



ANNUAL REPORT

2023-2024



CSIR-CENTRAL INSTITUTE OF MINING AND FUEL RESEARCH
BARWA ROAD, DHANBAD, JHARKHAND-826015, INDIA

Mission

To Develop And Deliver Sustainable Cutting Edge Technologies For Social Upliftment And Industrial Advancement.

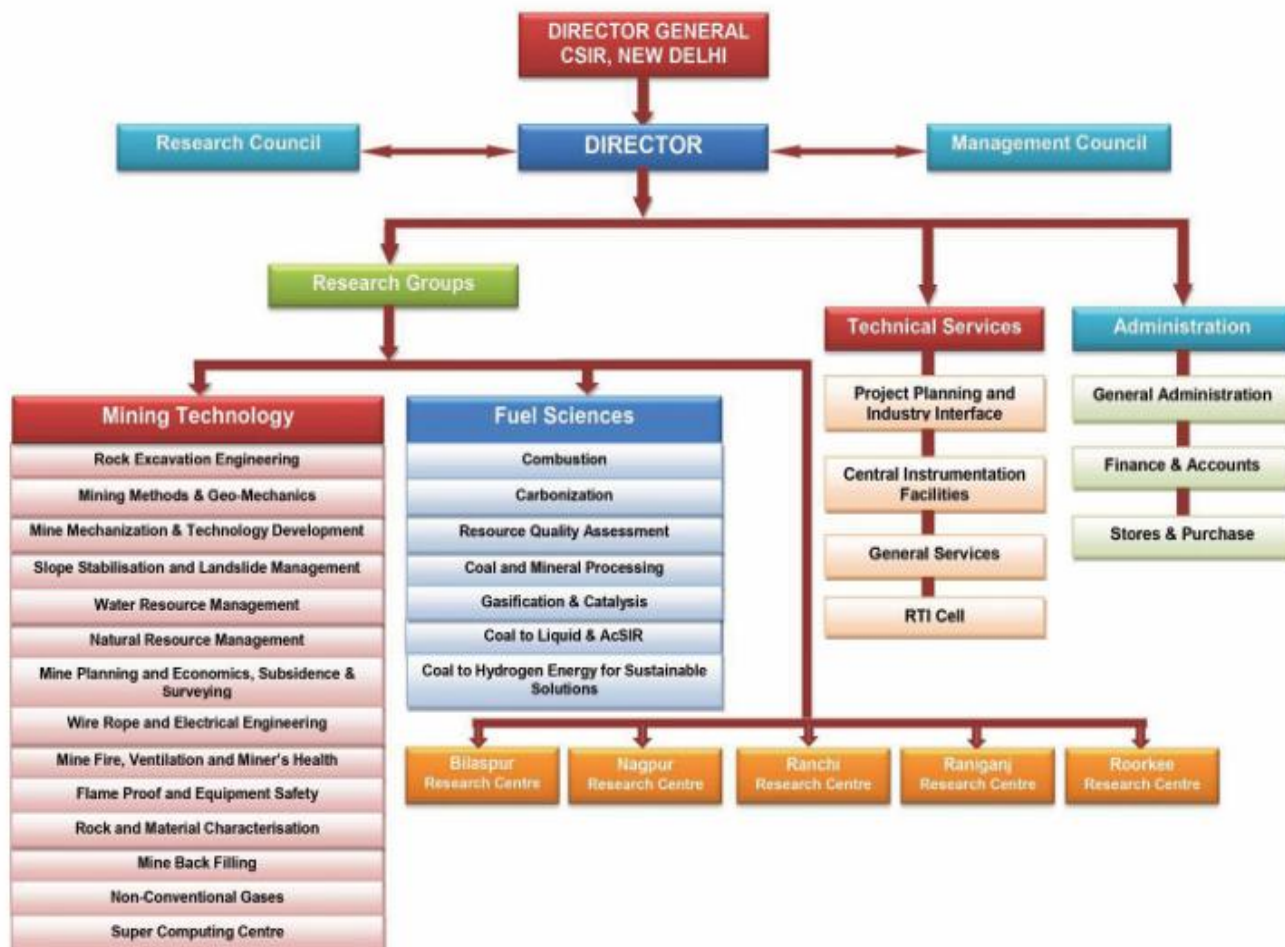
Vision

To Be An Internationally Acclaimed Mining And Fuel Research Organisation

Quality Policy

CSIR-Central Mining and Fuel Research Institute is committed to provide globally competitive, productive, environmentally sustainable, safe and efficient technologies for mining and fuel industries with emphasis on optimal exploitation and utilization of mineral resources through continual improvement in quality management system, customer satisfaction, scientific sanctity and improved standards to foster sustainable growth is the prime objective of the institute.

ORGANISATIONAL STRUCTURE



Research Council

Chairman



Prof. D. D. Misra

Former Director, CSIR-CMRI, Dhanbad
Former Chairman, BoG, IIT(ISM) Dhanbad

Member



Prof. T.N. Singh

Director
Indian Institute of Technology, Patna



Dr. P.S. Mishra

Chairman-cum-Managing Director
SECL, Bilaspur



Mr. Ramesh Babu V.

Director (Operations)
NTPC Limited, New Delhi



Dr. B. Veera Reddy

Director (Technical)
Coal India Limited, Kolkata



Mr. Prabhat Kumar

Director General of Mines Safety
(DGMS) Dhanbad



Dr. Naresh Chandra Murmu

Director
CSIR-Central Mechanical Engineering Research
Institute, Durgapur



Prof. Arvind Kumar Mishra

Director
CSIR-Central Institute of Mining & Fuel
Research, Dhanbad



Dr. Rama Swami Bansal

Chief Scientist & Head
International Science & Technology
Directorate Affairs, CSIR, New Delhi

Member Secretary



Dr. Ranjan Kumar

Senior Principal Scientist
CSIR - Central Institute of Mining And Fuel
Research, Dhanbad

Management Council

Chairman



Prof. Arvind Kumar Mishra
Director
CSIR - CIMFR, Dhanbad

Member



Dr. Naresh Chandra Murmu
Director
CSIR-Central Mechanical Engineering
Research Institute, Durgapur



Dr. Jai Krishna Pandey
Chief Scientist
CSIR - CIMFR, Dhanbad



Dr. C. Sawmliana
Chief Scientist
CSIR - CIMFR, Dhanbad



Dr. Manoj Kumar Saini
Senior Principal Scientist
CSIR - CIMFR, Dhanbad



Mrs. Seema A. Topno
Senior Principal Scientist
CSIR - CIMFR, Dhanbad



Dr. Arti Sahu
Scientist
CSIR - CIMFR, Dhanbad



Mr. Sudipto Chatterjee
Controller of Finance And Account
CSIR - CIMFR, Dhanbad



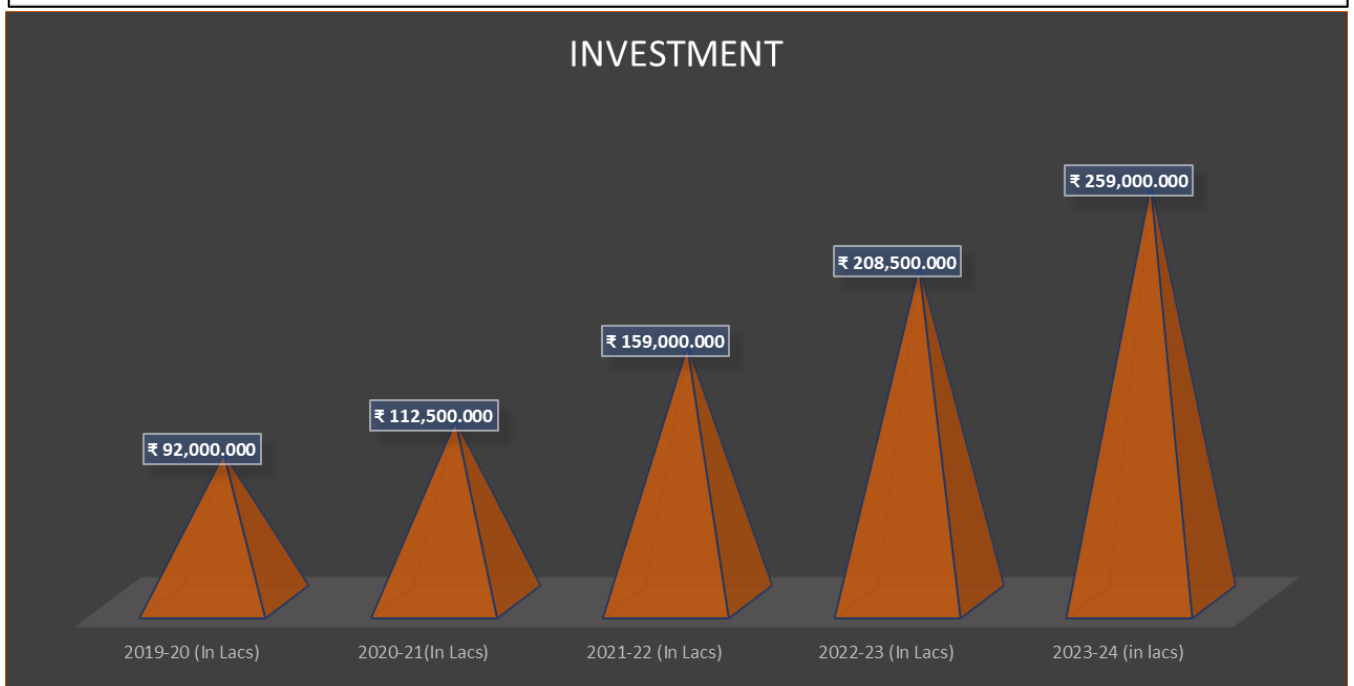
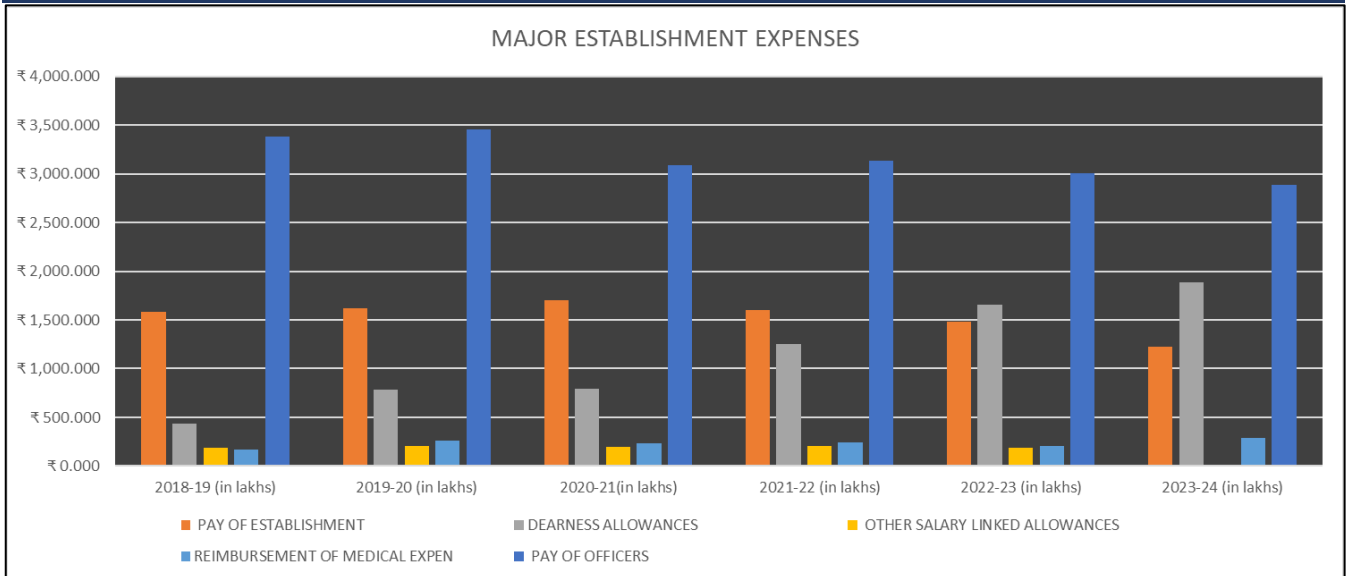
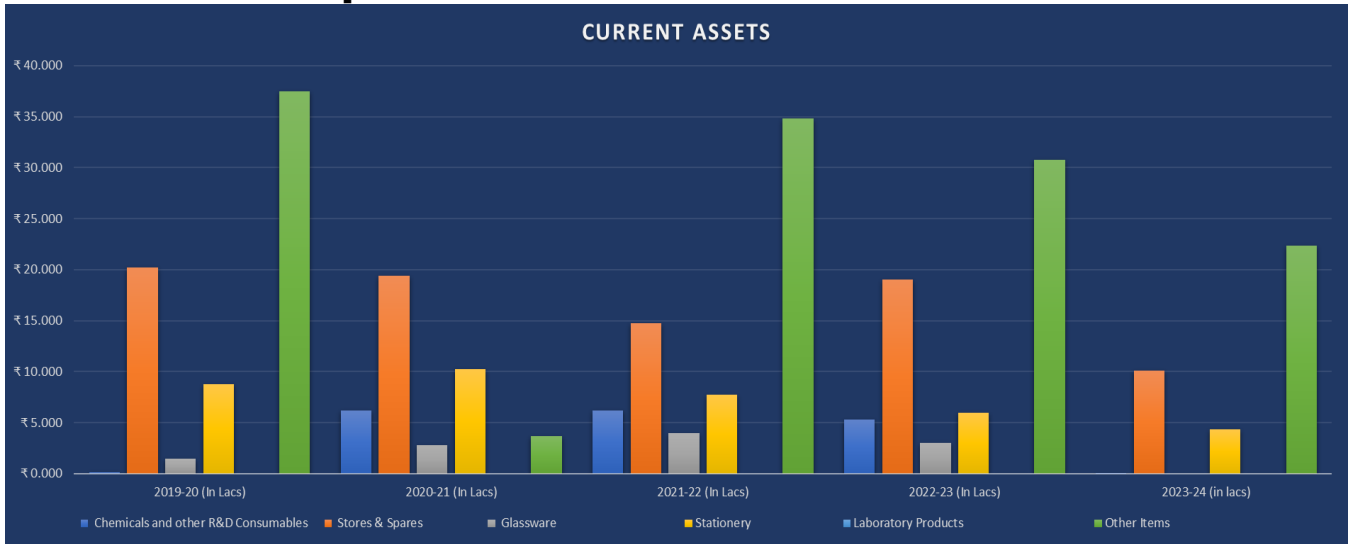
Mr. Kalyan Das
Senior Technical Officer (3)
CSIR - CIMFR, Dhanbad

Ex-officio Member Secretary



Mr. Alok Sharma
Controller of Administration
CSIR - CIMFR, Dhanbad

Status of Expenditure and Investment of the Institute



In the FY 2023-24, the institute earned a total of Rs 734.95 crore as ECF

Grants-in-Aid (GAP) Projects

1. Understanding the Mechanism of Tsunamigenic Mega-Earthquake of the Sumatra Subduction Zone – A Microstructural Investigation

Project Leader : Dr. Sivaji Lahiri

Earthquakes pose a significant challenge to prediction, despite their crucial role in risk mitigation in modern society. Extensive research over the past three decades has established that geological factors play a pivotal role in earthquake and tsunami development. The catastrophic 2004 Sumatra earthquake (Mw 9.1), resulting in a devastating tsunami and a loss of approximately 250,000 lives, underscored the urgency of understanding the geological controls on such events. In response, a group of researchers initiated the IODP (International Deep-Sea Drilling) Expedition-362. This expedition aimed to drill and collect samples from the Bengal Nicobar Fan sequence and sediments down to the Indian Ocean basaltic crust. The goal was to characterize the materials entering the subduction zone, contributing to an end-member earthquake. Historically, limited studies have delved into the mechanisms behind massive earthquakes and tsunamis at the Sumatra subduction zone. The focus of this study was to pursue microstructural investigation of Sumatra's subducting sedimentary litho units to enhance our knowledge of mega-earthquake mechanisms and contribute to mitigating future earthquake disasters for society.

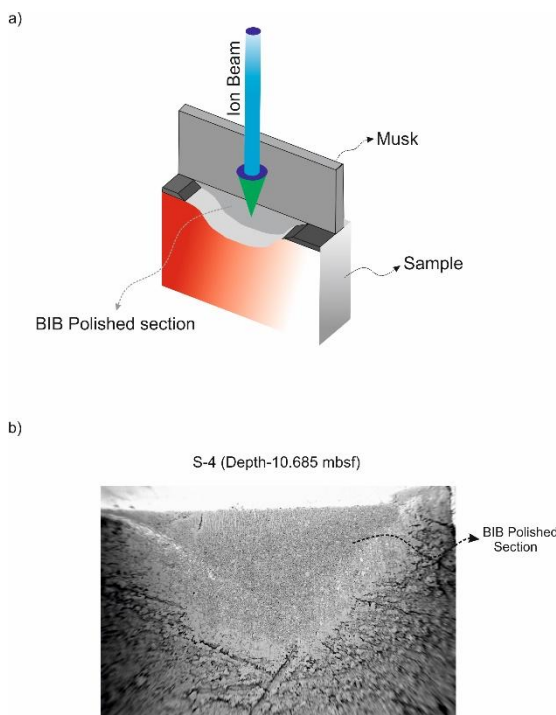


Fig.1: (a) and (b) representing Sample preparation using BIB-SEM technique

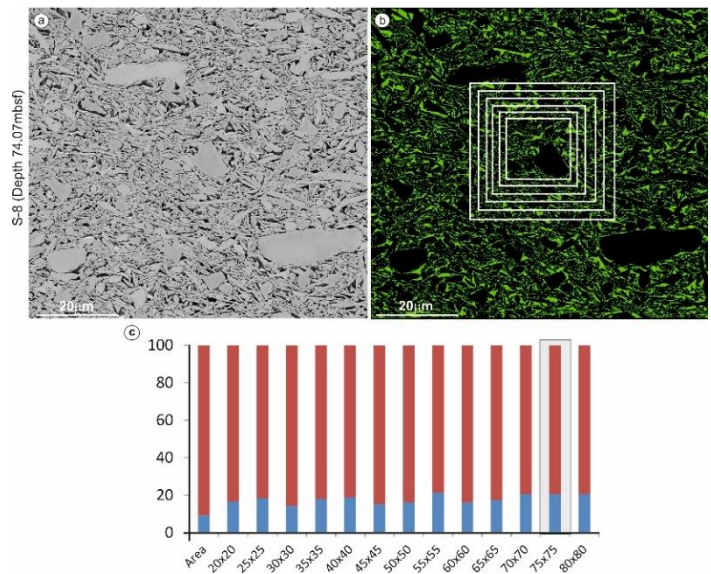


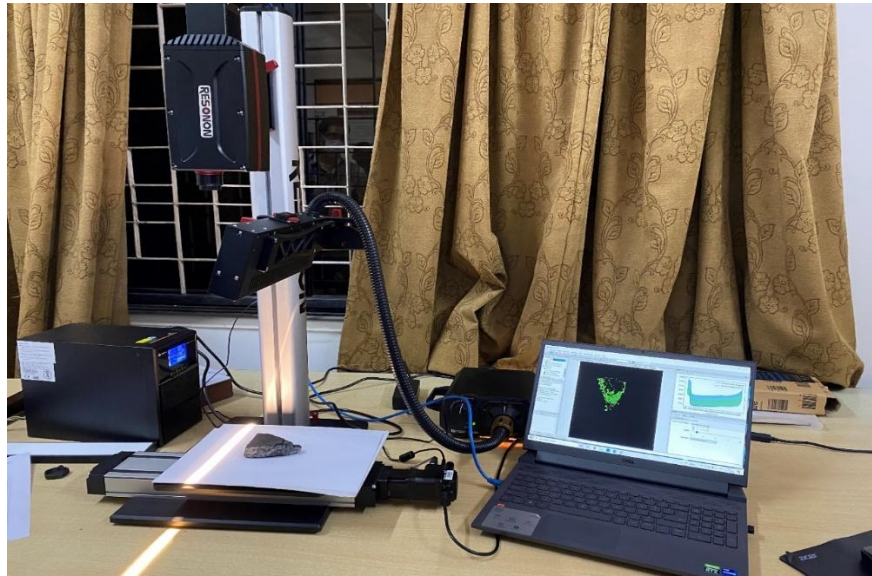
Fig.2: (a) Microstructure of the sample S-8 from 74.07 mbsf depth, (b) segmented pores from microstructure, (c) REA analysis

2. Indigenous Development of NIR Spectroscope for Instant Prediction of Coal Quality Parameters

Project Leader : Dr . D. K. Sakhre and Project Coordinator: Dr. L. K. Sahoo

CSIR-CIMFR Nagpur Research Centre has taken up this project jointly with the Department of Computer Science & Engineering, Shri Ramdeobaba College of Engineering & Management, Nagpur. The project has been funded by Ministry of Coal, Government of India with an objective to develop a NIR

Spectroscope for predicting coal quality parameters like ash%, moisture%, total sulphur% and GCV (Gross Calorific Value).



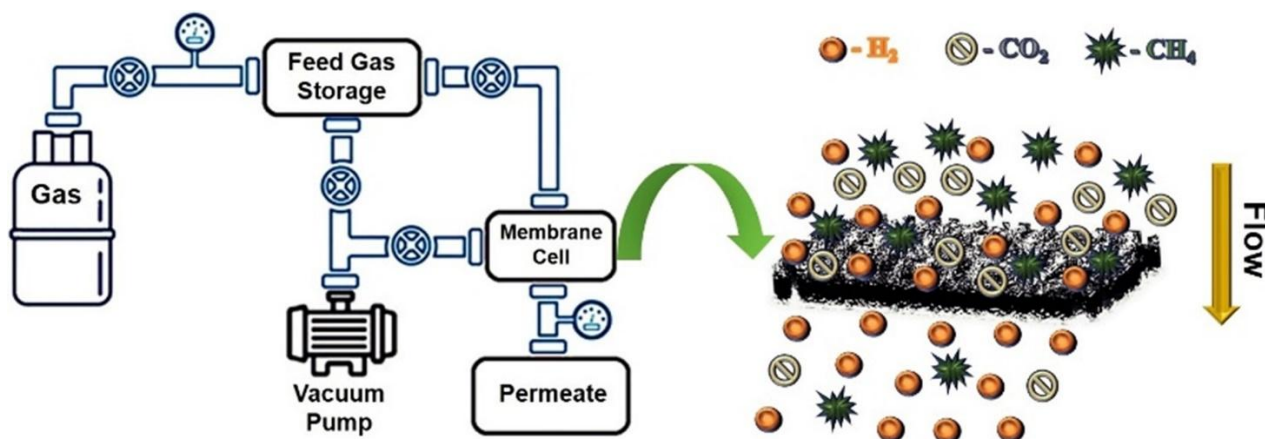
Scanning of Coal Sample by NIR Imaging Camera

Financial transaction between coal and power companies takes place on the basis of GCV at equilibrated moisture. These quality/grade parameters are being determined in a Chemical laboratory which is a time taking process and the result is obtained after 4-5 days of experimentation. So, the present project is addressing this issue and the NIR Spectroscope will be able to give the result instantly on the concerned officials' desktop/laptop computers & on a smart mobile phone so that the concerned official will know which quality or grade coal is being loaded to a rail rake or truck. The power plant will know instantly which quality coal is being fed to the boiler so that the plant operating staff can control it efficiently.

