की बैठक संपन्न



बैठक की अध्यक्षता करते हुए महानियंत्रक (प्रभारी) श्री रंजन सहाय मंच पर आसीन मुख्य खनिज अर्थशास्त्री एवं राजभाषा अधिकारी डॉ. पी.के. जैन, हिंदी विभाग के उप निदेशक (राजभाषा) श्री प्रमोद एस.सांगोले, खनिज प्रसंस्करण प्रभाग की निदेशक (अ.प्र.) श्रीमती इंदिरा रविन्द्रन, खनन एवं खनिज सांख्यिकी के उप-महानिदेशक श्री के.धामस तथा खान नियंत्रक श्री एस.टियू.

विभागीय राजभाषा कार्यान्वयन समिति की 102वीं बैठक 22 जून को महानियंत्रक (प्रभारी) श्री रंजन सहाय की अध्यक्षता में संपन्न हुई। सभाकक्ष में आयोजित बैठक, सदस्यों के स्वागत के पश्चात अध्यक्ष महोदय की अनुमति से आरंभ हुई। बैठक में पिछली बैठक के कार्यवृत्त पर की गई अनुवर्ती कार्रवाई एवं कार्यवृत्त की पुष्टि की गई। इसके पश्चात जनवरी – मार्च 2017 की तिमाही रिपोर्ट की समीक्षा, वार्षिक कार्यक्रम 2017-18 पर चर्चा, नराकास, नागपुर के तत्वावधान में भारतीय खान ब्यूरो में 31 अगस्त 2017 को आयोजित की जाने वाली प्रश्नोत्तरी, राजभाषा तकनीकी सेमिनार का आयोजन तथा नराकास, नागपुर के तत्वावधान में भारतीय खान ब्यूरो (मुख्यालय)

बैठक में पिछली बैठक के कार्यवृत्त पर की गई अनुवर्ती कार्रवाई एवं कार्यवृत्त की पुष्टि की गई। इसके पश्चात जनवरी – मार्च 2017 की तिमाही रिपोर्ट की समीक्षा, वार्षिक कार्यक्रम 2017-18 पर चर्चा, नराकास, नागपुर के तत्वावधान में भारतीय खान ब्यूरो में 31 अगस्त 2017 को आयोजित की जाने वाली प्रश्नोत्तरी, राजभाषा तकनीकी सेमिनार पर चर्चा की गई।

को उत्कृष्ट कार्यान्वयन एवं उत्कृष्ट गृह पत्रिका के लिए पुरस्कारों से सम्मानित किए जाने आदि विषयों पर चर्चा की गई।



डॉ. आंबेडकर जयंती के उपलक्ष्य में आयोजित कार्यक्रम में उपस्थितों को संबोधित करते भारतीय खान ब्यूरो के महानियंत्रक (प्रभारी) श्री रंजन सहाय तथा मंच पर उपस्थित वरिष्ठ तकनीकी सहायक श्री ए.ए. गवई, पूर्व जिलाधिकारी श्री ई. झेड. खोब्रागडे, विधि विभाग (पीजीटीडी) की विभागाध्यक्ष सुश्री विजेता भलावे, डॉ. बाबासाहब आंबेडकर स्मृति समिति के अध्यक्ष श्री डी. डब्ल्यू. बेक तथा सचिव श्री विनित रोटके.

## मुख्यालय में मनाई गई डॉ. बाबासाहब आंबेडकर की 126 वीं जयंती

डॉ. बाबासाहब आंबेडकर स्मृति समिति द्वारा डॉ. बाबासाहब आंबेडकर की 126वीं जयंती भारतीय खान ब्यूरो मुख्यालय के सभागृह में 25 अप्रैल 2017 को हर्षोल्लास के साथ मनाई गई. इस अवसर पर पूर्व जिलाधिकारी, वर्धा श्री ई. झेड. खोब्रागडे मुख्य अतिथि के तौर पर तथा रा. तु. म. विश्वविद्यालय, नागपुर के विधि विभाग (पीजीटीडी) की विभागाध्यक्ष सुश्री विजेता भलावे विशिष्ट अतिथि के तौर पर उपस्थित थीं. कार्यक्रम की अध्यक्षता भा. खा. ब्यू. के महानियंत्रक (प्रभारी) श्री रंजन सहाय ने की. मंच पर समिति के अध्यक्ष श्री डी. डब्ल्यू. बेक तथा सचिव श्री विनित रोटके उपस्थित थे.