3. Hydrogen Separation from Coal-Derived Syngas: A Near Term Opportunity for Commercialization Using New Membrane Compositions

Project Leader : Dr. M. S. Santosh

Separation of hydrogen from coal-based syngas is considered a promising near-term opportunity over other techniques because of the hydrogen selectivity and flux. They are commercially non-existent and their industrial viability is still a distant dream due to material/membrane-specific operational temperatures, susceptibility to poisoning, limited durability and expensive nature of the materials. By addressing these limitations, the proposed project intends to develop and scale up new compositions of membranes that are industrially viable, highly durable and selective to hydrogen in commercial applications.



There are hardly any industrially deployable commercial hydrogen separation membranes available in the market. The ones that were reported earlier and appeared closer to commercialization were fabricated using either dense polymers, dense metallic, dense ceramic, microporous ceramic or porous carbon-based membranes, but unfortunately, none of them was able to succeed in the market. However, there are no reports of any combination of bimetallic-biopolymeric composite membranes employed for hydrogen separation applications. Being the first of its kind usage of such material for hydrogen separation, the new composite membranes present themselves as promising candidates for gas separation applications with a great potential for scale-up and commercialization.

4. Mapping of Inaccessible Old Abandoned Underground Mine Workings Over Shallow Depth by Geophysical Approach

Project Leader : Dr. Abhay Kumar Bharti

In order to evaluate the safety of surface structures and deployment of civil constructions, the safety of underground workings has to be evaluated. Hence, considering this, the major objectives of this project are as follows:

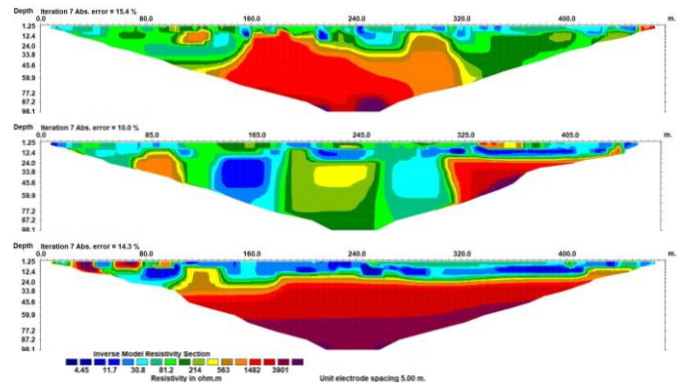
- Delineation and mapping of underground mine workings
- Detection of water-logged areas and location and estimated thickness of overlying surface
- Detection of access to mines, especially for old mine workings

The long-term aim of this project is to minimize the potential risk in mining areas and to reduce water accumulation in coal mine by applying extensive geophysical prospecting methods such as Electrical Resistivity Tomography, Ground Penetrating Radar, Seismic Refraction Tomography and Multichannel Analysis of Surface Waves, which will pose highly potential safety hazards in coal mining and destroy nearby houses, railways, roads, bridges etc.

The methodology includes preparing a forward/synthetic model of each geophysical technique (such as ERT, GPR, SRT and MASW) to better understand the actual field condition. Further aim of this research is to confirm the effectiveness and efficiency of combined geophysical techniques on mining areas through borehole lithology data and old underground work plans, so as to confirm the mining hazardous area such as cavities, galleries and goafs etc. obtained from comprehensive geophysical prospecting and correlate the results with good consistency.



Detection of old and abandoned mine workings status over Sijua, Colliery, Jharia, Tata using Electrical Resistivity Tomography



2D electrical resistivity model

5. Assessment of the efficacy of a biological and biotechnological approach for fly ash modification and subsequent phyto-stabilization using two different medicinally important plants.

Project Leader : Dr. Bhanu Pandey

This project has been funded under SERB Research Grant, Department of Science and Technology, Government of India, New Delhi. The aim of this study is to identify the most suitable plant, which can work best in fly ash soil, and to develop eco-friendly methods to reduce environmental pollution and protect public health.

In 2018-19, India produced 228 million tons of fly ash, of which 49 million tons remained unutilized. Sustainable management of this fly ash is important to minimize environmental and health problems as it contains toxic elements. The use of plants that can grow even in difficult conditions, such as lemongrass and *sadabahar*, can be a good solution to improve the condition of soil contaminated by fly ash. The aim of the research is to see how well lemongrass and *sadabahar* can clean the contamination caused by fly ash, as well as to study how it affects the growth and medicinal properties of these plants. For this, a mixture of industrial waste treated sludge and special microorganisms will be used to improve plant growth in nutrient-deficient fly ash soil.



6. Energy Sector Inventory for National Communications of Govt. of India to UNFCCC

Project Leaders : Dr. Santi Gopal Sahu, Dr. Ramakrishna Vallu and Dr. Arnold Luwang Usham

India communicates its National GHG inventory time to time to UNFCCC to fulfil its commitment to United Nations. India submitted its first national communications in the year 2004 and CSIR-CIMFR had been involved in estimation of GHG emission from energy and Manufacturing sector since the beginning of this century. India has already communicated three National communications (NCs) and three Biennial Update Reports (BURs). Third National Communication (TNC) was submitted in December' 2023 and Third Biennial Update Report (BUR-3) was submitted in December'2021. In the tenure of fourth national Communication (4NC) of GOI, CSIR-CIMFR has been awarded with three projects on estimation of GHG emission from Energy Sector: First project (GAP-7051) deals with estimations for fourth Biennial Update Report (BUR-4), second project (GAP-7052) covers the estimations for First-BTR (BTR-1), and third one (GAP-7050) is for India's Fourth National communication (4NC). Under the Enhanced Transparency Framework, Parties to the Paris Agreement including India are required to submit biennial transparency reports (BTR) every two years, first submission will be as BTR-1. According to the modalities, procedures and guidelines (MPGs) for the Enhanced Transparency Framework (annex to decision 18/CMA.1), BTR include information on national inventory reports (NIR), progress towards NDCs, policies and measures, climate change impacts and adaptation, levels of financial, technology development and transfer and capacity-building support, capacity-building needs and areas of improvement. The work-components of these projects pertaining to GHG emissions from Energy and Manufacturing industries are as follows:

- Time to time Refinement/ development of emission coefficients NCV and CEF for all the coal categories and for coals allocated to the sectors.
- Refinement of coal oxidation factor for electricity sector
- Preparation of inventory for various years and its refinement/revision time to time
- Time series analysis
- Estimation of CO₂ emission factors for some power plants of various categories depending on capacity, Technology, vintage factor, etc.
- Quality control and quality assurance, etc.

Sponsored Projects (SSP)

<i>Sl. No.</i>	<i>Title</i>	<i>Sponsors Name and Address</i>	<i>Project Leader</i>
1	Feasibility study of Nigahi mine for dumping overburden mixed with pond ash in the running mine dumps	Northern Coalfields Limited Singrauli Madhya Pradesh 486889	Dr. Vineeth Balakrishnan
2	Feasibility study of utilizing fly ash along with overburden as a filling material in the running Nigahi Mine of NCL, CIL	Northern Coalfields Limited Singrauli, Madhya Pradesh 486889	Prashant, Dr. Sujit Kr. Mondal
3	Scientific study and advice for carrying out controlled blasting for hard rock excavation works at Bharamtoli Hill, Ranchi for construction of 28.80 ML GLSR under Ranchi Water Supply Scheme Phase -II, Package - A	M/s NCC Limited 376, Budhan Ram, Chiraundi, Science City Road PO - Adalhatu, Beside Shagun Banquet Hall Ranchi - 834008 Jharkhand	Rakesh Kr. Singh (BI), Narayan Kr. Bhagat
4	Instrumentation scheme and monitoring of backfilling of stope blocks of Mahagiri Mines (Chromite), M/s IMFA Ltd.	Indian Metals and Ferro Alloys Limited At/Po : Kaliapani Dist : Jajpur Odisha - 755048	Prashant, Dr. S K Behera
5	Rock Mass Rating (RMR Study) at Gondbahera Ujheni Easr, MPNRPL Mine, Madhya Pradesh	MP Natural Resources Pvt. Ltd Bungalow No C-10, 1st Floor, BDA Colony Near Vyapam Square Shivaji Nagar, Bhopal - 462016, Madhya Pradesh	Dr. Avinash Paul, Dr. Arun Kumar Singh
6	Scientific investigation on in-situ gas content measurement and degree of gassiness at Bijahan Coal block of Odisha	Mahanadi Mine & Minerals Pvt. Ltd. HIG - 20, BDA Colony Jayadev Vihar, Bhubhaneshwar Khorda - 751013 Odisha	Dr. Vinod Atmaram Mendhe
7	Impact Study and analysis of wet ash slurry disposal through pipeline in Gare IV/1 Mine Void of Jindal Power Limited	Jindal Power Limited P.O Tamnar, Dist - Raigarh - 496107 Chhattisgarh	Prashant, Dr. Sujit Kr. Mondal
8	Scientific study on impact of fly ash dumping on flora, fauna aquatic lives & air at Gare Palma Mines JPL Tamnar, Raigarh, CG	Jindal Power Limited Village - Dongamouha District - Raigarh (Chattisgarh) - 496108	Dr. Sudarshan Singh Rathore, Sameer Shakhar

9	Scientific study for designing deep hole cast blasting at Parsa east & Kanta Basan (PEKB) open cast mine in view of vibration and fly – rock within the prescribed safe limits.	M/s Adani Enterprises limited Parsa Kent Site, Post:Shivnagar Dist: Udaipur PIN:497116	Vivek Kumar Himanshu, Dr.Murari Prasad Roy, Dr.C. Sawmliana
10	Scientific study for designing and supervision of controlled blasting operations for hard rock excavation at Kundevahai hill cutting, Gavanaphata.	M/s Thakur Infraprojects Pvt. Limited OM Sadnika Building, 1st Floor Plot No. 265/1 Panwel, Navi Mumbai-410206	Dr. R. K Paswan, R. S. Yadav
11	Study and advice for improvement in rock fragmentation to enhance production and productivity with greater safety at Manganese Group of Mines of Tata Steel Limited	Tata Steel Limited Manganese Group of Mines Ferro Alloys & Mineral Division, FAP, Joda, Keonjhar, Odisha - 758034	Dr. R. K Paswan, R. S. Yadav, Dr. Murari Prasad Roy
12	Instrumentation and strata monitoring of continuous miner working during development/depillaring operation at MIC, Jhanjra Project Colliery, ECL	Gainwell Commosales Pvt. Limited (GCPL) Agrati, Beside Jhanjra Area G.M Office, ECL, P.O - Jhanjra, Dist - Paschim Burdwan, West Bengal, Pin - 713385	Dr. Awanindra Pratap Singh, Rana Bhattacharjee
13	Scientific Study for OGL survey of Patch 1,2 and 3 at Pakri Barwadih Coal Mining Project of NTPC using Terrestrial 3-D laser scanner and associated softwares	NTPC LIMITED Pakri Barwadih,Sikri Site Office, P.O - Barkagaon, Hazaribagh - 825311, Jharkhand	Dr. Amar Prakash, J. K. Singh
14	Strata monitoring of stopes, strata condition and rock mechanics study in Banwas block of Khetri mines of Hindustan Copper Limited of Banwas Project of SMSL	SMS Limited Banwas Block of Khetri Mine, C65 IIA, Near Khetri Mine, Khetri Nagar, Jhunjhunu Rajasthan - 333504	Dr. Arka Jyoti Das, Dr. Prabhat Kumar Mandal
15	Scientific investigation on total desorbable gas content and prediction of specific gas emission from coal seams of AAD-OCM High Wall, Dhorri Area, Central Coalfilelds Limited	MINSOL Limited AADOCM Dhorri Area Mines Site, Office of Central Coalfields Limited. Dhorri. Phusro. Dist - Bokaro - 829144. Jharkhand	Dr. D. Mohanty, Dr. Vinod Atmaram Mendhe
16	Scientific study and advice for optimization of blast design parameters for flattering of Ulwe hill at core area of the airport being executed by M/s Navi Mumbai International Airport Pvt. Ltd., (NMIAL) for the safety of the airport site	M/s Navi Mumbai International Airport Pvt Ltd., Office of the Airport Director, CSI Airport terminal 1B Santacruz (E), Mumbai-400099	Dr. Murari Prasad Roy, Vivek Kumar Himanshu

17	Scientific Study of reactivity test of ground of Rajpura-Dariba mine of Hindustan Zinc Limited (HZL) Vedanta.	M/s Hindustan Zinc Limited Rajpura -Dariba Mine, HZL Railmagra, Udaipur, Rajsamand, Rajasthan 313211	Dr. Niroj Kr. Mohalik, Dr. Murari Prasad Roy
18	Scientific study on impact of flyash disposal on water resources and its management at GP- IV/1 Mines, Raigarh	Jindal Power Limited Village - Dongamohua District - Raigarh (Chhatisgarh) - 496108	Dr. Apurba Sinhamahapatra, Dr. Abhay Kumar Singh
19	Scientific study for the evaluation of incendivity and deflagration properties of permitted explosive P5 type (Supremecoal-5) for use in Australian underground coal mines.	M/s Solar Industries India Limited 'Solar House'14, Kachimet, N.H.-6 Nagpur-440023, (Maharashtra)	Arvind Kumar, Dr. C. Sawmliana
20	Scientific study for designing of controlled blasting patterns within 50-500 m from dwellings at Pachhwara (North) Coal mine of M/s West Bengal Power Development Corporation Limited. (MOD: BGR Mining & infra limited)	BGR Mining & Infra limited, Pachhwara North Coal Mine, Amiroza Colony, PO- Amrapara, Dist : Pakur, Jharkhand 814111	Dr. Aditya Rana, Dr. C. Sawmliana
21	Determination of RMR and support plan in seam II in development working at Gare Palma IV/8 Coal mine, Raigarh.	Ambuja Cement Limited Village: Karwahi Post: Saraitola Raigarh PIN-496107	Avinash Paul, Dr.Arun Kumar Singh
22	Specialized geo-chemical and petrographic properties of coal samples retrieved from gondbahera ujheni East Coal Mine of MPNRPL-Madhya Pradesh..	MP Natural Resources Pvt Ltd. Bungalow No c-10, 1st floor, BDA Colony Near Vyapam Square Shivaji Nagar Bhopal, Madhya Pradesh 462016	Dr.Vinod Atmaram Mendhe, Jaywardhan Kumar
23	Physico-Mechanical properties analysis of rock samples for coal seam and rocks above and below of coal seam at CCL, Dhori site.	M/s MINSOL Ltd., AADCOM Dhori Area Mines Site Office of CCL Dhori, Phusro,,Bokaro, Jharkhand-829144	Shailendra Kr. Singh, John Buragohain
24	Review of Geological Model and verification of the Annual Production Plan of Manoharpur Coal Mine project for financial year 2023-24.	Odisha Coal & Power Limited (OCPL) Zone A, ground Floor, Fortune towers, Chandrasekharapur, Bhubaneswar Odisha, 751025	Anand Sharma, Sandip Oraon

25	Instrumentation and strata monitoring of continuous miner working during development/ depillaring operation at Kumardihi-B Mine, ECL	Gainwell Comosales Pvt. Limited (GCPL), Agrati, Beside Jhanjra Area G.M. Office, ECL, P.O. Jhanjra, Dist- Paschim Burdwan, West Bengal- 713385	Nilabjendu Ghosh, Lal Babu Roy
26	Whole-Body Vibration study of NMDC mines (Kirandul, Bacheli, Donimalai and Panna)	NMDC Limited, Khanij Bhawan'10-3-311/A, Castle Hills, Msab Tank, Hyderabad- 500028	Anand Sharma, Sandip Oraon
27	Scientific Study for feasibility of Slag filling in underground Stope blocks of Mahagiri Mines (Chromite), M/s IMFA Ltd,	INDIAN METALS & FERRO ALLOYS LIMITED, Sukinda, Jajpur, Odisha- 755047	Prashant, S K Behera
28	Instrumentation and strata monitoring during stoping operation at Rampura Agucha underground mine, HZL	Hindustan Zinc Ltd. Commercial Department, Rampura Agucha Underground Mine, Near- Gulabpura, P.O- Agucha, Dist- Bhilwara, Rajasthan- 311029	Dr.Prabhat Kumar Mandal, Arka Jyoti Das
29	In situ nondestructive study and advice on the present conditon of track and haulage ropes of passenger Ropeway across river Brahmaputra at Guwahati, Assam	M/s. Usha Breco Limited, Guwahati Ropeway Terminal, Forest Campus, Near- DC Court, M.G. Road, Panbazar, Guwahati Place of Supply: Assam-781001	S. Waghmare, Dr. Debasish Basak
30	Stability Evaluation of Three Numbers of drivage gallery below the Damodar River from W-9 Panel in Lower Bachra Seam to access the Benti Block, Churi Mine, CCL	Central Coalfield Limited, Office of the Project Officer, Churi Colliery, NK Area, P.O- Ray, CCL, Ranchi Place of Supply: Jharkhand- 829209	Niraj Kumar, Dr. Rakesh Kumar
31	Scientific studies for controlled blasting at J.K. Cement Limited Group for mines viz. (1) Malaikhera Limestone Mine (2) Karunda Limestone Mine (3) Mangrol Tilakhera Limestone Mine (4) Mangrol (132 ha.) Limestone Mine (5) J.K.Cement (Murlia) Limestone Mine.	J.K. Cement Works, Kailash Nagar, Nimbahera- 312617, Chittorgarh, Rajasthan	Dr. Aditya Rana, Amar Prakash Kausik
32	Scientific study for ground graulated blast furnace slag (GGBFS) implementation in paste fill at SK Mines, HZL	Hindustan Zinc Limited, Commercial, SK Mines Servies, Dariba Rajsamand, Place of Supply: Rajasthan, Pin- 313211	Prashant, Dr. S K Behera

33	Scientific study for flattening of southern portion of Ulwe hill for the land development in Puspak Node to the south of Navi Mumbai international Airport (NMIA) using controlled blasting and flattening of balance portion of Ulwe hill in the NMIA	M/s CIDCO Maharashtra Limited NMIA Office, 2nd Floor CBD Belapur, Navi Mumbai-400614 Dist: Navi Mumbai	Dr. Murari Prasad Roy, Dr. C. Sawmliana
34	Study and advice for optimization of blast design parameters at Kayad underground mines of Hindustan Zinc Limited for the safety and stability of surface structures/dwellings of kayad village and subsequentstability	M/s Hindustan Zinc Limited Kayad UG Mines PO: Kayad Dist: Ajmer Rajasthan-305023	Dr. Murari Prasad Roy, Prof. A.K. Mishra
35	Safety and Feasibility Studies on utilization of Fly ash in the mine voids for Backfilling and disposal in external dumps of SMIORE Leas Holds	The Sandur Manganese & Iron Ores Limited Post-Deogiri, Taluk- Sandur, Bellary, Place of Supply: Karnataka- 583112	Prashant, Dr. Sujit Kr. Mondal
36	Quarterly measurement of coal, overburden `quantity and determination of stripping ratio at Manoharpur Coal Mining project of Odisha Coal and Power Limited for the year 2023-24	Odisha Coal and Power Limited Zone A, Ground Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar, Odisha- 751025	Amar Prakash, Dr. Sujit Kr. Mondal
37	Scientific study for safe and economical open and underground excavation of rock using drilling and blasting method at Pakal Dul Dam Project (J&K)	Jaiprakash Associates Ltd Pakal Dul Hydroelectric Project, Kishtwar, (Jammu And Kashmir) Pin- 182206	Narayan Kr. Bhagat, Rakesh Kr. Singh
38	Base lime environmental study for wet ash slurry disposal through pipeline in Gare IV/1 Mine void, Jindal Power Ltd. Tamnar, Raigarh	Jindal Power Limited, Mr. Ankur Gupta, P.O- Tammar, Dist- Raigarh- 496107	Dr. Gautam Chandra Mondal, Dr. Abhay Kumar Singh
39	Scientific study on dust suppression for Pakri Bawasih Coal Mining Project NTPC Ltd	Thriveni Sainik Mining Private Ltd, NTPC Pakri Barwadih Mines (Mines- 6001), C/o NTPC Limited, Langalu, P.O- Barkagaon, Hazaribagh, Jharkhand- 825311	Debashish Mishra, Ajay Khalkho

40	Scientific study for evaluation of gas content of coal seams to determine degree of gassiness of Inguri underground coal mine, NCL Singrauli, Madhya Pradesh and advice on associated gas hazards	Northern Coalfields Limited, General Manager (CP), Corporate Planning Department, Northern Coalfields Limited (NCL), Singrauli, Madhya Pradesh- 486889	Dr. D. Mohanty, Dr. Vinod Atmaram Mendhe
41	Scientific study for ventilation system planning and design for drivage of two inclines (inclines 1 & 2) at Parasea Beilbaid Colliery, ECL	M/s. Gainwell commosales private limited C/o. Agent Parasea Colliery of M/s. ECL, P.O. Parasea, West Bardhaman, Dist- Paschim Bardhaman, West Bengal- 713384	Debashish Mishra, Dr. Niroj Kr. Mohalik
42	Advice and monitoring of blast design patterns for safe and efficient formation works of different strategic defence roads-II	Headquarters 44 BRTF C/O 99 APO, Aalo District- West Siang, Pin- 792001, Arunachal Pradesh	Dr. Aditya Rana, Dr. C. Sawmliana
43	Slope Stability Study and Monitoring of Pit and Dump at Sukinda Mines (Chromite), IMFA with reference to Saety and Stability.	Indian Metals & Ferro Alloys Limited, Sukinda, Jajpur Odisha- 755047	Kartik Varwade, J.K.Singh
44	Scientific investigation on desorbed gas composition for methane potentiality assesment of coal seams from Raniganj Coalfield, West Bengal	Mining Associates Pvt. Ltd., 58/37, Atwal Nagar, S.B. Gorai Road, Asansol Place of Supply: West Bengal- 713301	Dr. D. Mohanty, Dr. Vinod Atmaram Mendhe
45	Petrological and petrophysical study of coal/shale horizons of Raniganj Sub-basin for hydrocarbon resource appraisal.	ESSAR oil and gas Exploration and production Ltd., Essar House-Durgapur Village/PO-Molandighi Block Kanksa, Dist: Paschim Bardhaman, Durgapur 713212 West Bengal	Dr. D. Mohanty, Dr. Vinod Atmaram Mendhe
46	Study and advice for Land development work using controlled blasting at Vahal Ulwe, sector 26 && 26A, Navi Mumbai (Maharashtra)	M/s. CIDCO Maharashtra Limited, NMIA Office, 2nd Floor CBD, Belapur, Navi Mumbai- 400614	Suraj Kumar, R.S.Yadav, Dr. Murari Prasad Roy
47	Scientific Study for Stability Assessment and Monitoring of Ground Surface Movement for Ensuring Stability and Safety of Surface Structures at Sawang Colliery, Kathara Area CCL.	M/s/ Central Coalfields Limited, Project Officer, Sawang Colliery (U/G), Kathara Area, CCL, P.O- Sawang, Dist- Bokaro, Jharkhand- 829128	Anand Singh, Dr. Sanjay Kumar Roy

48	Scientific study for optimization of blast design parameters for production blasts of Rajpura Dariba Mines for safe and efficient exploitation of mineral	M/s. Hindustan Zinc Limited, Rajpura Dariba Mines, Dariba, RDM P.O, Rajsamand- 313211	Vivek Kumar Himanshu, Dr.Murari Prasad Roy
49	Scientific investigation on in-situ gas content, degree of gassiness and assessment of methane drainage potential at Dahegaon-Gowari coal block, Kalmeshwar, Nagpur	Ambuja Cements Limited, Post- Upperwahi, Tahsil- Korpana, Dist- Chandrapur, Maharashtra Pin- 442908	Dr. Vinod Atmaram Mendhe
50	Scientific study for in-situ gas content measurement, assessment of the degree of gassiness and associated gas hazards at Gondbahera Ujheni coal block, MPNRPL mine, Madhya Pradesh.	MP NATURAL RESOURCES PVT LTD (Adani Group), Survey no. 1992-2, Daga Bargawan, Dist- Singrauli, Madhya Pradesh- 486886	Jaywardhan Kumar, Dr. Vinod Atmaram Mendhe
51	Scientific Study of High Density Ammonium Nitrate (HDANS) Properties.	M/s. Black Diamond Resources General Manager, M/s. Black Diamond Resources, Village- Sudi, Tancha, Dist- Bharuch, Gujarat- 392110	Dr. Firoj Ali
52	Slope Stability Monitoring and Analysis of RMP- 4 dump of Hindalco Industries Ltd., Muri Works	Hindalco Industries Ltd Muri Works, Post- Chota Muri, Dist- Ranchi, Place of Supply: Jharkhand-835101	Dr. Sanjay Kumar Roy, Kartik Varwade
53	Scientific investigation on methane emission and determination of in-situ gas content for categorization of degree of gassiness for coal seam 0 at Gayatri UG Mine, SECL and advice on associated hazards.	South Eastern Coal fields Limited Office of the General Manager, (SECL), Bishrampur Area, Dist- Surajpur, Chhattisgarh- 497226	Jaywardhan Kumar, Dr. Vinod Atmaram Mendhe
54	Scientific study on back filling of ash in mine voids and mixing of ash with external dumps at Manuguru Opencast project, Manuguru Area.	The Singareni Collieries Company Ltd. General Manager (R&D), Corporate Purchase Department, Bhadradi, Kothagudem, Telangana- 507101	Prashant, Dr. Sujit Kr. Mondal
55	Scientific study on slope monitoring of pit and dump for Ostapal Chromite Mine of Ferro Alloys Corporation Ltd.	Ferro Alloys Corporation Ltd. Head Projects, D.P Nagar, Randia Bhadrak, Odisha- 756135	Rakesh Kr. Singh, Anand Singh
56	Advice and monitoring of blast design patterns for safe and efficient formation works of different strategic defence road-III	HQ 13 BRTI Padam, Kargil, Ladakh, District Kargil, Pin- 194302	Dr. Aditya Rana, Dr. C. Sawmliana

57	Blast induced ground vibrations study on plant structures envisaged in DPR for the proposed capacity expansion of Bachel Complex, NMDC Limited, Bachel, South Bastar Dantewada Dist, CG State.	NMDC Limited BIOM, Bachel Complex, Dist- Dantewada, Chhattisgarh- 494553	Dr. R. K Paswan, Vivek Kumar Himanshu
58	Scientific study for determining the feasibility of utilizing ash with overburden as a backfill material in active opencast mine of Gare Palma IV/4 coal block.	Hindalco Industries Limited Sunil Choudhary Gare Palma IV/4 UG Coal Mine, Village- Bankheta, PO- Milupara, Chhattisgarh- 496107	Prashant, Dr. Sujit Kr. Mondal
59	Insitu nondestructive study and advice on the present condition of double drum winder ropes at Mahagiri mines (Chromite), Jajpur, Odisha,. (Two visits at interval of six months.)	M/s IMFA Manager (Mechanical), Mahagiri Mines (Chromite) Post Kaliapani Dist: Jajpur PIN-755028	S. Waghmare, Dr. Debasish Basak
60	Scientific study and advice for the use of plasma rock fracturing technique in the Powerhouse and Penstock area and continuous monitoring of blast vibration in Proximity to the Retaining Wall to ensure greater safety.	M/s P&R Infraprojects Limited, 9MW Small Hydro Plant Rajpipla Road, Indravana, Vadodara, Gujrat, Pin- 393151	Dr. Murari Prasad Roy Suraj Kumar
61	Geotechnical Study and Slope Monitoring of Pits and Dumps at Jhamarkotra Rock Phosphate Mine, RSMML, Udaipur for the Year 2023-24	Rajasthan State Mines and Minerals Limited Mines Manager, Jhamarkotra Rock Phosphate Mine, SBU and PC Rock, Phosphate, Post- Jhamarkotra District- Udaipur, Rajasthan, Pin- 313015	Kartik Varwade, Dr. Sanjay Kumar Roy
62	Scientific study for assessment of blasting impacts (ground vibration) on the surrounding environments and advise for designing of controlled blasting patterns at Surjagarh Iron Ore Mines of M/s Llyods Metals & Energy Limited (LMEL), Surjagarh, Gadchiroli District, Maharashtra.	Llyods Metals & Energy Limited Surjagarh Iron Ore Mines, Taluk- Etapalli, District: Gadchiroli Pin: 442704	P. Hembram, Dr. C. Sawmliana

63	Assessment and mitigation of blast induced ground vibration and optimization of Controlled Blast design parameters during rock excavation of Head and Tail Race Tunnel (HRT & TRT) at Vishnugaad-Pipalkoti Hydroelectric Power Project (VPHP), Pipalkoti, Joshimath, Uttarakhand	M/s Hundustan Construction Co. Ltd.(HCC) Vishnugaad, Pipalkoti Hydro Power Project Pipalkoti Place of Supply Uttarakhand, 246472 Maharashtra 40083,	Dr. Harsh Kr. Verma, Pushpendra Patel
64	Scientific study for assessment and mitigation of ground vibration, airoverpressure and other associated hazards due to proposed blasting operations at ML No 259/94, of M/s National Lime Stone Company, Shahpur, Rajasthan.	M/s National Lime Stone Company Private Limited 22-B-15, Opposite NRI Colony Sector-22, Haldi Ghati Marg Pratap Nagar Rajasthan	Dr. Harsh Kr. Verma, Pushpendra Patel
65	Study on optimisation of controlled blast design parameters for rock Excavation works during construction of NHAI-Bharatmala Highway Project, Dhamtari (CG).	M/s Dillip Buildcon Ltd. Patel complex, Durg Road, Bemetara Durg Place of study: Chattisgarh-491335	Dr. Harsh Kr. Verma, Dr. S. P. Singh
66	Scientific study on charecterization of flyash and flyash dump stability in Harad Mine out Void within Jamuna Open cast Mines of SECL.	Head of Plant (HOP) MB Power (Madhya Pradesh) Limited Loharpura Murra Tola, Tahsil Jaithari Madhya Pradesh 484330	Dr. Harsh Kr. Verma, Dr. Ashok Kumar Singh
67	Review and vetting of blast design for Two different rock mass Classes for Tunnel-7 of Sivok Rangpo Railway Tunnel Project in Sikkim	Surya Construction Private Limited, DIF, Tista Bazar, Darjeeling, Darjeeling, West Bengal- 734312	Pushpendra Patel, Dr. Harsh Kr. Verma
68	Review of blast design for safe implosion of the Super Tech Twin Tower, Noida, India's tallest building to be demolished and damage assessment of surrounding structures.	Director CSIR-CBRI, Roorkee, Uttarakhand	Dr. Harsh Kr. Verma, Dr. C. Sawmliana
69	Study and evaluation of trial blast with SME explosives at Sonadih Limestone Mine (ML-1) of M/s Nuvoco Vista Corp. Ltd. and subdequent optimization of blast design parameters to improve safety and productivity.	Sonadih Cement Plant NUVOCO Mistas Corp. Ltd., PO- Raseda, Baloda Bazar, Dist- Baloda Bazar District: Chattisgarh Pin- 493332	Dr. Harsh Kr. Verma, Dr. R. K Paswan

70	Hydrological and sub-surface 3D modelling of the limestone deposit for mining below at depth in respect of 100.00 Ha area at Nongtra Limestone Mines of M/s Lafarge Umiam Mining Pvt. Ltd. (LUMPL) East Khasi Hills, Meghalaya	M/s Lafarge Umiam Mining Pvt. Ltd. Keating Road 3rd Floor, Goenka Towers Shillong - 793001 Meghalaya	Dr. Autar Krishen Raina, Dr. A. K. Soni
71	Scientific study on pit slope stability of the Dharmeta Marble Mine	M/s R.K. Enterprises Dharmeta Marble Mine Near Village Dharmeta, Dist: & Tehsil: Rajsamand Rajasthan-313324	Dr. Saurav Rukhaiyar, Dr. J. C. Jhanwar
72	Scientific study on Pit slope stability of Mangampet Barytes Mine	M/s A.P Mineral Development Corporation Ltd. Mangampet Baryte Mine, Mangampet, Obulavaripalli(M), Dist - YSR Kadapa Andhra Pradesh	Dr. Saurav Rukhaiyar, Dr. J. C. Jhanwar
73	Scientific investigation in to the blast induced Ground Vibration, Air Overpressure due to Blasting in NMOC II (A) Exp Mine of Majri Area, WCL	WCL limited, Majri Area Bhadravati, Chandrapur Maharashtra PIN-442503	Anand Ganpatrao Sangode, Dr. Autar Krishen Raina
74	Advice & guidance on ground monitoring for stope blocks at Mahagiri Mines (Chromite) M/s Indian Metal & Ferro Alloys Ltd., for one year (2023)	M/s Indian Metal & Ferro Alloys Ltd., Sukinda, Dist: Jajpur Odisha, India Pin: 755047	Dr. John Loui P., Dr. J. C. Jhanwar
75	Scientific Study of Depillaring and Monitoring of Strata Behavior at Belgaon Underground Coal Mine.	Chief Advisor (Mines), SUNFLAG Iron and Steel Co. Ltd, 33, Mount Road, Sadar, Nagpur 440001	Dr. Neelratan Singh, Dr. Manoj N. Bagde
76	Scientific study for determining the thickness of the crown pillar bellow the ultimate pit limit of opencast mine of Sukinda Mine Chromite of IMFA Ltd.,	Indian Metal & Ferro Alloys Limited Sukinda, Dist: Jajpur Odisha, India, PIN: 755047	Dr. John Loui P., Dr. J. C. Jhanwar
77	Geotechnical study for estimation of RMR and stope back support design at Jam Underground Manganese Mine.	M/s. Namrata Upadhayay, Mine Owner, Jam Mangamese Mine, Tah, Tirodi, Balaghat,M.P 481449M.P	Dr. Chandrani P. Verma, Dr. John Loui P.
78	Scientific Study and Numerical Modelling at Malanjkhanda Underground Copper Mine, Hindustan Copper Ltd.	M/s Hindustan Copper Ltd, Malanjkhanda Copper Project, P.O. Malanjkhanda Dist:Balaghat, Madhya Pradesh, PIN:481116	Dr. Chandrani P. Verma, Dr. John Loui P.

79	Scientific blasting investigations and recommendations on safe blasting practice at Maratha Limestone mine of M/s Ambuja cement Limited, unit:MCW	M/s Ambuja Cements Limited Unit: Maratha Cement Works At Post- Upparwahi,tah-Korpana Dist:Chandrapur Gadchandur Pin: 442908, maharashtra India	Dr. Partho B. Choudhury, Dr. More Ramulu
80	Scientific blasting investigations and recommendations on safe blasting practice at Persoda Limestone mine of M/s RCCPL Private Limited.	M/s RCCPL Private Ltd., Post:Mukutban Taluka: Zari Jamani, Dist: Yavatmal Mukutban-445304 India.	Dr. Partho B. Choudhury, Dr. More Ramulu
81	Scientific Study on Pit Slope Stability of Khub, Wahpynkon, Bryshrnot Limestone mines and Bryshrnot shale mines	M/s Star cement Limited,Village: Lumshnong, Dist: East Jaintia HillMeghalaya 793210	Dr. Saurav Rukhaiyar, Dr. J. C. Jhanwar
82	Continuous Monitoring of the Open Cut Excavations at Panvel Karjat Double Line Corridor of Mumbai Rail Vikas Corporation Ltd.	Mumbai Rail Vikas Corporation Limited, 2nd Floor Churcgate station Building Maharashtra	Dr. Autar Krishen Raina, Anand Ganpatrao Sangode
83	Scientific study for recommending safe blasting practice at Pimpalgaon OC mine of Wani North Area, WCL	Western Coalfields Limited, Office of the General manager, Wani North Area, P.O- Bhallar, TH- Wani, Yavalmal Place of Supply: Maharashtra- 445304	Dr. Partho B. Choudhury, Dr. More Ramulu
84	Subsidence prediction studies for tunnel rail Connectivity to Vizhinjam International Seaport from Balaramapuram Railwat Station	Vizhinjam International Seaport Limited, (A Goverment of Kerala Undertaking) 9th Floor KSRTC Bus Terminal Complex, Thampanoor, Dist- Thiruvanthapuram, Kerala- 695001	Dr. John Loui P., Dr. J. C. Jhanwar
85	Design of site-specif controlled blast pattern and blast monitoring for safe and productive rock excavation for foundation excavation of at Godrej Bay View site	Suncity Infrastructures (Mumbai) LLP, Pirojshanagar Eastern Expressway, 5th floor, Godrej one, Vikhroli, Dist- Mumbai- 400079	Dr. More Ramulu, Dr. Partho B. Choudhury
86	Stabilty Analyasis of sill Pillars And Rib Pillars at Pandharwanl Underground Manganese mine	D.P Rai, Nanhka, 10, East High Court Road, Ramdaspath, Nagpur-10, Mine, Add: Pandharwani Mine, Balaghat Place of Supply:, Madhya Pradesh- 481441	Dr. Chandrani P. Verma, Dr. John Loui P.

87	Numerical modelling studies for underground mining at Baroi, Zawarmala Mines of HZL for a period of two years 2023-2024	Hindustan Zinc Ltd, Yashad Bhawan, Swaroop Sagar, Udaipur, Rajasthan- 313004	Dr. John Loui P., Dr. J. C. Jhanwar
88	Review of a previous scientific study (2017) and provide recommendation on stope sequencing below 20 L in Strike Reer of Hutti Gold Mine, HGML	The Hutti Gold Mines Company Ltd, P.O- Hulti, Dist- Raichur, Karnataka- 584115	Dr. John Loui P., Dr. J. C. Jhanwar
89	Scientific study for control Blast design for safe and productive rock excavation L&T work site at Bangalore Metro Phase II, RT02	Larsen and Toubro Limited- Infrastructure Vertical, Project Manager, RT- 02, L&T- ECC, Bangalore Metro Rail Project, Phase- 2, Bengaluru Place of Supply: Karnataka Pin- 560001	Dr. More Ramulu, Dr. Partho B. Choudhury
90	Conducting Scientific and technical study for trial blasting at Sagmania limestone mine of birla cement works, Satna.	Birla Corporation Ltd., Satna Cement Works PO-Birla Vikas Dist: Satna Madhya Pradesh 485005	Anand Ganpatrao Sangode, Dr. Autar Krishen Raina
91	Scientific & Technical study for conducting deep hole blasting within 500m and beyond from exixting School/institution & others structures not belonging to owner of Itoura Limestone mine, RCCPL, Maihar Satna, Madhya Pradesh.	RCCPL Private Ltd.,Birla Corporation Ltd., RCCPL-MAIHAR Village-Bharauli, Post:Ithara NH-7 Katni Road Maihar, Dist: Satna,Madhya Pradesh	Anand Ganpatrao Sangode, Dr. Autar Krishen Raina
92	Scientific studies for optimization of stoping geometry at Mahagri Mines (Chromite), M/s IMFA	Indian Metals && Ferro Alloys Limited, Sukinda, Dist- Jajpur, Odisha- 755047	Dr. John Loui P., Dr. J. C. Jhanwar
93	Scientific study for control Blast design for safe and productive rock excavation at L&T work site at Vellora Station Bangalore Metro Phase II, RT02	L&T Limited, Project Manager, RT- 02, L&T- ECC, Bangalore Metro Rail Project, Phase 2 : Bengaluru	Dr. Neelratan Singh, Dr. More Ramulu
94	Scientific studies for Controlled blast design for safe and productive rock excavation at L&T work Sites of Bangalore metro Rail Project Phase 2: Pckg Rt03	Larsen && Toubro Limited, Construction PB No 979, Mount- Poonamallee Road, Manapakkam, Chennai, Tamilnadu- 600089	Dr. Neelratan Singh, Dr. More Ramulu

95	Study on blasting effects on nearby structures in villages and high wall slopes in the vicinity of New Bharath Quarry, Kanichar, Kannur Dist., Kerala.	New Bharath Stone Crusher & Hollow Bricks Industries 24th Mile, Nedumpoyil, Poolakutty Post, Kannur Dist, Kerala, Pin- 670650	Dr. Neelratan Singh, Dr. More Ramulu
96	Scientific study on Design of Blast Pattern and ground vibration attenuation model at a Stone quarry of Sri Krishnagiri Rock Products & Sri Krishnagiri Sands LLP of Parackal Granites Pvt Ltd	Parackal Granite Kerala Pvt Limited PGKPL, No. 9/270, Enanelloor, Post Kalamboor Muvattupuzha, District: Ernakulam, Pin: 686673	Dr. Neelratan Singh, Dr. More Ramulu
97	Studies on controlled blast design, blast vibration monitoring and issues related to simultaneous blasting and concreting at critical structures of Talcher Thermal Power Project. Odisha	NTPC Limited 1027, Talcher Thermal Power Station, P.O- Talcher Thermal ANGUL Dist- ANGUL, Odisha, Pin- 759101	Dr. Neelratan Singh, Dr. More Ramulu
98	Study and monitoring of blasting operations for hill cutting at Barhi-Koderma section of NH-31 between chainage from 4+900 Km to 5+700 Km	M/s Ram Kripal Singh Construction Pvt.Ltd., 702,7th Floor, Panchwati Plaza, Kutchery Road, Ranchi-834001 Jharkhand	Dr. Ashok Kumar Singh, Dr. J. K. Mohnot
99	Scientific services for sampling and analysis of coal discharged from vessels M.V. NANXIN ANGELA	SAIL	Dr. Uday Sankar Chattopadhyay
100	Scientific services for sampling and analysis of coal discharged from M.V. TANG LAND	SAIL	Mr. Dhananjay Roy
101	Scientific study on quality Monitoring of Iron ore at dispatch points of Donimalai Complex Iron Ore Mines of NMDC - Phase-IX.	NMDC Limited	Dr. Manish Kumar
102	Scientific services for sampling and analysis of coal discharged from vessel M.V. Minoan Sky.	SAIL	Dr. Sanjoy Chaudhury
103	Scientific services for sampling and analysis for coal discharged from vessels M.V. SIFNOS.	SAIL	Neeraj Kumar Sharma
104	Determination of in-situ bulk density of coal seams, R.O.M. and crushed coal.	Chatti Bariatu Coal Mining Private Ltd.	Dr. Rabinarayan Senapati
105	Scientific and Technical Evaluation on "Effects of Developed Chemicals supplied by Krishna Antioxitants Pvt. Ltd. on coal slurry by Pilot scale flotation investigation.	Krishna Antioxitants Pvt. Ltd	Dr. Uday Sankar Chattopadhyay

106	Studies on the estimation of theoretical yield at 18% (Plus/Minus) 0.5% ash level of washery by crushing feed coal in two different sizes and assess the recovery of cleans ash at 18% (Plus/Minus) 0.5% from coal slurry of Chasnala IISCO, SAIL.	Chasnala IISCO, SAIL.	Mr. Subhash Chandra Maji
107	Assessment of Normative Quantity of Coal Requirement for Non Power Sector (Phase-I)	Coal India Limited	Dr. Ashish Mukherjee
108	Scientific services for sampling and analysis of coal discharged from vessels M.V. NEW ENDEAVOR.	SAIL	Neeraj Kumar Sharma
109	Scientific services for sampling and analysis of Trial PCI Coal discharge from vessel M.V. BULL at Dhamra and Haldia Port ends.	SAIL	Dr. Uday Sankar Chattopadhyay
110	Study on characterization of coal, preparation of semi coke and semicoke briquettes prepared from coal sample supplied by M/s Mundra Petrochem Limited, Gujarat.	M/s Mundra Petrochem Limited	Tarun Pramanik
111	Scientific Services for sampling and analysis of coal discharged from vessels M.V. SEA HOPE.	Steel Authority of India Ltd.	Md. Wahid
112	Gasification Potential Evaluation on Lignite resource of GMDC's Surkha North Lignite mine, Bhavnagar, and its utilization Strategy.	GMDC Ltd. Gujarat	Dr. Sujan Saha
113	Gasification Performance Evaluation of Lignite resource of GMDC's Surkha North Lignite mine, Bhavnagar	ICEM GMDC Ltd.	Mr. Rupesh kr. Singh

187 sponsored projects were taken up under the mega project "Quality Coal for Power Generation" during this period. The Project leaders of these projects include Dr. Ashok Kumar Singh, Dr. Shripal Singh, Dr. Lalit Kumar Sahu, Dr. Uday Shankar Chattopadhyay, Dr. Devendra Kumar Sakhare, Dr. Rajendra Kumar Vishwakarma, Mrs. Seema Ashishan Topno, Dr. Harsh Kumar Verma, Dr. Manoj Kumar Saini, Dr. Manoj Kumar Sethi, Dr. Ramakrishna Vallu, Dr. P. Gopinathan, Dr. Arnold Luwang Usham and Dr. Swapnil Keshavrao Varkhade.