श्री ई. झेड. खोब्रागडे ने अपने संबोधन में डॉ. बाबासाहब आंबेडकर के जीवन कार्य पर प्रकाश डाला. उन्होंने अपने

जीवन के दिलचस्प अनुभव भी सभी से बांटे.

जबकि सुश्री विजेता भलावे ने डॉ. बाबासाहब आंबेडकर द्वारा संविधान को दिए अमूल्य योगदान के लिए उनको याद किया. अपने अध्यक्षीय संबोधन में श्री सहाय ने संविधान निर्मिति में डॉ. बाबासाहब आंबेडकर की दूरदृष्टि की सराहना की. कार्यक्रम की शुरुआत अतिथियों द्वारा डॉ. आंबेडकर के छायाचित्र पर माल्यार्पण तथा दीप प्रज्वलन से हुई. जिसके पश्चात सहायक खनन भूविज्ञानी श्री अशोक पटेल तथा समूह के भीमगीतों ने समां बांधा. कार्यक्रम का कुशल संचालन वरिष्ठ तकनीकी सहायक श्री ए. ए. गवई ने तथा आभार प्रदर्शन कनिष्ठ तकनीकी सहायक श्री अनुराग मिश्रा ने व्यक्त किया.

## खान ब्यूरो में आतंकवाद विरोधी शपथ ली

श्री रंजन सहाय की उपस्थिति में कार्यालय के सभी अधिकारियों एवं कर्मचारियों ने आतंकवादी विरोधी शपथ हिंदी तथा अंग्रेजी में ग्रहण की.

जिसमें उन्होंने देश की अहिंसा एवं सहनशीलता की परंपरा में दृढ़ विश्वास रखते हुए सभी प्रकार के आतंकवाद एवं हिंसा का डटकर सामना करने की शपथ ग्रहण की.

प्रतिवर्षानुसार इस वर्ष भी भारतीय खान ब्यूरो मुख्यालय के सभागार में आतंकवादी विरोधी दिवस के अवसर पर कार्यक्रम का आयोजन किया गया था. भारतीय खान ब्यूरो के महानियंत्रक (प्रभारी) श्री रंजन सहाय की उपस्थिति में कार्यालय के सभी अधिकारियों एवं कर्मचारियों ने आतंकवादी विरोधी शपथ हिंदी तथा अंग्रेजी में ग्रहण की.

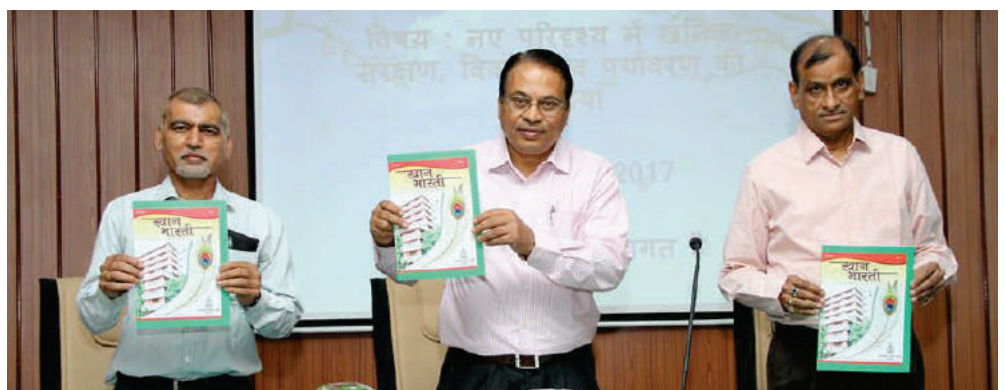
जिसमें उन्होंने देश की अहिंसा एवं सहनशीलता की परंपरा में दृढ़ विश्वास रखते हुए सभी प्रकार के आतंकवाद एवं हिंसा का डटकर सामना करने की शपथ ग्रहण की. साथ ही सभी जाति के सभी वर्गों के बीच शांति, सामाजिक सदभाव तथा सूझबूझ कायम करने की शपथ ली.