Consultancy Projects (CNP)

Sl. No.	Title	Sponsors Name and Address	Project Leader
1	Advice on Scheme of backfill and strata monitoring at Quarry AB of West Bokaro Mine of M/s Tata Steel Limited	TATA Steel Limited West Bokaro Division West Bokaro - 825314 Ramgarh, Jharkhand	Dr. S K Behera, Dr. Sujit Kr. Mondal
2	Feasibility study of ash utilization in Lalmatia opencast coal mine as a backfill material and advice thereof.	Adani Power Maharashtra Ltd. Plot No: A-1, Tiroda Growth Centre MIDC, Tiroda Gondia-441911 Maharashtra	Kanhaiya Mishra, Dr. Sujit Kr. Mondal
3	Scientific study and advice for optimisation of maximum charge per delay, total charge and blast pattern to minimise ground vibration at Patch -G of Kujama Opencast Project Under Lodna Area, BCCL	Kujama Colliery, BCCL Project Officer Kujama Colliery BCCL, Lodna Area BCCL Dhanbad - 828131 Jharkhand	Narayan Kr. Bhagat, Rakesh Kr. Singh
4	Study and advice for blasting impacts and design of safe blasting patterns for enhancement of production from 2.160 MTPA to 3.024 MTPA at Raikela and Tantra Iron Mines of M/s Penguin Trading & Agencies Limited, Odisha	Penguin Trading & Agencies Limited Raikela and Tantra Iron Mines Maa Parvati Enclave, D-Block 2nd Floor, Station Road PO - Barbil, Distt - Keonjhar Odisha - 171102	Dr. R. K Paswan, Dr. C. Sawmliana
5	Environmental Impact Assessment of Ash Disposal in Umrer and Gondgoan Coal Mine and Advice on its Management, Nagpur, Maharashtra	M/s Adani Power Ltd Plot No. A-1 TIRODA GONDIA CENTRE MIDC, TIRODA GONDIA 441911 (MAHARASHTRA)	Dr. Gautam Chandra Mondal, Dr. Abhay Kumar Singh
6	Scientific study and advice for slope stability of Pits, Dumps and Stacks Of Neelanchal Iron Ore Mine	M/s Neelanchal Iron Ore Mines Neelachal Ispat Nigam Limited Neelanchal House, Kalinga Nagar Industrial Complex, Duburi, Jajpur, Odisha - 755026	Dr. Sanjay Kumar Roy, J.K.Singh
7	Environmental Impact Assessment of Ash Disposal in Lalmatia Coal Mine and Advise on its Management, Godda District, Jharkhand	Adani Power Maharashtra Ltd. Plot No: A-1, Tiroda Growth Centre Maharashtra - 441911	Dr. Pallabi Das, Dr. Abhay Kumar Singh

8	Study and advice for optimization of blast design parameters at Hura-C Opencast Project, Rajmahal Area, MOD - Montecarlo Limited of M/s Eastern Coalfields Limited for controlling....for the sfety of structures in the periphery of the mines	Montecarlo Limited G.P Complex, Near Sai Hospital Bariatu Road Ranchi - 834002	Dr. R. K Paswan, Suraj Kumar, Dr. C. Sawmliana
9	Scientific Study and advice for slope stability of Pits, Dumps and Ore Stock Piles of Ghoraburhani-Sagasahi Iron Ore Mine	ArcelorMittal Nippon Steel India Limited Segasahi Iron Ore Mines, Ghodabuduni Segasahi Iron Ore Block, Koira, Bonai Sundargarh Place of Supply Odisha - 770048	Dr. Sanjay Kumar Roy, J. K. Singh
10	Scientific study and advice for deep hole blasting to be conducted at Tubed coal mine block of Damodar Valley Corporation Ltd. considering the safety of nearby structures in adjacent villages, State Highway, 11KV power line and nallas etc.	M/s DEVELECTO MINING LIMITED Tubed Coal Mine - DVC Damodar Valley Corporation Door No. 4, Plot No. 232 Latehar (Jharkhand) - 829206	Vivek Kumar Himanshu, A. Viswakarma, Dr. Murari Prasad Roy
11	Advice on subsidence prediction and management study pertaining to Kasta (East) coal block of Raniganj Coalfield	Jitusol Developers Pvt. Ltd. 39, Shakespeare Sarani, Premlata Building, 6th Floor, Kolkata - 700017	Amar Prakash, Dr. Sujit Kr. Mondal
12	Scientific study and advice for designing of deep hole drilling and blasting operations at Jamkhani opencast coal mine as per regulation - 194 and 196 of The Coal Mine Regulation - 2017	M/s BGR Mining & Infra Ltd. Jamkhani Coal Mines of Vedanta Ltd. Bileimunda, Hemgir Taluka, Luabahal, Sundargarh, Odisha - 770024	A. Viswakarma, Dr. C. Sawmliana
13	Advice for the stability of pillars and design of support system for trunk roadways and gate roadways in XV Seam at Moonidih Project, BCCL	INDU-SCCL-CORUM-Consortium, Moonidih Project, BCCL, P.O. Moonidih, Dist, Dhanbad, Jharkhand, PIN-828129	Nilabjendu Ghosh, Dr. Arka Jyoti Das, Dr. Prabhat Kumar Mandal
14	Advice on electrical safety parameters of One no. Increased Safety Ex 'eb' and Non - Sparking Ex 'ec' Motor, Rated at 1450KW, 6.6KV, 20Pole in Frame Size:1SJ1907-9 for use in EPL GC (Zone 2) for Gas Group IIC hazardous area.	M/s Bharat Heavy Electrical Limited Block - II, EW, II Floor, BHEL Bhopal - 462022	Manoj Kr. Vishwakarma

15	Scientific study and advice for slope stability of Pits, Dumps and Ore Stock Piles of Thakurani Iron Ore Mine	ArcelorMittal India Private Limited Thakurani Iron Ore Mines, Thakurani RF, Barbil,Keonjhar, Odisha - 758035	Kartik Varwade, J.K.Singh
16	Assessment of status of fire inside sealed off area at No.3 Seam of SRP-3 incline, SCCL and advice thereof.	Kothagudem Collieries Bhadrachalam Road Railway Station Khammam District PIN-507101,Telangana	Dr. Santosh Kr. Ray, Dr. Niroj Kr. Mohalik, Dr. J. K. Pandey
17	Scientific study and advice for evaluation of maximum charge per delay, total charge and optimum blast pattern to minimise ground vibration, air overpressure and restrict the extent of flyrock within safe distance at Julgul Bhalua limeston mines. .	M/s Ultratech Cement limited Unit Dalla cement Works Post-Dalla, Dist-Sonebhadra UP-231207	Narayan Kr. Bhagat, Rakesh Kr. Singh, Dr. C. Sawmliana
18	Advice on electrical safety parameters of one no. increased safety Ex 'eb' and Non-sparking Ex'ec' Motor rated at 490KW, 6.6 KV, 2 Pole in Frame size1MA7566-2hazardous area.	M/s Bharat Heavy Electrical Limited Block-II, EW, IIFloor BHEL Bhopal-462022	Biswajit Modak
19	Advice on electrical safety parameters of one no increased safety Ex 'eb' and non-sparking ex'ec' motor rated at 580KW, 3.3 KV, 10 Pole in Frame size: 1MA7716-3 for use in EPL Gc (Zone 2) for Gas Group IIC hazardous area.	M/s Bharat Heavy Electrical limited Block-II, EW, II Floor BHEL Bhopal-462022	Dr. Rakesh Kr. Mishra
20	Advice on electrical safety parameters of one no. increased safety Ex'eb' and non-sparking ex'ec' Motor, rated at 420KW, 3.3 KV,2 Pole in frame Size: 1MA7562-2 for use in EPL Gc (Zone 2) for Gas group IIC hazardous area.	M/s Bharat Heavy Electrical Limited Block-II, EW, II Floor, BHEL Bhopal-462022	Dr. Rakesh Kr. Mishra, Dr. Awanindra Pratap Singh
21	Scientific studies for the assessment of blasting impacts on the nearby surroundings and advice for design of control blasting patterns at Dedza Block - A, B & C Dolomite Deposit of M/s Metis Steel Private Limited situated in West Kameng District of Arunachal Pradesh	M/s Metis Steel Private Limited 347, Santosh Ray Road, James Long Sarani, Barisha, Sakher Bazar, Kolkata- 700008	Dr. C. Sawmliana, Amar Prakash Kausik

22	Scientific studies for the assessment of blasting impacts on the nearby surroundings and advice for designing of control blasting in Graphite mines of Arunachal Pradesh. (i) Bopi Graphite ddeposit (ii) Dodeserum Graphite Deposit (iii) Laa-Lambdak Gr aphite Deposit (iv) Tai-Techidoni graphite Deposit (v) Taliha Graphite Graphite Deposit.	M/s Sthenos Cement Pvt.Ltd. 347, Santosh Ray Road, James Long Sarani, Barisha. Sakher Bazar, Kolkata, 700008	Dr. C. Sawmliana, Amar Prakash Kausik
23	Advice on subsidence prediction and its impact due to underground miing with proposed mitigation measures for Bhivkund Coal Block of Chandrapur, Maharashtra	M/s Sunflag Iron and Steel Co. Ltd, Mount Road, Sadar, Civil Line Nagpur, PIN-440001 Maharashtra	Dr. Amar Prakash, Dr. Sujit Kr. Mandal
24	Scientific study on slope stability and advice thereon for design of overburden dump, backfill area and quarry slope stability study at Jindal Chromite Mines, Kaliapani.	M/s Jindal Stainless limited Kaliapani, Dist: Jajpur, Odisha:755028	J. K. Singh, Dr. Sanjay Kumar Roy
25	Scientific study and advice thereon for pit and dump slope stability of Tara (east) and tara (west) Coal Mine, Raniganj Coalfield, Paschim Bardhaman, West Bengal.	M/s Tara coal Mining Private Limited CA-12, Bengal Ambuja Complex, Phase-II, City Centre, Durgapur, West Bengal.	J. K. Singh, Dr. Sanjay Kumar Roy
26	Pit slope stability of band-II quarry & study of impact of neighboring dumps on pit slope stability, IMFA Ltd., Sukinda, Jajpur	M/s Indian Metals & Ferro Alloys Limited Sukinda, Dist: Jajpur, Odisha, India-755047	Dr. Sanjay Kumar Roy, J. K. Singh
27	Scientific study and advice on creating space within lease boundary for installation of infrastructures such as COB plant, paste fill plant, tailing pond, and other associated infrastructures.	M/s Ferro Alloys Corporation Ltd., Kaliapani, Dist: Jajpur Odisha, India-755047	Dr. Sanjay Kumar Roy, J. K. Singh
28	Human Resource Development programme on underground excavation techniques for eastern command OFCRs/JCOs/Ors of Indian Army.	HQ, Eastern Command GS (TRG) Fort William, Kolkata-700021 (W.B)	Dr. Aditya Rana, Dilip Kumbhakar

29	Advice on instrumentation and strata monitoring during stoping and review of underhand mining at Rampura Agucha underground mine, HZL	Hindustan Zinc Limited (HZL) Commercial Department, Rampura Agucha Underground Mine, Near- Gulabpura, P.O- Agucha, Bhilwara, Rajasthan- 311029	Dr. Prabhat Kumar Mandal, Arka Jyoti Das, Dr. Prabhat Kumar Mandal
30	Examination & advice on Non-Sparking Ex 'ec' motor rated at 45KW/415V/2P Frame Size: E225M, 180KW/415V/2P Frame Size: E315L & 37KW/415V/2P Frame Size: E200L for use in hazardous area	Marathon Electric Motors India Limited Mr. P.K. Guha Roy M/s Marathon Electric Motors (India) Limited, 1. Taratala Road, Kolkata Place of Supply: West Bengal- 700024	Dr. Rakesh Kr. Mishra, Dr. Awanindra Pratap Singh
31	Scientific advice for optimization of blast design parameters for stope blasting at Mahagiri Mines (Sukinda) of M/s. IMFA for safe and efficient exploitation of mineral.	Indian metals And Ferro Alloys Limited Sukinda, Jajpur, Place of Supply: Odisha- 755047	Vivek Kumar Himanshu, A. Viswakarma, Dr. Murari Prasad Roy
32	Advice for the design of method of development, support system and the preparation of Stra Control and monitoring Plan (SCAMP) for the development of RIX, RVIIIT, RVIIIB and RVII seams using Continuous Miner at Jaganathpur B underground coal mine of PTP L	Powerplus Traders Pvt. Ltd. 39, Shakespeare Sarani, Premlata Building,6th Floor, Kolkata, Place of Supply: West Bengal- 700017	Dr. Arun Kumar Singh, Nilabjendu Ghosh
33	Advice on the gound support design of portal and initial 100m decline length and the stability design of benches around the portal at Sukinda Mines (Chomite) of M/s IMFA Ltd.	Indian Metals And Ferro Alloys Limited Sukinda Mines (Chromite), Kaliapani, Sukinda, Dist- Jajpur- 755028	Niraj Kumar, Dr. Arun Kumar Singh
34	Scientific advice for designing of controlled blasting pattern at Tara (East & West) coal mines of WBPDC, Raniganj Coalfield, Paschim Bardhaman	Tara Coal Mine Privated Limited Plot No. CA-12, Bengal Ambuja Complex, Phase-II, City Center, Durgapur, Dist- Paschim Bardhaman, W.B- 713216	Dr. Aditya Rana, Dr. C. Sawmliana
35	Advice on Design of Support System for the inclines 1 & 2, intersections and one inset in each coal seam of Seam VIIC, Seam RVI, Seam V, Seam IV (T), Seam IV (B) and Seam III at Parasea-Belbaid Colliery, ECL	Gainwell Commosales Private Limited, C/o. Agent Parasea Colliery of M/s. ECL, P.O- Parasea, Parsea West, Bardhaman, Place of Supply: W.B- 713384	Niraj Kumar, Dr. Prabhat Kumar Mandal

36	Scientific advice and assessment of impact of train traffic movement on stability of surface structures while train movement in proposed tunnel for rail connectivity to Vizhinjam International Seaport from Balaramapuram Railway station over Southern Railway	Vizhinjam International Seaport Limited (A Gov. of Kerala Undertaking), 9th Floor, KSRTC Bus Terminal Complex, Dist- Thampanoor, Kerala- 695001	Vivek Kumar Himanshu, A. Viswakarma, Prof. A. K. Mishra
37	Scientific advice for assessment of possible impacts of controlled blasting on various surface structures due to excavation of proposed rail tunnel passing under habitat area between Vizhinjam International Seaport and Balaramapuram station in Thiruvananthapuram, Kerala	Vizhinjam International Seaport Limited (A Gov. of Kerala Undertaking), 9th Floor, KSRTC Bus Terminal Complex, Thampanoor, Dist- Thiruvananthapuram, Kerala- 695001	Narayan Kr. Bhagat, R. K. Singh, Prof. A. K. Mishra
38	Scientific advice for assessment of possible impacts due to blasting on various surface structures and surroundings during excavation of road tunnel proposed between Anakkampoyil-Kalladi-Meppadi in Kozhikode & Wayanad Districts of Kerala	Dy Chief Engineer/ Projects, Kokan Railway Corporation Limited, 5th Floor, West Wing, Belapur Bhawan, CBD Belapur, Navi Mumbai, Place of Supply: Maharashtra- 400614	Narayan Kr. Bhagat, Rakesh Kr. Singh, Prof. A. K. Mishra
39	Advice on electrical safety parameters of One no. Increased Safety Ex 'eb' and Non-Sparking Ex 'ec' Motor, Rated at 1860KW, 6.6KV, 4Pole in Frame size: 1SJ7635-4 for use in EPL Gc (Zone 2) for Gas Group IIC hazardous area.	M/s.BHARAT HEAVY ELECTRICALS LTD, Block-II, II Floor, BHEL, Bhopal Place of Supply: Madhya Pradesh-462022	Amit Kumar, Dr. Awanindra Pratap Singh
40	Advice on subsidence prediction study pertaining to Datima coal block of Bisharampur Coal field, Chhattisgarh	Shree Cement Ltd, Shree Raipur Cement Plant, Vill- Khapradih, Simga, Dist- Balodabazar, Bhalapara, Chhattisgarh- 493118	Dr. Amar Prakash, Dr. Sujit Kr. Mandal
41	Advice on the assessment of the suitability of proposed locations of inclines 3, 4, & 5 at Parasea Belbaid Colliery, ECL	Gainwell Commodities Pvt.Ltd. C/o Agent Parasea Colliery of M/s ECL, P.O. Parasea, Parasea West, Dist- Burdwan, W.B- 713384	Dr. Sivaji Lahiri, Rana Bhattacharjee, Dr. Prabhat Kumar Mandal

42	Advice for utility of plasma blasting technology (Non-Explosive) at Sardar Sarovar dam site adjacent to Narmada River and its suitability considering the safety of hydro power plant structure.	P & R Infraprojects Ltd., 9MW Small Hydro Plant Rajpipla Road Indravana, Vadodara, Gujarat Dist: Vadodara, PIN-393151 Gujrat-393002	Dr. Murari Prasad Roy, Suraj Kumar, Prof. A. K. Mishra
43	Scientific study on slope stability and advice thereon for Mine pit External Dump and Internal Dump of Talabira Coal Mine.	M/s Talabira (Odisha) Mining Pvt. Ltd., Khata no 362/774, Plot No: 1024/1025 Lapanga Satgachia, P.S. Thalkoli, Sambalpur, Odisha, Dist: Sambalpur PIN:768212	Kartik Varwade, Dr. Sanjay Kumar Roy
44	Advice on electrical safety parameters of One no. Increased Safety Ex 'eb' and Non-Sparking Ex 'ec' Motor rated at 1100KW, 6.6KV, 2 Pole in Frame size: 1MA7714-2 for use in EPL Gc (Zone 2) for gas Group IIC hazardous area. area.	M/s Bharat Heavy Electricals Limited Block- II, EW, II Floor, BHEL, Bhopal, Place of Supply: Madhya Pradesh, Pin- 462022	Manoj Kr. Vishwakarma, Dr. Awanindra Pratap Singh
45	Advice on electrical safety parameters of One no. Increased Safety Ex 'eb' cum Non-Sparking Ex 'ec' Motor, rated at 975KW, 6.6KV, in Frame size: 1SJ780X-Y of M/s.Bharat Heavy Electricals Ltd, (BHEL) Bhopal for safe use in Gas Group IIC hazardous area.	M/s.Bharat Heavy Electricals Ltd. Block- II, EW, II Floor, BHEL Place of Supply: Madhya Pradesh, Pin- 462022	Dr. Rakesh Kr. Mishra, Dr. Awanindra Pratap Singh
46	Advice for the extraction of V and VI seams of Sector-A in Quarry AB by highwall Mining Technology in two sites including a small patch of VII seam in one of the sites of West Bokaro Mine of M/s Tata Stell Ltd.	M/s. Tata Steel Ltd. West Bokaro Division, Ghatotand, Dist- Ramgarh, Jharkhand- 825314	Dr. Prabhat Kumar Mandal, Nilabjendu Ghosh
47	Scientific study and advice on slope stability of highwall and pad design at sector-A (Panel-G, PCP-3 area) in quarry AB of West Bokaro Collieries	M/s. Tata Steel Limited, West Bokaro Division, Ghatotand, Dist- Ramgarh, Jharkhand- 825314	Dr. Sanjay Kumar Roy, Anand Singh

48	Advice for blast designs and prediction of blast vibration using numerical simulation for initial mining operation at Gare IV/2 and IV/3 Coal Mine of M/s Jindal Power Limited and subsequently optimization of blast design parameters using experimental trials considering the safety of nearby houses/structures.	Jindal Power Limited Gare IV/2 and IV/3 Coal Mine, Dongamouha, Raigarh, Chhattisgarh- 496108	Dr. R. K Paswan, Vivek Kumar Himanshu
49	Advice for blast vibration prediction along with initial blast design for commencement of mining operation at Kalamang West Iron Ore Mine of M/s Tata Steel Limited and subsequently optimization of blast design parameters based on actual trial conducted at the mine site.	M/s. Tata Steel Limited Block 4, General Office, Kalinganagar, Duburi, District- Jajpur, Pin - 755026, Odisha	Vivek Kumar Himanshu, Dr. R. K Paswan, Dr. Murari Prasad Roy
50	Scientific Study and Advice on Pit and Dump Slope Stability of Tubed Coal Mine of Damodar Valley Corporation (DVC).	M/s. Develcto Mining Limited Tubed Coal Mine (DVC), Door No.- 04, Plot No.- 232, Tapakash, Latehar, Jharkhand, Dist- Latehar, Pin- 829204	Anand Singh, Dr. Sanjay Kumar Roy
51	Advice for optimization of blast design parameters at Bayal Quartz & Feldspar Mines to control ground vibration and air overpressure within safe limit for the safety of surrounding houses/structures beyond 100m with improved production and productivity	Bayal Quartz and Feldspar Mines Hoda, Narnaul, Mahendragarh, Haryana- 123001	Dr. Murari Prasad Roy, R. S. Yadav, Prof. A. K. Mishra
52	Scientific study and advice on slope stability of dumps and pits of Donimalai iron Ore Mine (DIOM) and Kumaraswamy Iron Ore Mine (KIOM) of NMDC Ltd.	NMDC Limited Donimalai Iron Ore Mine, Donimalai Township-583118 Dist: Bellari, Karnataka Pin- 583118	Rakesh Kr. Singh, Dr. Sanjay Kumar Roy

53	Scientific study for assessment of blasting impacts on the surrounding environments and advise for designing of controlled blasting patterns at Kolmomp Iron & Mn Mines of M/s Yazdani Steel and Power Ltd. Odisha.	Green Force Associates Private Limited Plot No. 1363-3892, Baibhab Realcon, Fulnakhara, Cuttack, Odisha, India, Pin- 754001	P. Hembram, Dr. C. Sawmliana
54	Scientific study and advise for development of controlled blast design patterns within danger zone of 500 m at Jamkhani Coal Mine of M/s Vedanta Limited [MDO: BGR Mining & Infra Limited]. Sundargarh, Odisha.	M/s.BGR Mining & Infra Ltd., Jamkhani Coal Mines of Vedanta Ltd., Bileimunda, Hemgir Taluka, Luabahai, Sundargarh, Odisha-770024 District: Sundargarh, Pin- 770024	Dr. C. Sawmliana, Prof. A. K. Mishra
55	Advice on Scientific Study for Liquidation Plan in Underground mine at Gare-Palma IV/4, Milupara, Hindalco Industries Limited.	Hindalco Industries Limited Sunil Choudhary Hindalco Industries Limited, Gare Palma IV/4 UG Coal Mine, Village- Bankheta, PO- Milupara, Chhattisgarh- 496107	Niraj Kumar, Dr. Rakesh Kumar
56	Scientific study and advice on slope stability analysis of pits and dumps at Nadidihi Iron & Manganese Ore Mine of M/s ESL Steel Ltd.	ESL Steel Limited Nadidihi Iron & MN, Mine-BICO-At/PO Barbil, Main Road, Odisha- 758035, India, Dist- Keonjhar, Pin- 758035	Dr. Sanjay Kumar Roy, Kartik Varwade
57	Scientific study and advice on slope stability analysis of pit internal dump and external dump of Chatti Bariatu Coal Mining Project.	Chatti Bariatu Coal Mining Private Limited CBCMPL, Shiv Nandan Estate 2, Flat No- 501, Fifth Floor, Haranganj Rd, Hazaribag, Jharkhand, 825301 District- Hazaribag Pin- 825301	Rakesh Kr. Singh, Dr. Sanjay Kumar Roy
58	Scientific study and advice on slope stability analysis of pits and dumps of Gare Palma IV/2 and IV/3 Coal Mine.	Jindal Power Limited Village- Dongamouha, District- Raigarh (C.G)- 496108 District- Raigarh Pin- 496108	Dr. Sanjay Kumar Roy, Anand Singh
59	Advice on three-dimensional subsidence prediction pertaining to Gondbahera Ujheni Coal Block, Singrauli, Madhya Pradesh.	MP Natural Resources Pvt. Ltd., Survey No. 1992-2-2, Daga Bargawan, District- Singrauli- 486886,	Dr. Amar Prakash, Dr. Sujit Kr. Mandal

60	Scientific Study and Advice on Geotechnical Aspect and Slope Stability of Surkha (North) Lignite Mine, GMDC Ltd., Bhavnagar, Gujarat.	GMDC, Lignite Project Bhavnagar, Gujarat The General Manager (Project), GMDC Limited, Lignite Project, Bhavnagar, Village- Tagdi, P.O- Malpar, District: Bhavnagar, Pin- 364002	Dr. Ritesh Kumar, Dr. Sanjay Kumar Roy
61	Scientific Study and Advice on Slope Stability for Pit and Dumps of kalamang West (Northren Part) Iron Ore Mine of M/s Tata Steel Ltd.	Tata Steel Ltd. Kalamang & Gandhalpada Office, Near V.T Centre, P.O. Joda, Keonjhar, Odisha- 758034	Anand Singh, Dr. Sanjay Kumar Roy
62	Advise on three-dimensional subsidence prediction due to underground coal mining for Marwatola VII Coal block at Umaria district, Madhya Pradesh	Rama Cement Industries Private Limited GK-1, Ground Floor, Rama Port, Main Road Vyapar Vihar, Bilaspur, Chhattisgarh- 495001	Dr. Amar Prakash, Dr. Sujit Kr. Mandal
63	Advice on 'Vetting of Detailed Design and Drawings of Tunnels T1 to T5 (Main tunnel, escape tunnel, adits, shafts and associated works) in Yavatmal- Nanded Section of New B.G line	Rail Vikas Nigam Limited. Project Director, RVNL, 2 Floor, CONCOR Container Depot Railway Premises, Sundervan Layout, Nagpur Place of Supply: Maharashtra- 440015	Dr. More Ramulu, Dr. Partho B. Choudhury

Technical Service Projects (TSP)

Sl No.	Title	Sponsors Name and Address	Project Leader
1	Inspection of factory as required for the first time manufacturing of Flameproof equipment for use in hazardous area	M/s Onus Equipments Pvt Ltd. Plot No. 51, Road No.3 Sector 1/S, Behind Cidco Office New Panvel (E), Navi Mumbai, Maharashtra - 410206, India	Dr. Pankaj Kr. Mishra
2	Study the condition of different wire rope used for winding at Jitpur Colliery SAIL	SAIL SAIL - Collieries Division, Jitpur Colliery, P.O: Jitpur, Distt: Dhanbad - 828309	Dr. Mousumi Mallick, Dr. Manoj Kr. Singh
3	Evaluation and advice on the present condition of haulage rope of Pushkar Ropeway site, Pushkar, Rajasthan	M/s Damodar Ropeway & Infra Ltd. Savitri Devi Mandir, Parikarama Marg, Pushkar, Ajmer, Rajasthan - 305022	S. Waghmare, Dr. Debasish Basak
4	Evaluation and advice on the present condition of haulage rope of mono-cable passenger ropeway at Science City, Kolkata, West Bengal.	M/s Damodar Ropeways & Infra Ltd., Constantia Building, 8th Floor, Wing-A 11, Dr. U.N. Brahmachari Street. Kolkata-700017	S. Waghmare, Dr. Debasish Basak
5	Evaluation and advice on the present condition of haulage rope of fixed grip mono-cable passenger ropeway at Digha, dist. Purba Medinipur, West bengal.	M/s Damodar Ropeways & Infra Ltd., Amarawati Park, New Digha, W.B 721428	S. Waghmare, Dr. Debasish Basak
6	Assessment and advice on the present condition of haulage rope of cable car and ropes of sky driver Ride at Nicco parks & Resorts limited at Salt Lake, Kolkata, West Bengal.	M/s Nicco Parks & Resorts Ltd., Jheel Meel, Sec-IV, Salt Lake City Kolkata-700106, India.	S. Waghmare, Dr. Debasish Basak
7	Study the condition of vital components of winding system and wire rope.	M/s Indian Metals and Ferro Alloys Limited Mahagiri Mines (Chromite) PO: Kalipani Jajpur Place of supply: Odisha 755028	Dr. Mousumi Mallick, Dr. Manoj Kr. Singh
8	Destructive test of four winding rope cut piece samples drawn from 400KW double drum winder installed at Turamdih Mines.	G. M., Turamdih Group of Mines, Uranium Corporation of India Limited, Turamdih Sundarnagar, East Singhbhum, (Jharkhand) PIN No.: 832107	Dr. Mousumi Mallick, Dr. Manoj Kr. Singh

9	evaluation and advice on the present condition of haulage rope of shri Naina Deviji Monocable Ropeway at Shri Naina Deviji, H.P.	M/s Ganpati Ropeways Pvt. Ltd., Suite 4 B, 4th Floor, 14 b Camac Street, Kolkata-700017	S. Waghmare. Dr. Debasish Basak
10	Inspection of factory as required for the first time manufacturing of Flameproof equipment for use in hazardous area.	M/s Aqua Machineries Private Limited, S.No. 504/1/2, Near hari Darsham Estate, Near Express Hihgway, Ramol, Ahmedabad, Gujarat- 382445	Manoj Kr. Vishwakarma, Dr. Awanindra Pratap Singh
11	Inspection of factory as required for the first time manufacturing of Flameproof equipment for use in hazardous area.	M/s Victory Luminaires 35-B, Mahal Industrial Estate Mahakali Caves Road Andheri (East) Dist: Mumbai,400093	Biswajit Modak, Dr. Awanindra Pratap Singh
12	Evalution and advice on the present condition of haulage rope and track ropes of passenger ropeway from Bhawan to Bhairon Ghati, Katra, Jammu & Kashmir.	M/s Damodar Ropeways & Infra Ltd., Mata Vaishno Devi Ropeways, Katra, Jammu & Kashmir, Dist- Reasi- 182320	S. Waghmare, Dr. Debasish Basak
13	Inspection of factory M/s. ray Flameproof Pvt. Ltd, New Delhi as required for the first time manufacturing of Flameproof equipment for use in hazardous area.	M/s. Ray Flameproof Pvt. Ltd. G1- 519, Riico Insdustrial Area, Bhiwadi Alawar, Place of Supply: Rajasthan- 301019	Dr. Rakesh Kr. Mishra, Dr. Awanindra Pratap Singh
14	Inspection of factory M/s. Abdex Flameproof Pvt. Ltd., Valsad, Gujrat as required for the first time manufacturing of Flamepoof equipment for use in hazardous area.	M/s. Abdex Flameproof Pvt. Ltd, Plot No. 318/2, 40 Shed Area, GDIC, Vapi, Valsad, Gujarat Place of Supply: Gujarat- 396195	Manoj Kr. Vishwakarma, Dr. Awanindra Pratap Singh
15	Study to Estimate Physico-mechanical properties of rock core samples of BGRL, Maharashtra	GUAHATI UNIVERSITY Department of Geological Sciences Guwahati- 781014, Dist: Guwahati, Assam	John Buragohain, Dr. Manoj Kumar Singh
16	Evaluation and advice on the present conditon of haulage rope of Maa Taratatini Passenger Ropeway, Ganjam, Odisha	M/s Usha Breco Limited Tara Tarini Ropeway, Post- Tara Tarini Hills Village Gobindpur, via- Purushottampur, Dist- Ganjam- 761018	S. Waghmare, Dr. Debasish Basak

17	Inspection of factory M/s . Pyrotech Electronics Pvt. Ltd., unit-1, Udaipur, Rajasthan as require for the first time manufacturing of Flameproof equipment for use in hazardous area.	M/s Pyrotech Electronics Pvt. Ltd. Unit-1, F-16A road No. 3, MIA, Madri Udaipur-313003, Rajasthan, India.	Biswajit Modak, Dr. Awanindra Pratap Singh
18	Inspection of factory M/s Brilliant Engineerrs Haryana, as required for the first time manufacturing of Flameproof equipment for use in hazardous area.	M/s Brilliant Engineers 4Km-Jind-Panipat Road Jind-126102, Haryana	Manoj Kr. Vishwakarma, Dr. Awanindra Pratap Singh
19	Assessment and advice on the present condition of haulage rope of Bi-cable Jig back Double Reversible Material Ropeway between Siar Dabri to Bhawan at Katra, Jammu & Kasmir.	Shri Mata Vaishno Devi Shrine Board, Katra, Central office, Dist- Reasi, J&K- 182301	S. Waghmare, Dr. Debasish Basak
20	Inspection of factory M/s. Nishtha Switch Gear, Vapi (Gujarat) as required for the first time manufacturing of Flamerproof equipment for use in hazardous area.	M/s. Nishtha Switch Gear, 1205/E, III Phase, G.I.D.S, Vapi, Gujarat- 396195	Dr. Rakesh Kr. Mishra, Dr. Awanindra Pratap Singh
21	Assessment and advice the present conditionof haulage ropes of passenger cable car between peerkho to Mahamaya (Sec-I)and Bahu to Mahamaya (Sec-I), of Makhdoom Sahab Ropeway Project at Jammu & Kashmir	M/s J & K Cable Car Corporation Jammu Ropeway Project, Mini-TRC Building, Peerkho-180015 Jammu & Kashmir	S. Waghmare, Dr. Debasish Basak
22	Assessment and advice the present condition of haulage ropes of detachable grip mono cable passenger ropeway at Maihar, M.P.	M/s Damodar Roprways & Infra Ltd., 11, Dr.U.N. Brahmachari Street Constantia Building, 8th Floor, Wing-A, Kolkata-700017 W.B	S. Waghmare, Dr. Debasish Basak
23	Inspection of factory of M/s. Hirpara Metal Products, Jamnagar as requirred for the first time nanufactring of flameproof equipment for use in hazardous area	M/s. Hirpara Metal Products, Plot No. 1A, Survey no. 85/1, GDIC Phase- III, Next to Plot No. 3031/2, Dared, Jamnagar- 361004	Manoj Kr. Vishwakarma, Dr. Awanindra Pratap Singh

24	Inspection of factory of M/s Vaishnavi Metal Products Corporation Private Limited, Jamnagar, Gujarat as required for the first time manufacturing of Flameproof equipment for use in hazardous area	Mr. G. Ghosh Dastidar, Head-Business Development, M/s. Vaishnavi Metal Products Corporation Private Limited, Plot No- 237-238, Vision Industrial Park, Changa, Jamnagar, Gujarat- 361012	Biswajit Modak, Dr. Awanindra Pratap Singh
25	Inspection of factory of M/s Capart industries private Limited, Hyderabad as required for the first time manufacturing of Flameproof equipment for use in hazardous area.	M/s Capart Industries Private Limited Plot No:17/B, Phase-1, I.D.A. Jeedimetla, Hyderabad-500055	Manoj Kr. Vishwakarma, Dr. Awanindra Pratap Singh
26	Study the condition of different winding ropes size of Chasnalla Division.	GM (P & CC), Centralised Collieries Contract Cell SAIL Collieries Division, Chasnalla Colliery PO-Chasnalla, Dist: Dhanbad, 828135 Jharkhand	Dr. Mousumi Mallick, Dr. Manoj Kr. Singh
27	Study the condition of 26mm winding rope samples drawn from 400KW double winder at Uranium Corporation of India Limited, Turamdih Mines	G.M., Turamdih Group of Mines, Uranium Corporation of India Limited, Turamdih, Sundarnagar, East Singhbhum, Jharkhand-b 832107	Dr. Mousumi Mallick, Dr. Manoj Kr. Singh
28	Assessment of one no. Flameproof EOT Crane of 5 Tonne capacity, 18.00 MtrSpan, 36.0 mtr bay Length, Pendant operated make m/s Dinesh Enterprises, Kalyan.	M/s Dinesh Enterprises 401/A, Vrundavan, Murbad rd, Kalyan (W) Thane Place of Sppl: Maharashtra 421304	Manoj Kr. Vishwakarma, Dr. Awanindra Pratap Singh
29	Assessment and advice on the present condition of haulage rope of Rajgir ropeway, Rajgir, Bihar.	M/s Conveyor & Ropeway Services pvt. Ltd., 75-C, 6th Floor, park Street Kolkata, West Bengal-700016	S. Waghmare, Dr. Debasish Basak
30	Assesment and advice on the present condition of haulage rope of Hanumandhara Ropeway at Chitrakut, M.P.	M/s Damodar Ropeways & Infra Ltd., Hanuman Dhara Chitrakoot Dist: Satna-485334	S. Waghmare, Dr. Debasish Basak
31	Study to Estimate Physico-mechanical properties of rock core samples of BH# AEL26, BH# AEL28, BH# AEL30, BH# AEL35, of Suliyari Coal Block, Singrauli Madhya pradesh	Adani Enterprises Limited, Vill-Aamdand, Jheleri, Majholipath & Seerswah, Dist- Singrauli, Madhya Pradesh- 486886	John Buragohain

32	Performance evaluation of different size wire rope used in winder at Surda Mines HCL	Maheshwari Mining Pvt. Ltd. Surda Mines HCL/IC, P.O- Surda Mines, Dist- East Singhbhum, Jharkhand- 832303	Dr. Mousumi Mallick, Dr. Manoj Kr. Singh
33	Study and performance evaluation of different size winding ropes used in Tata Steel, Jharia.	M/s Tata Steel Limited, Jamadoba Group Plant, Dist- Dhanbad, Jharkhand- 828112	Navin Kumar, Dr. Mousumi Mallick
34	Study the condition of viral components of winding system and wire rope .	Indian Metals & Ferro Alloys Limited Sukinda, Dist- Jajpur, Odisha- 755047	Dr. Surajit Dey, Dr. Manoj Kr. Singh
35	Study the condition of different size winding rope used in Hindustan Copper Limited, Ghatsila.	Maheshwari Mining Pvt Ltd., Surda Mine, HCL/IC, PO- Surda Mines Dist: East Singhbhum, Jharkhand- 832303	Manoranjan Kr. Verma, Dr. Mousumi Mallick
36	Assessment and advice on the present condition of haulage rope of Surkanda Devi Ropeway Project at Dhanaulti, Kaddukhal, Uttarakhand	M/s.Surkanda Devi Ropeway Project Co. Pvt.Ltd 30/1 THDC Colony, Dehra Khas, Dist- Dehradun, Uttarakhand- 248001	S. Waghmare, Dr. Debasish Basak
37	Assessment and advice on the present condition of haulage rope of mono cable detachable continuous ropeway at passenger ropeway at Dharamshala, Himachal Pradesh	Dharamshala Ropeway Limited 34, Civil Lines, MMR Snow Pines, Dharamshal Himachal Pradesh- 176215	S. Waghmare, Dr. Debasish Basak
38	Assessment and advice on the present condition of haulage ropes of chairlift and two ski-lifts of Garhwal Mandal Vikas Nigam Limited (GMVN), Auli, Joshimath.	Garhwal Mandal Vikas Nigam Limited 74/1, Rajpur Road, Dist- Dehradun, Uttarakhand- 248001	S. Waghmare, Dr. Debasish Basak
39	Evaluation of seismographs for their reliable operations and its calibration for accurate vibration recordings.	NMDC Limited BIOM Bachel, Complex, Dantewada, Chhattishgarh- 494553	Dr. R. K Paswan, Dr. Murari Prasad Roy
40	Evaluation of seismographs for their reliable operations and its calibration for accurate vibration recordings.	Indian Oil Corporation Limited BDG Explosive Block- II Plant, P.O- Nandkhurkee, Dhanbad, Jharkhand- 828307	Dr. R. K Paswan, Dr. Murari Prasad Roy
41	Evaluation of seismographs for their reliable operations and its calibration for accurate vibration recordings.	Steel Authority of India Limited DGM (Min)/ Colliery Manager, Ramnagore Colliery, Steel Authority of India Limited, West Bengal- 713324	Suraj Kumar, Dr. Murari Prasad Roy

42	Assessment and advice on the present condition of haulage rope of DRV passenger ropeway at darjeeling, West Bengal	M/s Conveyor & Ropeway Services Pvt. Ltd., 75-C park Steet, 6th Floor Dist: Kolkata PIN-700016	S. Waghmare, Dr. Debasish Basak
43	Assessment and advice on the present condition of haulage rope of i. maa Vijayasan Deviji Ropeway Salkanur, sehore, M.P. ii. Narmada Ropeway, bedhaghat, jabalpur, M.P.	M/s Conveyor & Ropeway Services Pvt. Ltd., 75-c park Street, 6th floor Dist- Kolkata Pin-700016	S. Waghmare, Dr. Debasish Basak
44	Inspection of factory of M/s. FCG Flameproof Control Gears (India) Pvt. Ltd. Vapi, Gujarat as required for the first time manufacturing of Flameproof equipment for use in haxardous area.	M/s. FCG Flameproof Control Gears (India) Pvt. Ltd Plot No. 199, Phase II, GIDC, Vapi, District: Gujarat Pin- 396195	Dr. Rakesh Kr. Mishra
45	Study to Estimate Physico-mechanical properties of rock core samples of BH # CMBDP-58 of Dewanganj Harinsingha Deocha Pachami Coal Block of Birbhum Coalfield	CMPDIL R I -I West End, G.T. Road, Asansol- 713304 District: Burdwan Pin- 713304	Pappu Rabidas, John Buragohain
46	Study to Estimate Physico-mechanical properties of rock core samples of BH # CMBDP-20 of Dewanganj Harinsingha Deocha Pachami Coal Block of Birbhum Coalfield	CMPDIL R I-I West End, G.T. Road, Asansol District: Burdwan West Bengal-713304	Pappu Rabidas, John Buragohain
47	Study to Estimate Physico-mechanical properties of rock core samples of BH # MKNA-30 of Batati-Kolga NE-A blok (MOU/Non-CIL), Mandraigarh Coalfield	CMPDIL The HOD (Exploration), CMPDIL, Regional Institute- V, CMPDI Complex, Bilaspur- 495006, (Chattisgarh), District: Bilaspur Pin- 595006	Pappu Rabidas, John Buragohain

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TRAINING PROGRAMS

Executive Development Programmes / Skill Development Programmes

A 03-Days Refresher Course cum Upskilling program on “Coal Quality Up-gradation, Sampling, and Preparation for Industrial Application” [CMP-2023] was organised for 08 officers of Hindalco Industries Limited at Digwadih Campus during 2nd May to 4th May, 2023.



“Coal Quality Up-gradation, Sampling, and Preparation for Industrial Application” [CMP-2023]

A Skill Development Programme on “Mechanical Safety in Mines” for 15 students of B. Tech (Mechanical Engineering) was organized during 28 June, 2023 to 27 July, 2023.



“Mechanical Safety in Mines”

An Executive-cum-Skill Development Programme on "Recent Advances in Mines Fire, Ventilation and Miner's Health" was organized *from 11th to 15th September, 2023*. In the inaugural session Shri Ujjwal Tah, Deputy Director General (Headquarters), Directorate General of Mine Safety was present as the Chief Guest on this occasion. The aim of the course was to provide updates on new technologies, equipment and latest advances in mine fire, ventilation and miners health. 38 delegates from ECL, CCL, BCCL, SECL, OCPL, Tata Steel, SAIL, Gainwell Comoseles, SCCL and MCL participated in this programme.



"Recent Advances in Mines Fire, Ventilation and Miner's Health"

A Skill-cum-Entrepreneurship Development Program on "An IoT based automation for energy efficient mining system" was organized from 04th to 08th December, 2023. With the aim of developing entrepreneurial thinking along with skill development among the participants, this program provided information about the potential of tools and technologies to create employment. Mr. Abhishek Mitra, CEO and Co-Founder, Indian Cyber Security Solutions also addressed the participants. 21 B.Tech (CSE), B.Tech (IT) and B.Tech (Mining) and B.Tech (ECE) students from NIT, Raipur; BIT, Sindri; UCET, Vinoba Bhawe University, Hazaribagh, Guru Gobind Singh Educational Societies, Technical Campus, Bokaro Steel City, Techno India University, Kolkata and VIT, Vellore and 07 officers and project assistants from CIMFR were participated.



"An IoT based automation for energy efficient mining system"

Under CSIR Integrated Skill Initiative, a **skill development program on "Analytical Chemistry and its Application in Soil and Water Analysis"** was organized at the Digwadih campus of this institute during the period from 11 December 2023 to 15 December 2023, with the aim to collectively create awareness in the field of analytical chemistry and its application on soil and water analysis, to enhance infrastructure and empower farmers with the knowledge and tools required for effective soil health management. On this occasion, Dr. Kavita Singh, Principal of P.K. Roy Memorial College was present as the Chief Guest. In this program practical training sessions on various topics like sampling techniques, sample preparation, quality assurance, data analysis and interpretation was also conducted. 20 M.Sc. students of Chemistry and Environmental Science from various colleges and universities of this state were participated in this program.



"Analytical Chemistry and its Application in Soil and Water Analysis"

Vocational/Project Training

During the said period, vocational/project training were organised for postgraduate (PG) and undergraduate (UG) engineering and science students as per their academic requirement. Students from various colleges/universities like: Dr. S.P. Mukherjee University; Tripura University; Visva-Bharati University; NIT, Patna; Vellore Institute of Technology; Techno India University, West Bengal; BIT Sindri, Dhanbad, Banasthali Vidyapeeth, Rajasthan etc. A total of 130 (34 PG Science /Engineering, 96 UG Science/Engineering) of various streams like B.Tech. (Computer Science & Engineering), M.Sc. (Geology), B. E. / B. Tech. (Mining Engineering), M.Tech. (Civil Engineering), M.Sc. (Microbiology), B.Tech. Chemical Engineering/Biotechnology/ECE etc. were benefited from the vocational/project trainings.

Other events organized by HRD Department

Apart from the above, 30 students of class 8th to 10th of Dhanbad City School, Dhanbad along with 3 teachers visited various laboratories of this institute on 11th April 2023.

28 students of M.Sc. Final Year (Applied Geology) along with 02 faculty members of Jadavpur University visited the Institute's Barwa Road Campus and Digwadih Campus on 24.01.2024 and 25.01.2024 respectively.

For the purpose of Knowledge Sharing & Knowledge management, **239** scientists, technical officers and staff of this Institute were facilitated to participate in various national and international conferences/seminars/ workshops.

JIGYASA: STUDENT-SCIENTIST CONNECT PROGRAMS

The following events were organized under the **CSIR-Jigyasa : Student-Scientist Connect program** during the year 2023-24:

Four number of workshops were organized on **“Artificial Intelligence and its Role in Educational Excellence: Beginning of a New Era”** on 6th November 2023 for 53 students of class 11th & 12th at Kendriya Vidyalaya, Dhanbad-1; on 8th November 2023 for 56 students of class 8th, 9th & 10th at Sanskriti Vidya Mandir, Digwadih; on 10th November 2023 for 50 students of class 7th, 8th, 9th & 10th at Eklavya Madhyamik Vidyalaya, Saharaj, Govindpur and on 22nd December 2023 for 81 students of class 10th at Upkramit Uchch Vidyalaya, Kashiayatand.