## राजभाषा तकनीकी सेमिनार आयोजित

भारतीय खान ब्यूरो में 25 मई 2017 को महानियंत्रक (प्रभारी) श्री रंजन सहाय की अध्यक्षता में अखिल भारतीय राजभाषा तकनीकी सेमिनार का आयोजन किया गया. 'नए परिदृश्य में संरक्षण, विकास एवं पर्यावरण की चुनौतियां' विषय पर आयोजित सेमिनार में मुख्य अतिथि के तौर पर पूर्व महानियंत्रक श्री सी. एस. गुंडेवार उपस्थित थे. दीप प्रज्वलन के साथ कार्यक्रम का उद्घाटन हुआ. श्री गुंडेवार ने अपने संबोधन में हिंदी में किए जा रहे तकनीकी सेमिनार की भूरि-भूरि प्रशंसा की. उन्होंने इस प्रकार के सेमिनार को राष्ट्रीय स्तर पर भी किए जाने की आवश्यकता पर बल दिया.

अध्यक्षीय भाषण में महानियंत्रक (प्रभारी) श्री रंजन सहाय ने हिंदी विभाग से जुड़े समस्त अधिकारियों एवं कर्मचारियों को उनके द्वारा किए जा रहे सराहनीय कार्य के लिए बधाई दी तथा एक साथ दो-दो पत्रिकाओं के विमोचन हेतु भारतीय खान ब्यूरो के प्रकाशन अनुभाग को धन्यवाद दिया.

इसके पूर्व मुख्य खनिज अर्थशास्त्री एवं राजभाषा अधिकारी डॉ. पी. के. जैन ने कार्यक्रम की संक्षिप्त रूपरेखा प्रस्तुत की. कार्यक्रम के दौरान 'नए परिदृश्य में संरक्षण, विकास एवं पर्यावरण की चुनौतियां' विषय पर स्मारिका एवं हिंदी गृह पत्रिका का विमोचन हुआ. राजभाषा तकनीकी सेमिनार का



'नए परिदृश्य में संरक्षण, विकास एवं पर्यावरण की चुनौतियां' विषय पर स्मारिका का विमोचन करते सेमिनार के मुख्य अतिथि भारतीय खान ब्यूरो के पूर्व महानियंत्रक श्री सी. एस. गुंडेवार, महानियंत्रक (प्रभारी) श्री रंजन सहाय तथा मुख्य खनिज अर्थशास्त्री एवं राजभाषा अधिकारी डॉ. पी. के. जैन.

कार्यक्रम दो सत्रों में आयोजित किया गया जिसमें पूर्वाह्न में 5 आलेख तकनीकी विशेषज्ञों द्वारा प्रस्तुत किए गए. प्रथम सत्र की अध्यक्षता खान नियंत्रक (मध्य) श्री एस. टियू ने की तथा खनिज अधिकारी (आसूचना) श्रीमती वर्षा घरोटे ने रिपोर्टियर की भूमिका निभाई. दूसरे सत्र में 6 आलेख प्रस्तुत किए गए. जिसकी अध्यक्षता मुख्य खनन भूविज्ञानी श्री एस. के. अधिकारी ने की तथा सहायक अनुसंधान अधिकारी श्री जे. पी. मिश्रा ने रिपोर्टियर की भूमिका निभाई.