“Artificial Intelligence and its Role in Educational Excellence: Beginning of a New Era”

A two-day **DIY Workshop** on **“Basic Electronics”** and **“Artificial Intelligence : its Role in Academic Excellence”** was organised for 270 students from Class 9th to 12th at Jawahar Navodaya Vidyalaya, Koderma on 19-20 December, 2023.



“Basic Electronics” and “Artificial Intelligence: its Role in Academic Excellence”

A two-day workshop on **“3D Printing”** was organized at CSIR, CIMFR, Barwa Road, Dhanbad during 01-02 February, 2024 for 42 students of H.E. School, Hirapur; Upkramit Uchch Vidyalaya, Kashiayatand; Sanskriti Vidya Mandir, Digwadih; Kasturba Gandhi Balika Vidyalaya, Baliapur; Kasturba Gandhi Balika Vidyalaya, Jharia with the aim to apply 3D printing to promote personalized learning, creativity and research and to improve academic performance .



"3D Printing"

CSIR-CIMFR, Dhanbad organised **"Third Tribal Pride Day Celebration"** at Eklavya Secondary School, Saharaj, Govindpur, Dhanbad on November 22, 2023. On this occasion a talk on **"Sickle Cell Anaemia : Past, Present and Future"** by Dr. G.R. Chandak, Chief Scientist and J.C. Bose Fellow, CSIR-CCMB was webcasted in which total 144 students and 06 teachers actively participated.



"Third Tribal Pride Day Celebration"

Qualification Upgradation

The following member of the Institute was awarded the PhD degree during this period:

Name and Designation	Title of PhD Thesis	Institute (where PhD was completed)
Dr. Kshitindr Kumar Singh Sr. Technical Officer	Geochemical characterization and statistical correlation of physico-chemical parameters of groundwater resources of Pantnagar area of Uttarakhand	Kumaon University, Nainital

Awards

Ministry of Coal, Government of India through Central Mine Planning and Design Institute Limited (CMPDIL) organized a Hackathon for R&D problem statements on 03rd October, 2023 at CMPDI (HQ), Ranchi with an aim to promote creativity and innovation by providing a platform to the participants to think out of the box and develop innovative solutions to the real challenges faced by Coal India Limited and the mining industry. The Institute bagged two awards in this Hackathon – Dr. Vivek Kumar Himanshu, Senior Scientist and Dr. Murari Prasad Rai, Chief Scientist were awarded for “Remedy for Cracks in Structures”. Dr. Krishna Murari Prasad Singh, Principal Scientist was awarded the 1st runner up award under the problem statement “Technology to detect the effect of blasting on propagation of cracks in structures” while Dr. Krishna Murari Prasad Singh, Principal Scientist was awarded the 2nd runner up award under the problem statement “Technique for efficient management of coal grade monitoring system”. They received this award from the hands of Shri Amrit Lal Meena, Secretary, Ministry of Coal, Government of India and Shri P.M. Prasad, Chairman, Coal India Limited.

Dr. R.D. Dwivedi, Chief Scientist, was awarded the Excellence in Performance Award by the ISRM-TT for his outstanding contribution in the field of Rock Mechanics and Tunnel Engineering. Apart from this, he also received the Best Paper Award for his paper titled “Portal Design of Z-turn Tunnel in Weak Ground” published in Indorock 2019 .

Dr M N Bagde has been appointed as an Associate Editor of the Arabian Journal of Geosciences.

Dr. M. S. Santosh, Senior Scientist was selected as Member of the National Academy of Sciences (NASI), Allahabad, India. He was elected as Fellow of the Royal Society of Chemistry (FRSC) and also received recognition as Ignition Grant Project from the US-India Science and Technology Endowment Fund.

Dr. Vivek Kumar Himanshu, Sr. Scientist received Abheraj Baldota Memorial Gold Medal Award (Young Mining Engineer of the Year 2022) from Mining Engineers Association of India (MEAI), Hyderabad on August 25, 2023 at Ahmedabad.

Dr. Pallabi Das, Senior Scientist received prestigious SERB-SIRE Fellowship to pursue research on photocatalytic membranes in University of Connecticut, USA. She also received the prestigious PROWIS Fellowship awarded by CEPIFRA to pursue research on 3D printed membranes in European Institute for Membranes France.

Mr. Ashish Kumar Vishwakarma received SERB International Travel Grant for presenting a paper at 50th ISEE conference at Savannah, Georgia, United States of America.

Dr. Aditya Rana, Sr. Scientist, received Vishwakarma Award from CIDC NITI Aayog on 10 April 2023. He also received the Director General Border Roads' Commendation Card from the Border Roads Organization, Ministry of Defense, Govt. of India for his outstanding contribution and the award came with a letter of appreciation.

Dr. R. D. Dwivedi, Chief Scientist & HoS, Delivered a keynote lecture on "Tunnelling in Himalaya: A Case Study" in 9th Indian Rock Conference-INDOROCK 2023 during 16-18 Nov, New Delhi, pp. 53-58.

Dr. J. K. Mohnot, Chief Scientist & HoRG, Delivered a keynote lecture on "Challenges and Suitability of Solution Mining Technique for Deep-Seated Potash Deposit in North-West Rajasthan", 4th International Conference on Advanced Technology in Exploration and Exploitation of Minerals, during 8-10 January 2024, Jodhpur, pp. 25-30.

Two officials of CSIR-CIMFR, Dhanbad were awarded the first prize under the "Best Official Language Implementation in the Office" category in the meeting of *Nagar Rajbhasa Karwanyayan Samiti* (NARAKAS), Dhanbad held on 24th November, 2023 at IIT-ISM.

Honours

Prof. Arvind Kumar Mishra, Director

- ❖ Vested with Additional Charge of CSIR-NEIST, Jorhat for the period from 10th January to 25th February, 2024.
- ❖ Listed among the top2% scientists in the world by Elsevier.

Dr. Pradip Kumar Banerjee, Outstanding Scientist

- ❖ Delivered Keynote Lecture on 'Future Role of Coal in Decarbonisation Strategy of Indian Metallurgical Industries ' at the International Conference on (ICPMMM 2024) organised by National Institute of Technology (NIT) Durgapur and KNU-IIM Student Chapter, Kazi Nazrul University, Kolkata held during 28-29 March 2024
- ❖ Delivered lecture on "Conversion of Coal to Clean Fuel" in the National Seminar (GMI-IMP 2024) on "Green Mining Initiatives - Indian Mineral Industry Perspective" organized by Indian Association of Mine Managers (IMMA) Nagpur Branch during January 13-14, 2024 at Hotel Tuli International, Nagpur.
- ❖ Presented Invited lecture in the National Conference on "Clean Coal Technologies for Decarbonisation of Metallurgical Industries" organized by Hindalco Industries Ltd. in collaboration with IIM-ATM at KIIT, Bhubaneswar during November 22-24, 2023.

Dr. J. K. Mohnot, Chief Scientist

- ❖ Delivered the keynote lecture on "Challenges and Suitability of Solution Mining Technology for Deep-seated Potash Deposits in North-West Rajasthan" in the 4th International Conference on Advanced Technologies in Exploration and Exploitation of Minerals held at Jodhpur during 8-10 January 2024.

Dr. J. C. Jhanwar, Chief Scientist

- ❖ Delivered a lecture on "Scientific pit slope management in Indian mines" in the International Conference on "Mining: Vision 2047" organized by Mining Engineers Association of India (MEAI), Ahmedabad Chapter from 25th to 27th, August 2023.
- ❖ Delivered a keynote lecture on "Safe and optimal extraction of minerals from opencast mines through scientifically implemented pit slope management" in the 4th International Conference on "Advanced Technologies for Exploration and Exploitation of Minerals" organized by MEAI, Jodhpur during 8-10 January, 2024.
- ❖ Delivered a lecture on "Slope stability in opencast mines in India – Scientific and Practical Perspective" in the National Workshop on "Theory and Practice in Rock Mechanics Design Applications for Mining and Infrastructure Industry" held during 16-20 January, 2024 at VNIT Nagpur.

Dr. D. Basak, Chief Scientist

- ❖ **Member (Organizational/National/International Committees)**
 - "Continuous Bulk Conveying, Elevating, Hoisting and Ropeways and Related Equipment Sectional Committee, MED-06" – Member.
 - "Wire Ropes & Wire Products Sectional Committee, MED-10" Alternate Member -.

❖ **Member (Editorial)**

- "Editorial Board of "Amity Journal of Operations Management (AJOM)
- Editorial Team of "Journal of Mechanical Engineering Research (JMERE)"

❖ **Reviewer in the following International Peer-Reviewed Journals**

- Information sciences
- & NDTE International
- Global Advanced Research Journal of Engineering, Technology and Innovation
- Educational Research
- Mechanical Engineering Research
- The European Journal of Finance
- Materials Evaluation

Dr. More Ramulu, Chief Scientist

- ❖ Nominated as member of the Frag.blast International Organising Committee (FIOC)

Dr. Avtar Krishna Raina, Chief Scientist

- ❖ Nominated as a Session Chair at the International Conference on Safe, Smart and Sustainable Mining (3SM) organized by IIT ISM on 16-18 December 2023 at Margao, Goa.
- ❖ Under his guidance the following two professionals received PhD degree from IIT-ISM Dhanbad in the year 2023:
 - Mr. Lalit Chauhan, Senior Manager, UltraTech Cement Limited, Kotputli, Rajasthan on the topic "Modeling the Collision Process in Different Firing Patterns in Surface Blasting and its Implications on Rock Fragmentation and Ground Vibration" and
 - Mr. Parvez Alam, Senior Manager, MECL, Nagpur on the topic "Determination of Coring Characteristics in Relation with Physical Properties of Rocks to Investigate the Influence of These Text Rock Properties on Regret Achievement for Edinburgh Selection of Coring Machines"

Dr. R. D. Dwivedi, Chief Scientist

- ❖ Delivered Keynote Lecture on "Tunneling in the Himalayas: A Case Study" at 9th Indian Rock Conference-Indorock 2023 held during 16-18 November in New Delhi.

.DrPrakash D. Chavan, Chief Scientist

- ❖ Lecture delivered on "Commercial Scale Coal Gasification – Lessons Learnt and R&D Needs" at the 14th Edition of Conference & Expo – Gasification India 2023, held on 19 - 20 October 2023 at NDMC Convention Centre, New Delhi .

Dr. Manoj N. Bagde, Senior Principal Scientist

- ❖ Appointed as Associate Editor to the Editorial Board of Arabian Journal of Geosciences (Springer).(Nature publication

Dr. D.K. Sakhre, Senior Principal Scientist

- ❖ Was as one of the judges for the presentation on techniques for efficient management of coal grade monitoring system in the R&D Problem Statement 5 of Hackathon held on 05th September, 2023 at CMPDI, Ranchi.

Dr. Harsh Kumar Verma, Senior Principal Scientist

- ❖ Delivered invited expert lecture on the topic "Tunnel / Cavern Blast Design Case Study" in the Professional Development Programme on "Modern Techniques and Practices in Hydroelectric Project Construction" organised at IIT (ISM) Dhanbad for NHPC Officers from 21st to 25th August, 2023.

Dr. R. Ebhin Masto, Senior Principal Scientist

- ❖ Listed among the top 2% scientists in the world by Elsevier.

Dr. Chandrani Prasad Verma, Senior Principal Scientist

- ❖ "Delivered a technical lecture on "Harnessing Mineral Resources – Opportunities and Challenges as a speaker on 22 September 2023 at the CSIR Session of the 78th United Nations General Assembly Summit held from 12 to 29 September 2023 .
- ❖ Delivered a lecture on "Design of Crown Pillar during Transition from Open Pit to Underground Mining" on 18th January 2024 in the National Workshop on "Theory and Practice in Rock -Mechanics Design Applications for Mining and Infrastructure Industry (TPRM25)" held at VNIT, Nagpur during 16-20 January 2024.
- ❖ Appointed as Chairperson of Curriculum Committee for Diploma Course "Mining & Mine Surveying of Government Polytechnic Nagpur from 7th August, 2023.
- ❖ Invited as reviewer for article "Study the Impact of Earthquake Coefficient and Slope Angle on a Gravity Dam through Numerical Simulation - A Case Study" in Current Science Journal Bangalore and technical article "Numerical Investigation into Factors Affecting Stability of Opencast Coal Mines Rise Side Highwall Slope" in Journal of Mines, Metals and Fuels.
- ❖ -Invited as External Examiner for Project Phase II Examination of 8th Semester of B.Tech Mining Engineering Students of VNIT, Nagpur.

Dr. Sujan Saha, Senior Principal Scientist

- ❖ Attended Session 3: Coal to Liquids/Value Added Products/Coal Gasification of India Energy Conclave (IEC2023) organized by Association for Sustainable Energy and Mission Vision Innovation Event on 23rd, 24th November & 2023 at SCOPE Convention Centre, New Delhi and shared his views on Coal Gasification vs Coal Properties: Indian Perspective.
- ❖ With an aim to promote coal gasification in India, Ministry of Coal, Government of India organised discussion with the industry on Scheme of Financial Assistance for Surface Coal Gasification Projects on February 16, 2024 at Taj Krishna Hotel, Hyderabad and gave a presentation as an invited speaker on the "Achievement of CSIR-CIMFR in High Ash Coal Gasification".

Dr. Krishna Murari Prasad Singh, Principal Scientist

- ❖ Under his guidance, Ms. Priyanka Kumari Ujala was awarded PhD degree by ACSIR in October, 2023.

Dr. Santosh Kumar Behera, Senior Scientist

- ❖ Delivered Guest Lecture on Paste Fill Technology on 8th February, 2024 in the International Workshop on Modern Ground-Control and Numerical-Modeling Techniques (MGNT-USE) for Underground and Surface Excavations held during 5-9th February, 2024 at National Institute of Technology (NIT) Rourkela.

Dr. Pallabi Das, Senior Scientist

- ❖ Received the prestigious SERB-SIRE Fellowship to conduct research on photocatalytic membranes at the University of Connecticut, USA and the prestigious PROWIS Fellowship awarded by CEPIFRA to pursue research on 3D printed membranes at the European Institute for Membranes, France.

,Dr. Aditya Rana, Senior Scientist

- ❖ Was awarded the Director General Border Roads Commendation Certificate by Border Roads Organisation, Ministry of Defence, Government of India.

Dr. M.S. Santosh, Senior Scientist

- ❖ Received an Ignition Grant from the U.S.-India Science and Technology Endowment Fund
- ❖ Was selected as a Fellow of the Royal Society of Chemistry (FRSC) and as a member of the National Academy of Sciences (NASI), Allahabad, India.
- ❖ Delivered an invited lecture in the prestigious ACS in January 2024 and also gave a lecture in the Young Scientists Conference under IISFF- 2023 held in Faridabad.

Dr. Vineet Balakrishnan, Senior Scientist

- ❖ Delivered a lecture on "Latest Advances in Mine Planning and Digital Solutions at National Institute of Technology, Raipur on January 11, 2023
- ❖ Made a presentation on the existing MoU between CSIR-CIMFR and NIT Raipur at the National Conference on Industry-Institute Interaction (NCII) held during 1-2 November 2023 and also discussed the possible areas of collaboration between CSIR-CIMFR with the industry representatives and academia present there

Dr. Saurav Rukhiyar, Senior Scientist

- ❖ Delivered an invited lecture on "Real Triaxial Strength Behaviour of Rocks" in a week-long STTP on "Advances in Rock Engineering" (ARE2023) (organized by IGS-Aurangabad Chapter and Department of Civil Engineering, MIT, Aurangabad during 21 to 25 August, 2023).

.Dr P. Gopinathan, Scientist

- ❖ Appointed as Associate Editor for SCI Journal: "Environmental Geochemistry and Health".

FOREIGN TOURS

A delegation from India led by Dr. N. Kalaiselvi, Director General, CSIR and Secretary, DSIR visited Russia and Belarus from 22nd May to 26th May, 2023. The delegation also included Prof. Arvind Kumar Mishra, Director, CSIR-CIMFR, Dhanbad; Prof. Manaranjan Parida, Director, CSIR-CRRI, New Delhi; Dr. P. C. Panchariya, Director, CSIR-CEERI, Pilani and Dr. Rama Swami Bansal, Head and Chief Scientist, International Science and Technology Affairs Directorate, CSIR. The main objective of CSIR-CIMFR for the visit to Russia was to sign the MoU and hold discussions for setting up of "Centre of Excellence on Intelligent Mining Systems" in collaboration with IACP FEB RAS and KhFRC FEB RAS.



Dr. Bodhisattva Hazra, Senior Scientist was on deputation to University of Kiel, Germany from September 01, 2023 to February 29, 2024 to conduct research work on "Effect of supercritical CO₂ on storage and enhanced recovery from shale". This visit was funded by SERB, DST, New Delhi under SIRE Fellowship Scheme.

Dr. Pallabi Das, Senior Scientist was on deputation to University of Connecticut, USA from 8 September 2023 to 26 February 2024 for research work on "Photocatalytic brackish water splitting with cost effective composite membrane synthesized by recycling old membrane". Her visit was funded by SERB, DST, New Delhi under SIRE Fellowship Scheme.

Dr. Ranjan Kumar, Senior Principal Scientist was on deputation to Kyoto University, Japan from January 10-30, 2024 for a bilateral project between DST & JSPS under the Indo-Japan Cooperative Science Program sanctioned by DST, New Delhi.

Mr. Ashish Kumar Vishwakarma, Technical Officer visited Savannah, Georgia, United States of America from January 24th to 27th, 2024 for attending ISEE 50th Annual Conference on Explosives and Blasting Technology and presenting a paper titled "Optimization of ring blast design for ore dilution control in underground hard shale mine using numerical simulation".

LIST OF CIMFR EMPLOYEES AS ON 31 March 2025

Outstanding Scientist

Dr. Pradeep Kumar Banerjee

Chief Scientist

Dr. J. K. Mohnot
Dr. Ashish Mukherjee
Dr. J. C. Jhanwar
Dr. Sujit Kumar Mandal
Dr. Debashish Basak
Dr. Jai Krishna Pandey
Er. Amar Nath
Dr. Prabhat Kumar Mandal
Shri Ram Lolarak
Dr. Ashok Kumar Singh
Dr. Shripal Singh
Dr. Sanjay Kumar Roy
Dr. More Ramulu
Dr. C. Swamlina
Dr. Abhay Kumar Singh
Dr. Pinaki Sarkar
Dr. Avtar Krishna Raina
Dr. John Loui Porathur
Dr. Vinod Atmaram Mendhe
Dr. Sudip Maiti
Dr. Ramadhar Dwivedi
Shri Dilip Kumbhakar
Dr. Sudipta Dutta
Dr. Prakash D. Chavan
Dr. Santosh Kumar Ray
Dr. Murari Prasad Roy
Dr. Arun Kumar Singh

Senior Principal Scientist

Dr. Manoj N. Bagde
Dr. Siddharth Singh
Dr. Lalit Kumar Sahoo
Dr. Pankaj Kumar Mishra
Dr. Uday Shankar Chattopadhyay
Dr. Devendra Kumar Sakhare
Dr. Partho B. Choudhary
Dr. Rajendra Kumar Vishwakarma
Dr. Rakesh Kumar
Dr. Manish Kumar
Mrs. Seema A. Topno
Dr. Harsh Kumar Verma
Dr. Amar Prakash
Dr. R. Ebhin Masto
Dr. Sudhir Krishna Bharti
Dr. Ashish Kumar Ghosh

Dr. Avinash Paul
Dr. Ranjan Kumar
Dr. Chandrani Prasad Verma
Dr. Sujan Saha
Dr. Rajesh Kumar
Dr. Santi Gopal Sahu
Dr. Gautam Chandra Mandal
Dr. Niroj Kumar Mohalik
Mr. Prashant
Dr. (Mrs.) V. Anguselvi
Dr. Bhagirath Ahirwal
Dr. Devdutt Mohanty
Mr. Niraj Kumar
Dr. Manoj Kumar Saini
Dr. Manoj Kumar Sethi

Principal Scientist

Dr. Avnindra Pratap Singh
Dr. Shailendra Kumar Singh
Dr. Ratnesh Trivedi
Dr. John Buragohain
Mr. Ajay Khalkho

Senior Scientist

Dr. Ritesh Kumar
Dr. Ark Jyoti Das
Dr. Santosh Kumar Behera
Dr. Pallabi Das
Dr. Prasad Bhukia
Shri Jaywardhan Kumar
Dr. Aditya Rana
Dr. Vivek Kumar Himanshu
Dr. Rajesh Kumar Meena
Dr. Bodhisatwa Hazra
Shri Debashish Mishra
Dr. Pawan Kumar Gupta
Shri Nilabjendu Ghosh
Dr. Neelratan Singh
Dr. M. S. Santosh
Dr. Bhanu Pandey
Dr. Ranjit Kumar Paswan
Dr. Vineeth Balakrishnan
Dr. Hridesh Agrawal

Dr. Saurabh Rukhaiyar
Dr. Ramakrishna Vallu
Mr. Aniket Verma
Mr. Vishal Chauhan
Dr. Apurba Sinhamahapatra
Dr. Keshav Raghuvanshi
Dr. Shweta Kumari

Scientists

Dr. S. K. Chaulya
Dr. Anil Kumar Ray
Dr. Monalisa Gangopadhyay
Dr. Firoz Ali
Dr. Arnold Luwang Usham
Dr. P. Gopinathan
Mr. Karthik Varwade
Dr. Vikram Singh
Dr. Abhay Kumar Bharti
Mr. Anand Singh
Mr. Rupesh Kumar Singh
Dr. Mrs. Aarti Sahu
Dr. Ashok Kumar Singh
Dr. Swapnil K. Warkhade
Dr. Sivaji Lahiri
Dr. Sudarshan Singh Rathore

Junior Scientist

Shri G. Muralimohan

Principal Technical Officer

Dr. (Mrs.) Archana Gupta
Dr. A. K. Raman
Shri B. R. Panduranga
Dr. Sanjay Choudhury

Senior Technical Officer (3)

Dr. (Mrs.) Madhu Jha
Mr. Kalyan Das
Dr. Prabal Boral
Dr. A. L. V. Prasad
Mr. Naresh Kumar

Senior Technical Officer (2)

Dr. Manoj Kumar
Dr. (Mrs.) Manjula Sharaf
Dr. Jitendra Kumar Singh
Mr. Rakesh Kumar Singh
Mr. Pramod Kumar
Dr. Amit Kumar Singh
Mr. Mukul Ranjan Mandal
Mr. Rajesh Laxmanrao Katley
Mr. Sanjay Kumar Thakur
Mr. Ashish Kumar Adak
Mr. Lal Babu Roy
Mr. Bishwajit Sadhukhan
Dr. Jitendra Pandey
Dr. Narayan Kumar Bhagat
Mr. Sandip Oraon
Dr. Surajit Dey
Mr. Rakesh Kumar Mishra
Mr. Kshitindra Kumar Singh
Mr. Anand Ganpatrao Sangode
Mr. Virendra Kumar
Mr. Rajiv Ranjan
Mr. Rama Shankar Yadav
Mr. Shekhar Prasad
Mr. Rana Bhattacharjee
Mr. Subhashish Tiwari
Mr. Dhananjay Roy
Mr. Vivek Singh
Mr. Birendra Kumar Sahu
Mr. Amit Jaiswal
Mr. Sanjeev Kumar
Mr. Neeraj Kumar Shukla
Mrs. Pragya K. Chayande
Mr. Arvind Kumar