कार्यक्रम का मंच संचालन उप-निदेशक (राजभाषा) श्री प्रमोद एस. सांगोले ने किया तथा आभार प्रदर्शन हिंदी आशुलिपिक श्री जगदीश अहरवार ने किया. कार्यक्रम को सफल बनाने हेतु हिंदी अनुभाग के वरिष्ठ हिंदी अनुवादक श्री राजीव कुलश्रेष्ठ, हिंदी अनुवादक श्री असीम कुमार, हिंदी अनुवादक श्री किशोर पारधी, हिंदी अनुवादक श्रीमती मिताली चटर्जी, हिंदी टंकक श्री प्रदीप कुमार सिन्हा एवं एम. टी. एस. श्री ए. के. नाल्हेआ ने विशेष योगदान दिया.





हिंदी कार्यशाला के दौरान व्याख्यान देते हुए मुख्य खनिज अर्थशास्त्री एवं राजभाषा अधिकारी डॉ. पी.के. जैन. (दाएँ) हिंदी कार्यशाला में उपस्थित कर्मचारी.

## दो दिवसीय हिंदी कार्यशाला सफल

भारत सरकार की राजभाषा नीति के कार्यान्वयन एवं हिन्दी के प्रचार प्रसार के उद्देश्य से भारतीय खान ब्यूरो में समय-समय पर हिन्दी कार्यशालाओं का आयोजन किया जाता है. इसी के मद्देनजर 19 एवं 20 जून 2017 को भारतीय खान ब्यूरो मुख्यालय में दो अर्द्ध दिवसीय हिंदी कार्यशालाओं का आयोजन किया गया. जिसमें 17 कर्मचारियों ने उत्साहपूर्वक भाग लिया.

उक्त कार्यशाला में विभिन्न केंद्रीय कार्यालयों के व्याख्याताओं ने विविध विषयों पर व्याख्यान दिया. जिसमें मुख्य खनिज अर्थशास्त्री एवं राजभाषा अधिकारी डॉ. पी.के. जैन ने राजभाषा नीति, महालेखाकार कार्यालय के हिंदी अधिकारी श्री सतीश दुबे ने वर्तनी बोध, भारतीय खान ब्यूरो, हिंदी विभाग के हिंदी अनुवादक श्री असीम कुमार ने पारिभाषिक शब्दावली, दक्षिण पूर्व मध्य रेलवे कार्यालय के राजभाषा अधिकारी श्री आर.के.दास ने टिप्पण आलेखन तथा वेस्टर्न कोल्ड फील्ड लि. के सहायक प्रबंधक (राजभाषा) श्री मनोज कुमार ने हिंदी-अंग्रेजी वाक्य संरचना आदि विषयों पर व्याख्यान दिए.

कार्यशाला में सभी प्रतिभागियों ने अपनी विशेष रुचि दिखाते हुए व्याख्याताओं से अपनी समस्याओं का निवारण किया साथ ही ऐसी कार्यशालाओं का समय-समय पर आयोजन हो ऐसी इच्छा व्यक्त की. कार्यशाला में विश्वविद्यालय से व्याख्याता आमंत्रित किए जाए, कार्यशाला में अधिक से अधिक विषयों को शामिल किया जाए. पाठ्यक्रम मुद्रित रूप में वितरित किए जाने तथा पाठ्यक्रम को अभ्यास केंद्रित किए जाने का प्रतिभागियों ने सुझाव दिया.

### उदयपुर

भारतीय खान ब्यूरो के उदयपुर क्षेत्रीय कार्यालय में 28 एवं 29 जून को दो दिवसीय हिंदी कार्यशाला का आयोजन किया गया. सरकारी कामकाज में हिंदी को बढ़ावा देने के उद्देश्य से आयोजित इस कार्यशाला का उद्घाटन कार्यालय सभागार में खान नियंत्रक (उ) श्री टी. के.रथ तथा कार्यक्रम के मुख्य अतिथि सेवानिवृत्त राजभाषा अधिकारी श्री विजयसिंह चौहान के हस्ते दीप

कार्यशाला में सभी प्रतिभागियों ने अपनी विशेष रुचि दिखाते हुए व्याख्याताओं से अपनी समस्याओं का निवारण किया साथ ही ऐसी कार्यशालाओं का समय-समय पर आयोजन हो ऐसी इच्छा व्यक्त की. कार्यशाला में विश्वविद्यालय से व्याख्याता आमंत्रित किए जाए, कार्यशाला में अधिक से अधिक विषयों को शामिल किया जाए. पाठ्यक्रम मुद्रित रूप में वितरित किए जाने तथा पाठ्यक्रम को अभ्यास केंद्रित किए जाने का प्रतिभागियों ने सुझाव दिया.