Mr. Manoranjan Kumar Verma
Mr. Rakesh Kumar Singh
Mr. Shailendra Kumar Singh
Mr. Manish Kumar
Mr. Manoj Kumar Vishwakarma
Mr. Supriyo Mohanish Dhan
Dr. Gajanan Sahu
Mr. Naveen Kumar
Mr. Tarun Pramanik

Senior Technical Officer (1)

Shri Sadanand Sharma
Shri Jayant Kumar
Shri Digambar Kumar
Shri Parmanand Thakur
Shri Prasun Basu
Md. Mustaq Ansari
Shri Saroj Kumar
Shri Subhojit Betal
Shri Subhash Chandra Maji
Smt. Amrita Mantri
Dr. R. N. Senapati
Shri Pappu Ravidas
Shri B. Ravi Kumar
Shri Supriyo Das
Dr. Manas Kumar Singh

Technical Officers

Mr. Panchanan Hembram
Mr. Nikhileshwar Kumar
Mr. Suraj Kumar
Mr. Vikram Kumar Rajak
Mr. Prakash Kumar Singh
Mr. Mayank Kumar Singh
Mr. Suresh Chandra Dansena
Mr. Kunwar Ambrish Singh
Mr. Biswajit Modak
Mr. Gaurav Raghuvanshi
Mr. Saurabh Singh
Mr. Vikash Kumar
Mr. Pushpendra Patel
Mr. Kanhaiya Mishra
Mr. Abhishek Chowdhury
Mr. Pankaj Kumar
Mr. Guguloth Suresh
Mr. Abhishek Kumar Singh
Mr. K. Nageswara Rao
Ms. Ranu Ishwar Singh Bande
Mr. Sachchak Ramesh Waghmare
Mr. Amar Prakash Kaushik

Mr. Amit Kumar
Mr. Sameer Shekhar
Mr. Ashish Kumar Vishwakarma
Mr. Manish Kumar Meena
Mr. Ritu Raj Raman
Mr. Anand Shyamji Sharma
Ms. Preeti
Ms. Kumari Anjali
Dr. Surajit Das
Mr. Anand Kumar Upadhyay
Dr. Prem Kumar

Technical Assistant

Mr. Ranjit Kumar Singh
Ms. Priya Kumari
Mr. Abhishek Mahto
Mr. Amar Kumar Singh
Mr. Aditya Kumar
Mr. Subodh Kumbhakar
Mr. Vivek Singh
Mr. Prince Kumar
Mr. Neeraj Kumar Sharma
Ms. Savita Kumari
Mr. Nilesh Dhananjay Dhaigude
Mr. Saikat Banerjee
Mrs. Arshi Parveen
Md. Wahid
Mr. Sanjivan Kumar
Mrs. Perna Jaiswal
Mr. Ranjit Siddharth Rangari
Mr. Jagdeepa Oraon
Mr. Banti Kumar Dhar
Mr. Md. Mudassar Raja
Mrs. Jyoti Sharma
Mr. Om Prakash Kumar
Mr. Reddy Ganesh
Mr. Siddharth Bari
Mrs. Munmun Majhi
Mr. Devi Prasad Paikaray
Mr. Abdur Rahman
Mr. Subhay Kumar Prasad
Mr. Shiv Kumar Sao
Mr. Rakesh Kumar Rawani
Mr. Jagpathal Vinod Kumar
Mr. Anand Kumar Singh
Mrs. Sumitra Giri
Mrs. Swati Singh

Senior Technician (2)

Mr. Shyamal Kumar Ghosh
Mr. Braj Kishore Jaina
Mr. Ashok Kumar Dutta
Mr. Birendra Rajak
Mr. S. K. Mandal
Mr. Kapildev Ram
Mr. Pradeep Kumar Sharma
Mr. Kameshwar Ram
Mr. Sajjit Minz
Mr. B. Soren
Mr. Tapas Kumar Thakur

Technician (2)

Shri Pradeep Kumar

Technician

Mr. Sanjeev Kumar Verma
Mr. Shubham Nigam
Mr. Sunil H. Rahangdale
Mr. Dhananjay Pratap Singh
Mr. Simanta Sinha
Mr. Sameer Kumar
Mr. Gautam Gorai
Mr. Avinash Sharma
Mr. Suraj Kumar
Mr. Swapan Mahato
Mr. Vijay Kumar Rawani
Mr. Sushobhan Das
Mr. Deep Narayan Sharma
Mr. Rishikesh Saroj
Mr. Harshal Rajendra Wakade

Laboratory Assistant

Mr. Sanjay Kumar Ghosh
Mr. Shakti Pada Mandal
Mr. Padambir Shah
Mr. Vinod Kumar Singh
Mr. Satya Narayan Gaun
Mr. Deb Das Roy
Mrs. Kalawati Bauri
Mr. Ashok Kumar Singh
Mr. D. Appa Rao
Mr. Bhupen Singh
Mr. Uma Shankar Ganguly
Mrs. Malti Giri
Mr. Sudhir Kumar Ojha
Mr. Debabrata Sikdar
Mr. Kaleshwar Besra
Mr. Ganesh Paswan
Mr. Nishi Bhushan Jha
Mr. Kalopada Sarkar
Mr. Tetru Mahato
Mr. Somra Oraon
Mr. Tulsi Rajwar
Mr. Birendra Dusadh
Mr. Soma Munda
Mr. Mridul Kanti Sarkar
Mr. Saroj Kumar Singh
Mr. Joy Das
Mr. Duryodhan Hari
Mr. Rajiv Chandra Acharya
Mr. Bishtu Manjhi
Mr. Suresh Ram
Mr. Arun Kumar Singh
Mr. Dinesh Ramdas Shinde
Mr. Arjun Besra
Mr. Avadh Kishore Bharti
Mr. Gautam Goswami
Mr. Sanatan Hembram
Mr. Bailun Rabidas
Mr. Shashi Kant Rai
Shri Pawan Hari
Shri Resham Lal Mandre

Laboratory Attendant

Mr. P.G. Prasad Dagore

Senior Technician (1)

Dr. Shankhjit Mitra

Controller of Administration

Mr. Alok Sharma

Administrative Officer

Mr. Dashmath Murmu
Mr. Shambhu Sharan Mandal
Mr. Kumar Rahul

Private Secretary

Mr. Dipak Kumar Singh
Mr. Patit Pawan Mandal
Mrs. Anjali R. Jaipilley

Hindi Officer

Ms. Sahana Chaudhuri
Mrs. Anima Kumari Mahato

Section Officer (Adm.)

Mr. Rakesh Kumar
Mr. Keshri Kumar
Mr. Sunil Kumar
Mr. Ranu Kumar
Mrs. Rita Dutta
Mr. Amod Kumar

Assistant Section Officer (Adm.)

Mr. Rajesh Kumar Sahu
Mr. Bhagwan Singh
Mr. Ranjit Samanta
Mr. Arun Kumar Gupta
Mr. Mithu Hari
Mr. Shyamal Mukherjee
Mr. Sanjeev Dasgupta
Mr. Dharmendra Kumar Singh
Mr. Sunil Kumar Mandal
Mr. Amarendra Kumar Singh

Junior Stenographer

Mr. Abhishek Kumar Pandey
Mr. Manoj Kumar Mandal
Mr. Vivek Singh
Mr. Vishal Kumar Sharma
Mr. Md. Kashif Kamal
Mrs. Shubhangi Kumari
Mr. Abhishek Kumar
Mr. Neeraj Kumar
Mr. Abhijeet Chandra

Junior Secretariat Assistant (Adm.)

Mr. Baiju Kumar
Mr. Amit Kumar Mahato
Mr. Sujit Kumar
Mr. Panchanand Bauri
Ms. Juhi Priya
Mr. Abhishek Anand
Mr. Sunny Murmu
Mr. Sunil Soreng
Mr. Somendra Mohanty
Mr. Vijay Kishor Hansda
Mr. Pritam Wamanrao Meshram
Mr. Hemant Kumar
Mr. Anant Kumar Prasad
Mr. Debarun Chatterjee
Mr. Marshal Topno

Controller of Finance & Accounts

Mr. Sudipto Chatterjee

Finance & Accounts Officer

Mr. Priyam Mukherjee

Section Officer (F&A)

Mr. Amrit Kumar
Mr. Shoubhik Sarkar
Mr. Ajay Kumar Das

Assistant Section Officer (F&A)

Mr. Santosh Kumar
Mr. Ranjan Kumar Sinha

Senior Secretariat Assistant (F&A)

Mr. Ranjit Kumar Mandal

Junior Secretariat Assistant (F & A)

Mrs. Sanskriti Kumari
Mr. Guru Gopal
Mr. Rahul Mandal

Controller of Stores and Purchase

Mr. Nalin Kumar Singh

Stores and Purchase Officer

Mr. Naveen Kumar Sharma

Section Officer (S&P)

Mr. Akshay Kumar Das
Mr. Bikash Kumar Goswami

Assistant Section Officer (S & P.)

Mr. Nalin Kumar
Mr. Mohan Kumar Tudu
Mr. Diwakar Alope Srivastava

Junior Secretariat Assistant (S&P)

Mr. Rakesh Kumar Singh
Mr. Rameshwar Murmu
Mr. Pradeep Kumar Uthwal

Group C (Non-Technical)

Mrs. Meera Singh
Mr. Pradeep Hari
Mr. Suresh Ram
Mr. Umesh Ram
Mr. Suresh Tiwari
Mr. Bhagwan Yadav
Ms. Leena Mai Sundi
Mr. Dulal Chandra Mandal
Mr. Narendra Hansda
Mr. Avadh Yadav
Mr. Md. Safi Ahmed
Mr. Murali Sahu
Mr. Krishna Sonar
Mrs. Sumitra Devi
Mrs. Lal Bachhi Devi
Mr. Sukh Bahadur Singh

Mrs. Jiamuni Murmu
Mr. Bhavani Bauri
Mrs. Kunti Devi
Mr. Jiten Rai
Mr. Pintu Kumar Bhowmick
Mrs. Krishna Chattopadhyay
Mrs. J. Savitri Devi
Mrs. Chunmun Devi
Mrs. B. Saraswati
Mr. Sunita Bauri
Mr. Vishwanath Dutta
Mr. Dhari Koranga
Mr. Akash Kumar Karn
Mr. Sagar Karwa
Mr. Bajrangi Mistry
Mr. Vikas Kumar Kushwaha
Mr. Akash Kumar Yadav

Canteen Staff

Mr. Mahendra Rajak
Mr. Sanjay Mukherjee
Mr. Shishir Kumar Bauri
Mr. Dilip Koranga
Mr. Swapan Kundu
Mr. Anjan Koranga
Mr. Bihari Munda

Tribute

Late Shri Maheshwari Ram, Senior Technician (2)
Late Shri C.B. Singh, Laboratory Assistant/ Technician
Late Shri Prem Yadav, Group C (Non Technical)

Retiring Members**Chief Scientist**

Mr. Jitendra Kumar Singh
Dr. Abhay Kumar Soni
Dr. Manoj Kumar Singh
Dr. Sudhir Kumar Kashyap
Dr. Nishant Kumar Srivastava

Senior Principal Scientist

Mr. Shishir Kumar Mandal

Principal Scientist

Dr. Lalan Kumar

Principal Technical Officer

Dr. Phanil Kumar Mandal
Mr. Tapan Kumar Mandal

Section Officer(Asst.)

Mr. Anand Kisku
Mr. Narayan Gope

Assistant Section Officer(Asst.)

Mr. S.S. Ekka

Senior Technician (2)

Mr. Ashok Kumar Dutta
Mr. Mrityunjay Kumar Singh
Mr. Radhelal Chandra
Mr. Manoj Kumar Singh

Lab assistant

Mr. S. K. Rabbani
Mr. Ramesh Prasad Dasaundhi
Mr. Satya Narayana Goun
Mr. K. P. Naik
Mr. Rajkishore Sharma
Mr. Jeevan Paswan
Mr. Naeem Ansari
Mr. Satya Bauri
Mr. Paramatma Ram
Mr. Laxman Yadav
Mr. Bhim Malik

Group C (Non Tak.)

Mr. K. R. Tiwari
Mrs. Usha Sinha

Canteen Bearer

Mr. Adar Lal Gope

Temporary Staff

Mr. Subhash Kushwaha

Officers Transferred From CSIR Headquarters or its other Laboratories

S.No.	Name	The institute from where transferred	Date of joining at CIMFR
1.	Shri Sudipto Chatterjee Controller of Finance & Accounts	CSIR-NPL, New Delhi	September 18, 2023
2.	Shri Shambhu Sharan Mandal Administrative Officer	CSIR-IGIB, New Delhi	March 4, 2024
3.	Shri Priyam Mukherjee Finance & Accounts Officer	CSIR-IICB, Kolkata	February 19, 2024
4.	Mr. Naveen Kumar Sharma Stores and Purchase Officer	CSIR-IICB, Kolkata	September 1, 2023
5.	Shri Supriyo Das Senior Technical Officer	CSIR-CEERI, Pilani	March 4, 2024
6.	Shri Amod Kumar Section Officer (General)	CSIR-NML, Jamshedpur	August 2, 2023
7.	Dr. Surajit Das Technical Officer	CSIR-CEERI, Pilani	March 4, 2024
8.	Dr. Prem Kumar Technical Officer	CSIR-CEERI, Pilani	March 4, 2024
9.	Shri Anand Kumar Upadhyay Technical Officer	CSIR-CEERI, Pilani	March 4, 2024
10.	Mr. Pradeep Kumar Technician(2)	CSIR-CEERI, Pilani	March 18, 2024

Officers Transferred from the Institute

S.No.	Name and Designation	Institute transferred to	Date of release from SIMFER
1.	Mr. Dayakant Kumar Finance & Accounts Officer	CSIR- NML, Jamshedpur	October 10, 2023
2.	Mr. Dharamraj Finance & Accounts Officer	CSIR - CDRI, Lucknow	February 05, 2024
3.	Mr. Anand Bharti Stores and Purchase Officer	CSIR-CMERI, Durgapur	February 09, 2024

MAJOR EVENTS AND IMPORTANT VISITORS

Prof. Arvind Mishra, Director CSIR -Central Mining and Fuel Research Institute, Dhanbad hoisted the tricolour on the occasion of **Independence Day** on 15th August, 2023, and addressed all the members of the Institute.



Independence Day, 2023

On 04th October, 2023, the **82nd CSIR-Foundation Day** was celebrated at the Institute. On this glorious occasion, Shri P. M. Prasad, CMD, CIL was the Chief Guest. Also, like every year, retired employees of this institute and members of CIMFR who had served for twenty-five years were felicitated and winners of various competitions were also awarded on the occasion of Foundation Day. Apart from this, children of CIMFR families were given lump sum cash prizes for getting admission in higher secondary and good institutions. To commemorate the occasion, the Foundation Day Lecture which was delivered by the Chief Guest Shri Piyush Narayan Sharma, Chief Controller of Mines, Indian Bureau of Mines, on the topic of "Indian Mineral Industry: Future Prospects" at the Nagpur Research Centre of this Institute organized on 05th October, 2023



82nd CSIR-Foundation Day

On 17th November, 2023, the institute celebrated its **77th CIMFR- Foundation Day**. On this proud occasion, Director General, Geological Survey of India (GSI) Government of India, Shri Janardan Prasad as the Chief Guest and Chairman-cum-Managing Director of BCCL, Mr. Samiran Dutta was present as the special guest. Apart from this, other distinguished guests included Deputy Director of IIT-ISM, Dhanbad, Prof. Dheeraj Kumar, former Director of CIMFR, Dr. T.N. Singh . was also present. As a tradition of CIMFR, at 8:30 AM Bhoomi Pujan was occurred near the Director's residence.



77th CIMFR- Foundation Day

This year, **Hindi Diwas** and the **3rd All India Official Language Conference** were inaugurated by the Department of Official Language, Ministry of Home Affairs, Government of India on 14th September, 2023 at Shiv Chhatrapati Sports Complex, Pune. Various Union Ministers, Ministers of State, MPs, senior officials of the Ministry of Home Affairs and representatives related to official language from all over the country were present in this conference. At the same time, in the presence of respected guests, the ***Hindi Pakhwada*** of all the central government offices, undertakings, banks etc. including the Institute was simultaneously inaugurated by the Hon'ble Minister of State for Home Affairs, Shri Ajay Kumar Mishra, Deputy Chairman of Rajya Sabha, Shri Harivansh and Hon'ble Deputy Chairman of Parliamentary Official Language Committee, Shri Bhartrihari Mahtab. Hindi officers of the Institute participated in this conference. During the period of *Hindi Pakhwada*, Hindi quiz and memory competitions were organized and notes/drafting written in Hindi throughout the year were also evaluated. Also, general knowledge, Hindi essay, note writing and drafting competitions were organized at Bilaspur Regional Research Center. Scientists, officers and staff members participated enthusiastically in all these competitions. The closing ceremony of *Hindi Pakhwada* was organized on 3 October 2023 in the auditorium located at Barwa Road of CSIR-Central Mining and Fuel Research Institute, Dhanbad. On this glorious occasion, Professor Sukhdev Bhoi ji, a great pioneer of literature, culture and linguistics, eminent scholar and Vice Chancellor of Binod Bihari Mahto Koylanchal University, was present as the Chief Guest. All the winners were awarded on the occasion of the closing ceremony.



Hindi Diwas

On 26th January 2024, the **Republic Day** was celebrated in the institute. On this glorious occasion, the national flag was hoisted by the Director, Prof. Arvind Kumar Mishra. In his address, he shared the works and achievements of the institute in the last 6 months.



Republic Day, 2024

National Technology Day was celebrated on 11th May, 2023. Prof. Indranil Manna, Vice Chancellor, BIT Mesra, Ranchi was present as the Chief Guest and Dr. N.P. Shukla, Member (Technical) Air Quality Management Commission and Shri Shriprasad of Vigyan Bharati were present as the Guest of Honour. Prof. Manna delivered a lecture on the topic "Synchronization of Science, Engineering and Technology is essential for Aatmanirbhar Bharat" and Dr. Shukla delivered a lecture on "Development in Biotechnology for Human Welfare".



National Technology Day, 2023

National Science Day was celebrated at the Institute on 28th February, 2024. Prof. A.S.K. Sinha, Director, Rajiv Gandhi Institute of Petroleum Technology, Amethi, who was present as the Chief Guest on the occasion, shared insights on sustainable energy transition. He also addressed the legacy of Sir. C. V. Raman and important issues like carbon emissions and hydrogen economy. On this occasion, a quiz competition and an interactive session were organized for students of various schools of Dhanbad under the aegis of CSIR-JIGYASA, in which a total of 80 students and 7 teachers participated. The program concluded with the prize distribution ceremony.



National Science Day, 2024

Vigilance awareness campaign was organized in the institute from 16.08.2023 to 15.11.2023. Under this, **Vigilance Awareness Week** was celebrated from 31st October, 2023 to 5th November, 2023 with the theme 'Oppose corruption: Be Dedicated to the Nation'. During this, all the scientists, officers and employees took the civic integrity pledge. Apart from this, a workshop on 'Vigilance and PIDPI Resolution, 2004' was organized for the members of the institute, residents of CIMFR Colony and De Nobili CMRI School, Dhanbad. A walkathon was organized for the members of the institute. Essay, painting and quiz competitions were organized for staff members and their children. Also, on-spot complaint redressal camps were arranged for vendors, contractors, customers and other stakeholders. Vigilance awareness programme was successfully organized among the villagers of Tentulia village of Sialjori Panchayat of Bokaro district and a quiz competition was organized for the children of Utkramit Madhya Vidyalaya, Tentulia. Senior Divisional Operations Manager (Planning), East Central Railway, Dhanbad, Mrs. Shuchi Singh was present as the Chief Guest on the occasion of the closing ceremony.



Vigilance Awareness Week, 2023

Swachhta Pakhwada was celebrated in the institute from 1 to 15 May, 2023. During this fortnight, cleanliness pledge was taken by all the personnel; swachhta awareness walkathon and quiz competition were organized for the members and painting and essay competition for their ward. Apart from this, the office and residential premises were cleaned by the members. On the occasion of the closing ceremony, City Manager, Mr. Kunal Kumar Singh of Dhanbad Municipal Corporation, Dhanbad was the Chief Guest. Were present. The institute's scientists, officers, employees as well as children and their parents participated enthusiastically in the various programs and competitions of this Swachhata Pakhwada.



Independence Day, 2023

International Women's Day was celebrated on 11th March, 2024. Dr. Swasti Sthaphak, Associate Professor, NIT Raipur was present as the Chief Guest in the function. She highlighted the inner values of women and asked them to think about their well-being as well. Special guest was Dr. Malobika Karanjai, Scientist from ARCI, who delivered a lecture on "Challenging the Fears for a Brighter Future – A Woman's Perspective". First Lady of CIMFR, Mrs. Meera Mishra wished the Women's Day by sharing one of her poems dedicated to all women. On this occasion, a painting competition was also organized under the Jigyasa program in which 21 girl students from Kasturba Gandhi Girls School Baliapur, Kasturba Gandhi Girls School Jharia, Upgraded Middle School Daldali, Dhanbad participated.



International Women's Day, 2024

The **8th Ayurveda Day** was celebrated at CIMFR dated 03 November, 2023. On this occasion, Dr. Balaji Potbhare, Research Officer (Ayurveda) of Regional Ayurveda Research Institute, Patna, delivered a Lecture on "Ayurveda Every Day for Every Person".



8th Ayurveda Day, 2023

On the occasion of the birth anniversary of Iron Man, Sardar Vallabhbhai Patel on 31st October, 2023, all the members of the institute participated in the unity race and took the **National Unity Day** oath.



National Unity Day, 2023

On June 21, 2023, the **9th World Yoga Day** was celebrated in the Institute. On this occasion, yoga session was conducted by Yoga Instructor of Patanjali Yogpeeth, Shri Rudra Narayan Yadav, at CIMFR Stadium situated at Barwa Road Campus in the morning, in which scientists, employees, ladies and children of the institute participated in large numbers and the Yoga Guru also gave a lecture related to yoga in the auditorium of the institute in the evening .



9th World Yoga Day, 2023

Three representatives from STX Technologies, Australia, Mr. Rob Nowell, Mr. Duncan Chambers and Mr. Miguel Arros visited the Institute on April 12, 2023 and delivered a lecture on "Testing of Permitted Explosives".