प्रज्ज्वलन से हुआ. अध्यक्षीय संबोधन में श्री रथ ने सभी को हिंदी में अधिक से अधिक कार्य करने हेतु प्रोत्साहित किया. इस अवसर पर क्षेत्रीय खनन भूवैज्ञानिक डॉ.एम.के. सोमानी ने सहभागियों को पूर्ण मनोयोग के साथ हिंदी कार्यशाला में भाग लेने की अपील की. हिंदी संपर्क अधिकारी ने हिंदी के प्रयोग के लिए वर्ष 2017-18 के वार्षिक कार्यक्रम का ब्यौरा प्रस्तुत करते हुए हिंदी कार्यशाला में उत्साहपूर्वक भाग लेने का आग्रह किया. कार्यशाला के उद्घाटन समारोह का सफलतापूर्वक संचालन कनिष्ठ सांख्यिकीय अधिकारी श्री अक्षत यागनिक ने किया.

कार्यशाला के प्रथम सत्र में श्री चौहान ने हिंदी लेखन में होने वाली सामान्य अशुद्धियों से बचने के संबंध में महत्वपूर्ण व्याख्यान दिया तथा हिंदी प्रश्नावली के जरिए प्रायः होने वाली त्रुटियों के बारे में अवगत कराया. 28 जून के दूसरे सत्र में डॉ.सोमानी ने खनन क्षेत्र के बदलते स्वरूप के बारे में विस्तृत जानकारी दी.

29 जून को बी.एस.एन.एल से आए हुए नराकास, उदयपुर के सदस्य सचिव श्री गिरिराज पालीवाल ने यूनिकोड द्वारा हिंदी में किस तरह आसानी से काम किया जा सकता है इस बारे में प्रशिक्षणार्थियों की सभी जिज्ञासाओं का सामाधान पावर पाइंट प्रेजेंटेशन से किया. कार्यशाला के चौथे सत्र में आपसी विचार विमर्श द्वारा हिंदी के प्रगामी प्रयोग, हिंदी कार्यशाला की उपयोगिता एवं आवश्यकता पर हिंदी संपर्क अधिकारी ने प्रकाश डाला.

## गोवा में एक दिवसीय हिंदी कार्यशाला का आयोजन

राजभाषा नीति के क्रियान्वयन में 29 जून 2017 को एक दिवसीय राजभाषा हिंदी कार्यशाला का आयोजन गोवा क्षेत्रीय कार्यालय में किया गया. कार्यशाला में पांच पाठ लिए गए. जिसमें कुल तीन अधिकारियों एवं सात कर्मचारियों ने भाग लिया.

क्षेत्रीय खान नियंत्रक डॉ. वाई.जी.काले ने दीप प्रज्ज्वलित कर कार्यक्रम का विधिवत उद्घाटन किया. हिंदी संपर्क अधिकारी एवं उप खान नियंत्रक श्री प्रेम प्रकाश ने स्वागत भाषण प्रस्तुत किया. जिसमें उन्होंने कार्यालय की हिंदी गतिविधियों का विशेष तौर पर उल्लेख किया. अपने भाषण में श्री प्रकाश ने कार्यक्रम में सम्मिलित पाठों की जानकारी दी. डॉ. काले ने अपने अध्यक्षीय संबोधन में राजभाषा के रूप में हिंदी के महत्व और योगदान तथा हिंदी कार्यान्वयन के क्षेत्र में कार्यालय की उत्कृष्ट उपलब्धियों पर प्रकाश डाला. हर तीन माह में कार्यालय में आयोजित की जा रही हिंदी कार्यशाला की उन्होंने प्रशंसा की. डॉ. काले ने भारतीय खान ब्यूरो के महानियंत्रक (प्रभारी) श्री रंजन सहाय का विशेष आभार माना जिनके मार्गदर्शन में इन कार्यशालाओं का आयोजन किया जाता है.

कार्यशाला में राजभाषा नीति, टिप्पण/आलेखन, बायोमेट्रिक की पूर्ण प्रक्रिया, खनिज संरक्षण एवं विकास, खानों का तारक मूल्यांकन आदि उपयोगी विषयों की जानकारी प्रतिभागियों को दी गई.

कार्यशाला के समापन पर हिंदी अनुवादक श्री आर. सी.महतो ने सभी का उनके योगदान के लिए आभार व्यक्त किया.



गोवा क्षेत्रीय कार्यालय में दिनांक 29 जून 2017 को संपन्न हुए राजभाषा हिंदी कार्यशाला का दीप प्रज्ज्वलित कर उद्घाटन करते हुये क्षेत्रीय खान नियंत्रक डॉ. वाई. जी. काले तथा अन्य अधिकारी.

# नराकास ने किया हिंदी कार्यशाला का आयोजन

नगर राजभाषा कार्यान्वयन समिति, मडगांव द्वारा भारतीय खान ब्यूरो के गोवा क्षेत्रीय कार्यालय में 28 जून 2017 को एक दिवसीय राजभाषा हिंदी कार्यशाला का आयोजन किया गया। गौरतलब है कि नराकास, मडगांव के अध्यक्ष पद का कार्यभार भारतीय खान ब्यूरो, गोवा के क्षेत्रीय खान नियंत्रक डॉ. वाई. जी. काले संभाल रहे हैं। कार्यशाला में कुल पाँच पाठ आयोजित किए गए।

मुख्य अतिथि ओएनजीसी, गोवा के कार्यकारी निदेशक श्री सुबोध कुमार तथा अन्य मंचस्थ पदाधिकारियों ने दीप को प्रदीप्त कर हिंदी कार्यशाला का विधिवत उद्घाटन किया। उद्घाटन समारोह को संबोधित करते हुए नराकास, मडगांव के अध्यक्ष एवं क्षेत्रीय खान नियंत्रक डॉ. वाई. जी. काले ने नराकास के अधिकार और कर्तव्यों का उल्लेख किया। उन्होंने कहा कि नराकास एक ऐसा मंच है जहां सदस्य कार्यालय आपसी सहयोग एवं समन्वय से हिंदी को एक नए मुकाम पर पहुंचाना चाहते हैं। उन्होंने उपस्थित सभी प्रतिभागियों से अपील की कि वे कार्यशाला में संकायों द्वारा दिए जा रहे हिंदी पाठ को ध्यानपूर्वक सुने तथा इसे दैनंदिन शासकीय कार्यों में उपयोग में लाएं। मुख्य अतिथि श्री सुबोध कुमार ने हिंदी कार्यशाला की सराहना की तथा उसे सफल बनाने आपसी सहयोग की बात कही। उन्होंने कहा कि हिंदी में हम सभी आसानी से बातचीत कर लेते हैं, अतएव हम जैसा बोलते हैं वैसा ही लिखकर अपने शासकीय कार्य आसानी से कर सकते हैं। अतः शिक्षक और हिचकिचाहट को छोड़कर हिंदी में लिखना शुरू करें और अपने दायित्व को पूरा करें।

उप खान नियंत्रक/हिंदी संपर्क अधिकारी तथा सदस्य सचिव श्री प्रेम प्रकाश ने स्वागत भाषण प्रस्तुत किया, उन्होंने मुख्य अतिथि तथा अध्यक्ष की उपस्थिति को उत्साहवर्द्धक बताते हुए उनका और सदस्य कार्यालयों से पधारें सभी प्रतिभागियों का हार्दिक अभिनंदन एवं स्वागत किया।

कार्यशाला में डिजिटल इंडिया में भारतीय भाषाओं की भूमिका तथा राजभाषा कार्यान्वयन की कठिनाइयाँ और समाधान विषयों पर यूको बैंक, आंचलिक कार्यालय, पूणे के वरिष्ठ प्रबन्धक (राजभाषा) पर डॉ. सुनील कुमार ने मार्गदर्शन किया। श्रीमती पार्वतीबाई चौगुले महाविद्यालय, मडगांव गोवा के हिंदी प्राध्यापक डॉ. प्रदीप आर. जताल ने हिंदी भाषा, राजभाषा एवं हिंदी साहित्य विषय पर तथा राजभाषा नीति, संवैधानिक प्रावधान एवं हिंदी वर्तनी व हिंदी वाक्य शुद्धि विषयों पर श्रीमती पार्वतीबाई चौगुले महाविद्यालय, मडगांव गोवा के प्राध्यापक एवं हिंदी विभागाध्यक्ष डॉ. ओमप्रकाश त्रिपाठी ने प्रशिक्षणार्थियों का मार्गदर्शन किया।

## भारतीय खान ब्यूरो दो पुरस्कारों से सम्मानित



पुरस्कार प्राप्त करते हुए मुख्य खनिज अर्थशास्त्री एवं राजभाषा अधिकारी डॉ. पी.के. जैन तथा उप निदेशक (राजभाषा) श्री प्रमोद एस. सांगोले।



हिंदी कार्यशाला के उद्घाटन समारोह में न. रा. का. स., मडगांव के अध्यक्ष के रूप में उपस्थितों को संबोधित करते हुए गोवा के क्षेत्रीय खान नियंत्रक डॉ. वाई. जी. काले।

उक्त कार्यशाला में क्षेत्रीय कार्यशाला के 12 तथा अन्य कार्यालयों के 22 अधिकारियों/कर्मचारियों ने भाग लिया।

समापन समारोह के अध्यक्ष डॉ. वाई. जी. काले ने हिंदी भाषा की वैज्ञानिकता की ओर श्रोताओं का ध्यान आकृष्ट करते हुए राष्ट्रीय मस्तिष्क अनुसंधान केंद्र के डॉ. नंदनी सिंह के नेतृत्व में हुए अनुसंधान का हवाला दिया। उन्होंने बताया कि हिंदी के सस्वर पाठ करते समय जहां मस्तिष्क के दाहिने व बाएँ दोनों भाग सक्रिय होते हैं वहीं अंग्रेजी पठन के समय केवल एक ही बायाँ भाग सक्रिय होता है। अतः हिंदी हमारे मस्तिष्क को समग्र रूप से सक्रिय कर हमें ज्यादा सक्षम बनाने की क्षमता रखती है, जिसे हमें ध्यान में रखना चाहिए।

इस हिंदी कार्यशाला के समापन समारोह के मुख्य अतिथि श्रीमती पार्वतीबाई चौगुले महाविद्यालय, मडगांव गोवा के प्राध्यापक एवं हिंदी विभागाध्यक्ष डॉ. ओमप्रकाश त्रिपाठी ने उपस्थितों को संबोधित करते हुए तुर्की जैसे देशों का उदाहरण दिया, इन देशों में सख्ती से राजभाषा को लागू किया गया है। हमारे देश में विभिन्न भाषाएं बोली जाती हैं यहां सख्ती से हिंदी भाषा के प्रयोग पर बल नहीं दिया जा सकता लेकिन अब समय आ गया है कि हम स्वयं की इच्छा से इस भाषा का प्रयोग करें अंत में डॉ. त्रिपाठी ने स्वयं को नराकास स्तर के हिंदी कार्यशाला में अपनी बात रखने के अवसर देने के लिए नराकास, मडगांव के अध्यक्ष डॉ. वाई. जी. काले के प्रति कृतज्ञता व्यक्त की।

श्री प्रेम प्रकाश ने समापन कार्यक्रम में स्वागत भाषण दिया तथा धन्यवाद ज्ञापन हिंदी अनुवादक श्री आर.सी. महतो ने किया। कार्यशाला के सफल आयोजन हेतु हिंदी अनुवादक श्री आर.सी. महतो, आशुलिपिक श्री भरत शर्मा तथा श्री. ई. टि. परब ने प्रयास किया।

## PERSONNEL NEWS

### Appointments

**Shri Manoj Kumar Meena** as Assistant Mineral Economist (I) w.e.f. 17.4.2017

### Promotions

**Shri S.G. Bansod** as Assistant Mining Engineer w.e.f. 1.6.2017

**Shri B.K. Katole** as Assistant Mining Engineer w.e.f. 13.4.2017

### Transfers

**Shri G.C. Sethi**, Deputy Controller of Mines, from RO Ranchi to RO Bhubaneswar

**Shri L.H. Chhangte**, Deputy Controller of Mines, from RO Bhubaneswar to ZO Kolkata

**Shri B.P. Kerketta**, Sr. Assistant Controller of Mines, from RO Kolkata to RO Ranchi

**Shri V. V. R Murthy**, Assistant Ore Dressing Officer, from RMPL Ajmer to MPD, Nagpur

**Shri Pukhraj Nenival**, Deputy Controller of Mines, from SZ Bengaluru to TC Div. Nagpur

**Shri Arun Kumar**, Deputy Controller of Mines, from CCOM office Nagpur to RO Bengaluru

**Dr. V.A. J. Aruna**, SO (Ore Dressing), from MPD Nagpur to RMPL Bengaluru.

**Shri K.K. Tardia**, Deputy Controller of Mines, from RO Ajmer to ZO Udaipur

**Shri Pushpendra Gaur**, Deputy Controller of Mines from ZO Udaipur to IBM/NCR New Delhi

**Shri Suresh Prasad**, Deputy Controller of Mines from CZ Nagpur to RO Goa

**Dr. S.K. Jha**, Regional Mining Geologist from IBM/NCR New Delhi to ZO Kolkata

**Shri Gumna Ram**, Sr. Assistant Controller of Mines, from RO Goa to RO Gandhinagar

**Shri D.R. Gurjar**, Assistant Controller of Mines from SRO Dehradun to RO Ajmer

**Shri Omkesha Murthy**, Sr. Mining Geologist, from CCOM office Nagpur to SZ Bengaluru

**Shri D. Dash**, Sr. Mining Geologist, from RO Hyderabad to CCOM office Nagpur

**Shri S.K. Muduli**, JMG, from GM & MM Cell Nagpur to RO Hyderabad

**Shri P.N. Sharma**, Regional Controller of Mines from TS Section Nagpur to MTS Cell, Nagpur

**Shri Abhay Agrawal**, Regional Controller of Mines from CCOM Office Nagpur to TS Section Nagpur

**Shri Sudhakar T.I.**, Sr. Mining Geologist from TMP Division Nagpur to GM & MM Cell Nagpur

**Shri S.P. Ramteke**, AAO, from MTS Cell Nagpur to Accounts Section, Nagpur

**Shri D.M. Patil**, Assistant Mining Geologist, TMP Division Nagpur to Training Cell Nagpur

**Shri M.M. Tol**, Assistant Mining Geologist, from CZ Nagpur to GM & MM Cell, Nagpur

**Shri A.R. Dalai**, Assistant Mining Engineer, from CZ Nagpur to TS Section, Nagpur

**Shri S.S. Roy**, Assistant Mining Geologist, from TC Division Nagpur to CZ Nagpur

**Shri N. Sheshadri**, AAO, from RMPL Bengaluru to RO Goa

**Shri N. Domodar**, AAO, from RO Bengaluru to RMPL, Bengaluru

### Retirements

**Shri N.U. Kadu** as Editor w.e.f. 30.4.2017

**Shri S.K. Deshpande** as DME (S) w.e.f. 31.5.2017

**Shri Finny Abraham** as AMER w.e.f. 31.5.2017

**Shri J.P. Mishra** as ARO w.e.f. 31.5.2017

**Shri T.R. Purankar** as AMER w.e.f. 30.6.2017