Visit of Experts from STX Technologies, Australia

As a part of the Global Methane Initiative of the US Environmental Protection Agency (USEPA), Ms. Volha Rosh Chanka, Co-Chairman (Coal Mines Sub-Committee), Global Methane Initiative (GMI) and Mr. John Nathan Calafant, Senior Vice President, Advanced Resources International, USA visited the Institute on July 13-14, 2023 .



Visit of Ms. Volha Rosh Chanka and Mr. John Nathan Calafant

Shri V. L. Kanta Rao, Secretary, Ministry of Mines, Government of India, alongwith Dr. P. K. Singh, Director, Ministry of Mines, visited the institute on 14th December, 2023. He also interacted with the scientists and appreciated the various research and development initiatives of the institute .



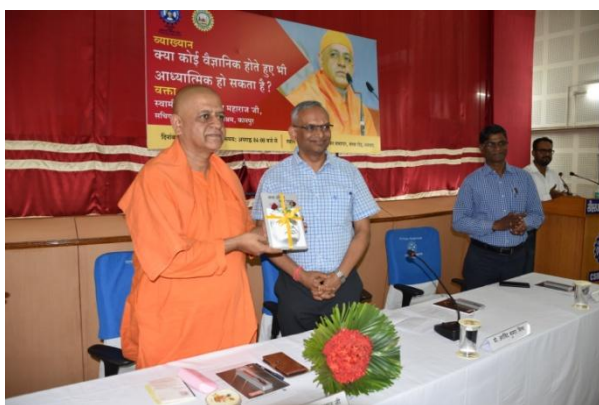
Visit of Shri V. L. Kanta Rao, Secretary, Ministry of Mines, Govt. of India

A talk-cum-presentation session was conducted by Mr. Saurabh Suman Garuda UAV Soft Solutions Pvt. Ltd. at the Institute on 10th April, 2023 to showcase the capabilities in the field of "Drone-based Surveillance System in Mining Sector".



Mr. Saurabh Suman Garuda UAV Soft Solutions Pvt. Ltd.

A lecture on the topic "**Can one be a scientist and still be spiritual?**" was delivered by Swami Atmashradhanand Maharaj Ji, Secretary, Ramakrishna Mission Ashram, Kanpur on 13 April, 2023 in which apart from CSIR-CIMFR, BCCL, IIT (ISM) officials also participated.



Swami Atmashradhanand Maharaj Ji, Secretary, Ramakrishna Mission Ashram, Kanpur

Earth Day 2023 was celebrated in the institute on 22nd April 2023. On the occasion, Energy Swaraj Foundation, Atal Innovation Mission, CSIR and AICTE jointly launched "World's Largest Climate Change Summit" with an aim to generate mass awareness about climate change. CSIR-CIMFR joined hands to organise "Assembly and Display of the Global Climate Clock" for the students of class VIII to X of Sanskriti Vidya Mandir, Digwadih and Kasturba Gandhi Girls School, Jharia. Besides this Mr. Raj Ankur, Head, Planning, and Shri Pradeep Kumar, Manager, Environment, Tata Steel delivered lecture on "Environment and Climate Control".



Earth Day, 2023

Prof. Kashmir Singh, Coordinator, Centre of Policy Research (DST), Punjab University interacted with the scientists and staff of the institute May 01, 2023.



A brainstorming session was organised with **Prof. C.D. Hills** and **Dr. Nimisha Tripathi, Department of Environmental Engineering, University of Greenwich, UK** with the scientists and technical officers and staff of the Institute on 25th May, 2023.



Visit of the scientists and technical officers, from Dept. of Environmental Engineering, University of Greenwich, UK

Dr. Arun Bandopadhyay, Director, CSIR-IICB, Kolkata and Dr. Souvik Maiti, Director CSIR-IGIB, New Delhi with teams of scientists from both the institutions visited the institute for **Awareness Programme on Phenom India Project (CSIR Cohort)** on 01st June, 2023.



Dr. Arun Bandopadhyay, Director, CSIR-IICB, Kolkata and Dr. Souvik Maiti, Director CSIR-IGIB, New Delhi

On 05 June, 2023, on the occasion of **World Environment Day**, **Shri H.L. Gupta, General Manager, Environment, SAIL, Dhanbad** delivered a lecture on **"An overview of coal mining with special reference to environmental issues"**. Apart from this, Dr. S. S. Sarkar, Welfare and Nutrition advisor and Former Chief Medical Officer, BCCL and ECL, Gave a lecture on the topic "Lifestyle Management for Preventing Non-Communicable Diseases".



World Environment Day, 2023

A brainstorming session on the topic "Hackathon in R & D" was organised on 14th June, 2023 in the auditorium of the institute to present the proposals of research and development in the field of coal mining. Shri Milan Sen, Chief Manager (Mining), CMPDI and Mr. Dheeraj Kumar By Scientists and Technical Officers of CSIR-CIMFR Dhanbad and Regional Centres provided information about the proposal process on hackathon and identified areas.



"Hackathon in R & D, 2023

Dr. Ashok Varshney, National Organization Secretary, Arogya Bharti delivered a lecture on **"Indian lifestyle and importance of Ayurveda"** on October 06, 2023.

Padmashree Dr. Khadar Vali and Millet Man of India delivered a lecture on the topic **"Health through Diet"** on 24th December, 2023 by highlighting the importance of millets in promoting health..



Visit of Padmashree Dr. Khadar Wali and Millet Man of India

The Institute has initiated an Administrative Lecture Series for its employees focusing on various topics with an aim to enhance awareness. The inaugural lecture on the topic **“Cyber Crime: Emerging Threats and Challenges”** was delivered by **Shri Chandan Kumar Singh, Public Prosecutor, CBI Dhanbad** on January 23, 2024.



Shri Chandan Kumar Singh, Public Prosecutor, CBI Dhanbad

An interactive session on **"Statistical Analysis using Systat Software and Scientific Graph Plotting and Data Analysis using SigmaPlot Software"** was organised on 24 November 2023.



An interactive session on Systat Software

A blood donation camp was organised on 16th June, 2023 in the Barwa Road dispensary, on the occasion of **World Blood Donor Day**, under the **“Blood Donation Amrit Mahotsav”**.

Inspired by the call of Hon'ble Prime Minister Shri Narendra Modi Ji **"Ek Taareek Ek Ghanta Ek Saath"**, CSIR-CIMFR launched a **'Swachhata Abhiyaan'** as part of **Swachhata Hi Sewa 2023** initiative on the occasion of Gandhi Jayanti on 2nd October, 2023. Under the guidance of Director Prof. Arvind Kumar Mishra, the entire team of the Institute joined hands to promote cleanliness in public places, adopting the theme of **'Garbage Free India'** for **Swachhata Pakhwada 2023**. A **Fit India Swachhata Freedom Run 4.0** was also organized on 28th October, 2023 under the theme **"Swachh Bharat Swasth Bharat"**.



Swachhata Hi Sewa 2023

Workshop

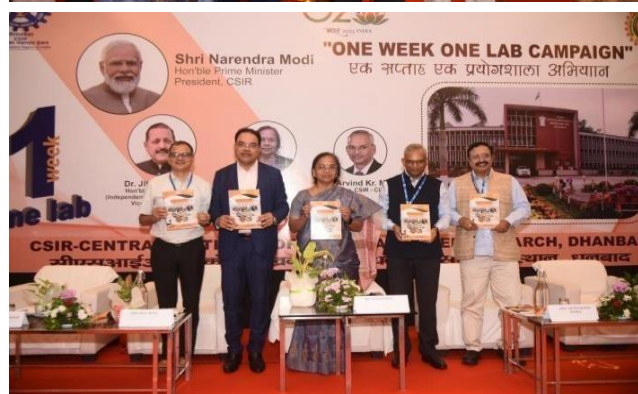
GLIMPSES OF ONE WEEK ONE LAB CAMPAIGN

22-26 August, 2023

22nd AUGUST, 2023

UDGHAATAN

The Udghaatan i.e. Inaugural Ceremony of the One Week One Lab campaign was held at Hotel Radisson Blu, Ranchi on August 22, 2023. Dr. N. Kalaiselvi, Director General, CSIR and Secretary, DSIR was the Chief Guest on the occasion. The event was also graced by the Guests of Honour, Shri Arun Mishra, CEO, HZL; Prof. N. V. Ramana Rao, Director, NIT Raipur and Prof. Shalivahan, Director, IIPE, Vishakhapatnam. Prof. Arvind Kr. Mishra, Director, CSIR-CIMFR welcomed all the dignitaries. The event was attended by more than 300 participants comprising experts from various mining and fuel industries, academic institutes, officials from local administration and scientists and staff from CSIR-CIMFR. One Technology was transferred and six MoUs were signed on the occasion. A new Coal to Hydrogen Energy for Sustainable Solutions (CHESS) division was inaugurated virtually, showcasing CSIR-CIMFR's commitment towards sustainable energy solutions.



23rd AUGUST, 2023
YUVA-MANTHAN
(Young Researchers' Conclave)

The Young Researchers Conclave was organized on August 23, 2023, at the Digwadih Campus of CSIR-CIMFR as part of the "One Week One Lab" campaign. Prof. Arvind Kr. Mishra, Director of CSIR-CIMFR, in his welcome address highlighted India's economic growth and government support for research, stressing the need for cutting edge research during the "Amrit kaal" of "Azadi ka Amrit Mahotsav."

Dr. P. K. Banerjee, Outstanding Scientist, discussed CSIR's role in engaging stakeholders for research. Prof. Gautam Sutradhar, Director, NIT Jamshedpur and Guest of Honor emphasized interdisciplinary research and relevant skills for young scientists' growth. Prof. Manoj Kumar Dhar, Director, AcSIR and Chief Guest, advocated the role of ACSIR in developing and fulfilling the need of human resources in various fields. He also reiterated addition of humanities subjects to research scholars' curriculum for resilience and ethics.

The event showcased 6 scientific presentations, 9 oral presentations, and 21 posters. A cultural evening concluded the conclave.



24th AUGUST, 2023

VIDYARTHI-JIGYASA

OPEN DAY (Students Outreach Program)

The Vidyarthi-Jigyasa i.e. Open Day program was successfully conducted to engage school children with an objective to captivate young minds by showcasing the practical applications of science in national development. This program was executed across multiple venues, including the Barwa Road and Digwadih campuses, as well as all regional centres situated in Nagpur, Bilaspur, Roorkee and Ranchi. More than 1000 students from various schools participated. Interactions, quiz, lab visits and science exhibition by school students and also the technologies from CSIR-CIMFR were showcased during the occasion.

Prof. Arvind Kr. Mishra through his welcome address motivated students towards development of scientific temperament. Dr. Pravin Singh, Principal, RS More College and Guest of Honour stressed upon the importance of science and technology in the development of the nation. Mr. Varun Ranjan, DC Dhanbad graced the occasion as Chief Guest and encouraged the students about inculcating good habits and reiterated the importance of proper decision-making to shape up a successful career. CSIR- CIMFR scientists engaged students through Q&A, quizzes, and exhibitions. Over 60 models were displayed, focusing on scientific concepts and innovations.





25th AUGUST, 2023

GYANODAYA

(Thematic Lectures by Invited Speakers)

Gyanodaya (Thematic Lectures) program focusing on the theme "Mining for Sustainable Development and Energy for Growth of the Nation" was hosted on 25th August at CIMFR Barwa Road campus. Distinguished luminaries from various industries and academic institutions delivered plenary speeches.

Guest of Honour, Dr. O. P. Mishra, Director, National Centre for Seismology discussed role of seismology in risk management. Chief Guest, Shri Bhola Singh, CMD, Northern Coalfields Limited, highlighted R&D's role in achieving coal production targets sustainably. Seven papers were presented, covering topics like impact of mining on communities, environmental and social sustainability, critical element extraction from waste, automation and application of AI and ML in mining etc.

26th AUGUST, 2023

UDAAN (STARTUP MEET)

CSIR-CIMFR "One Week One Lab" campaign, on the last day, started with the successful Startup Meet. Prof. Arvind Kumar Mishra, presiding over the proceedings, emphasized startups' role in driving economic growth and innovation of the nation. Chief Guest, Prof. J K Pattanayak shared insightful entrepreneurial experiences and highlighted role of innovation culture in the development of an organisation.

On the occasion, diverse startups like "Spin off Research Energy," "TE tech," "Vimana Aerotech," "Techosence," "Joymettee," and "APChemi" showcased breakthrough ideas, highlighting innovation's societal impact. The "One Week One Lab" initiative underscored CSIR-CIMFR's commitment towards nurturing an innovation ecosystem for startups' success.





Day. The event was followed by a Cultural Program.

On the occasion of completion of 75 years of India's independence, a one - day **workshop on 'Intellectual Property Management: Creation, Protection and Commercialization'** was **organized at** the Institute on 31 July 2023 as a part of the 'National Intellectual Property Festival' organized from 01 to 31 July 2023 across the country. Dr. Kishore Srinivasan, Head, CSIR-URDIP, Pune, who was present as the Chief Guest on the occasion, delivered a very insightful lecture on the topic **'Patent and IP Value – 'Portfolio' Perspective'** and discussed in depth about the value of IP and portfolio preparation. Invited speakers in the technical session of the workshop, Dr. Yogesh Dhoble, IP Expert, CSIR-IPU, New Delhi; Dr. Shivkami Dhulap, Patent Analysis Scientist, CSIR-URDIP, Pune; Dr. Virendra Singh, Senior Examiner of Trademarks & GI, Trade Marks Registry, Kolkata and Dr. Sanjiv Kumar Majumdar, Senior Manager & Head, National Research Development Corporation, New Delhi delivered informative lectures on **'Patent Filing and Strategies', 'Patents and Patent Related Work Patinformatics Homework', 'Industrial Property-IPR, its Creation and Protection' and 'NRDC in Technology Commercialization: Roles and Strategies'** respectively. The workshop was attended by policy makers, technocrats, researchers, industry experts, scientists and faculty members and students from different parts of the country. Apart from the above workshop, three IP awareness-cum-interactive programs on the topic **"Intellectual Property Rights: Understanding the General Principles"** were also organized under this National Festival on July 20, 2023 at BIT, Sindri; on July 24, 2023 at Binod Bihari Mahto Koyalanchal University and on July 27, 2023 at Kazi Nazrul University, Asansol.

Non-technical officers and employees of CSIR and all its national institutes were to fill their Annual Performance Assessment Report (APAR) online on Sparrow application from the year 2022-23. In this regard, as per the direction of the Director General and Joint Secretary of CSIR, New Delhi, a **one-day workshop on training of Sparrow Apar Application** was organized on 23rd June, 2023 at CSIR-CIMFR, Dhanbad. CSIR-CIMFR was amde the nodal institute for two CSIR laboratories located in Eastern Region for training of this Sparrow application. This one day workshop was attended by 10 representatives from CSIR-IMMT, Bhubaneswar and CSIR-NML, Jamshedpur, besides 100 members from Administration, Finance & Accounts and Stores & Purchase sections of CSIR-CIMFR, Dhanbad. Two officers from CSIR Headquarters, New Delhi, Mr. Sunil Kumar, Under Secretary and Mr. Sushant Singh, Section Officer also joined online. In the first session, Ms. Sahana Chaudhary, Hindi Officer, spoke on the use of Sparrow application and how to fill your Apaar online. In the second session, senior officers of the administration department of the three laboratories, Mr. B.C. Sahu, Mr. Alok Sharma, Mr. R.K. Das, Mr. P.K. Das, Mr. Kumar Rahul, Shri Aditya Mainak, Shri Dayakant Kumar, Shri Anand Bharti presented simple solutions to various problems related to administration. Apart from these, a film was also shown on e-office available on the NIC website.

An **Outreach programme of Indian International Science Festival (IISF) 2023** organized By CSIR-CIMFR Dhanbad on 11 December 2023. On this occasion, National Secretary of Vigyan Bharati, Shri Praveen Ramdas was present as the Chief Guest. The main objective of this program was to promote scientific spirit among school students. Around 300 students and teachers from Rajkamal Saraswati Vidya Mandir, Dhanbad Public School, Kendriya Vidyalaya, Abhaya Sundari Girls High School, St. Xavier's School, DAV Koylanagar, Saraswati Vidya Mandir, ASVM Bhooli, HE School Bhistipara, Upgraded High School, Symbiosis International School, Sarvamangala Public School and SSLNT College participated in the event .



पहल. सिंफर ने शुरू किया एक सप्ताह एक प्रयोगशाला अभियान कभी खत्म नहीं होगी कोयले की उपयोगिता इसे ग्रीन एनर्जी में बदलें : महानिदेशक

करीव संवाददाता, रांची

काउंसिल ऑफ साइंटिफिक एंड इंजिनिअरिंग रिसर्च (सीएसआईआर) की महानिदेशक डॉ एन कलसेल्वी ने कहा है कि कोयले की उपयोगिता है और आगे भी रहेगी, वह कभी खत्म होने वाली नहीं है, वैज्ञानिकों की जिम्मेदारी है कि काले कोयले को ग्रीन एनर्जी में कैसे बदलें, ऐसी तकनीक विकसित करें, जिससे कोयले से ग्रीन एनर्जी निकाल सके, यह संभव है, क्योंकि पर्यावरण को स्वच्छ रखने की जिम्मेदारी हमारी भी है, डॉ कलसेल्वी मंगलवार को राजधानी में सेट्रल इंस्टीट्यूट ऑफ माइनिंग एंड फ्यूल रिसर्च (सिंफर) के कार्यक्रम को संबोधित कर रही थीं. सिंफर ने मंगलवार से एक सप्ताह एक प्रयोगशाला अभियान शुरू किया है. डॉ कलसेल्वी ने कहा कि अभी ऐसे विषय पर अनुसंधान करने की जरूरत



रांची में आयोजित कार्यक्रम में उपस्थित सीएसआईआर के महानिदेशक, सिंफर अधिकारी व अन्य.

है, जो समाज और उद्योगों के हित में हो, कई वैज्ञानिक ऐसे अनुसंधान करते हैं, जो बाजार तक नहीं आ पाते हैं, किसी भी अनुसंधान का महत्व तभी है, जब वह आम लोगों के काम आये, भारत सरकार अनुसंधान को बढ़ावा देने के लिए हरसंभव प्रयास कर रही है. **समय-समय पर बदलती हैं चुनौतियाँ** हिंदुस्तान जिनके सीईओ अरुण मिश्रा ने कहा कि ऊर्जा की जरूरत देश को

हमेशा रहेगी, चुनौतियाँ बदलती रहती हैं, नये-नये अनुसंधान इसका रास्ता निकालते हैं, कोयला से निकलने वाले कार्बन डाइऑक्साइड को कम करने की जरूरत है, यह अनुसंधान का बड़ा विषय है.

मिलकर काम करने की जरूरत : एनआईटी रायपुर के निदेशक एनवी रमन्नाराव कहा कि आज मिलकर काम करने की जरूरत है. मिलकर

काम करने से कई तरह के अनुसंधान हो पायेंगे. एक दूसरे के क्षमता का बेहतर उपयोग कर पायेंगे. इंडियन इंस्टीट्यूट ऑफ पेट्रोलियम एंड एनर्जी विशाखापट्टनम के शालीबान ने भी विचार रखे.

युवाओं के लिए खुल रहे हैं अवसर के द्वार : सिंफर के निदेशक प्रो अरविंद कुमार मिश्रा ने कहा कि हमारा संस्थान 1946 का है. इसकी उपयोगिता धीरे-

धीरे और बढ़ रही है. कार्यक्षेत्र और दायरा भी बढ़ रहा है. कई उल्लेखनीय काम किये जा रहे हैं. कोयला वाशरी का डिजाइन भी बनया है. संस्थान से जुड़े युवाओं के लिए अब और अवसर के द्वार खुल रहे हैं. कोयला के क्षेत्र में हम लोग काम करते हैं, कोयला की उपयोगिता आगे भी बनी रहेगी, हम लोगों को कोयले से मिथेन, कोयले से हाइड्रोजन आदि बनाने पर काम करना होगा. युवाओं को इसे चुनौती के रूप में लेना होगा, संस्थान भी इनको उद्योगों के साथ लिक करने का प्रयास करेगी. कार्यक्रम का संचालन आशीष घोष तथा धन्यवद ज्ञान जीतेन्द्र सिंह ने किया. सीके पर अनुसंधान के लिए कई संस्थाओं के साथ एमओयू किया गया. सिंफर ने टाटा स्टील के इरिखा के जीएम संजय राजौरिया, अछानी कंपनी के राजेंद्र पिंगले, एसआरके मिनरल्स के प्रतिनिधि तथा एनएमडीसी के राजीव बाधवा को भी सम्मानित किया.

सिंफर ने इंटेलिजेंट माइनिंग पर रूस की कंपनी से किया करार



धनबाद . केंद्रीय खनन एवं ईंधन अनुसंधान संस्थान (सिंफर) ने इंटेलिजेंट माइनिंग पर रूस की कंपनी के साथ करार किया है. वह करार सिंफर के निदेशक प्रोफेसर अरविंद कुमार मिश्रा ने इंस्टीट्यूट ऑफ ऑटोमेटेशन एंड कंट्रोल प्रोसेसेस ऑफ दि फार ईस्टर्न ब्रांच ऑफ रशियन एंकेडेमी ऑफ साइंसेस (आईएसपी एफडीबी आरएएस) एवं खव्वारस्क फेडरल रिसर्च सेंटर ऑफ दि फार ईस्टर्न ब्रांच ऑफ दि रशियन एंकेडेमी ऑफ साइंसेस (खएफआरसी एफडीबी आरएएस) के साथ किया. सीएसआईआर की महानिदेशक डॉ एन कलसेल्वी के

नेतृत्व में सीएसआईआर टीम ने केलास्क और रूस का दौरा किया. प्रतिनिधिमंडल में डॉ कलसेल्वी के साथ सिंफर के निदेशक प्रोफेसर अरविंद कुमार मिश्रा, केंद्रीय सड़क अनुसंधान संस्थान के निदेशक प्रोफेसर मनोरंजन परिड़ा, केंद्रीय इलेक्ट्रॉनिकी अभियांत्रिकी अनुसंधान संस्थान के निदेशक डॉ पीसी पंचारिया एवं अंतरराष्ट्रीय विज्ञान एवं प्रौद्योगिकी कार्य निदेशालय की प्रमुख व मुख्य वैज्ञानिक डॉ रमा स्वामी बंसल शामिल थे. राष्ट्रीय अनुसंधान विकास निगम (एनआरडीसी) केलास्क और मॉस्को में ही टीम में शामिल हुए.

सिंफर में कौशल सह उद्यमिता विकास कार्यक्रम शुरू



धनबाद . सीएसआईआर-सिंफर द्वारा सीएसआईआर एकीकृत कौशल पहल के तहत पांच दिवसीय कौशल विकास सह उद्यमिता विकास कार्यक्रम की शुरुआत सोमवार को की गयी. शुरुआत सिंफर के निदेशक प्रो अरविंद कुमार मिश्रा ने की. कार्यक्रम में एनआईटी रायपुर, बीआईटी सिंदरी, यूसीडीटी, विनोबा भावे विश्वविद्यालय, हजारबाग, गुरु गोविंद सिंह एजुकेशनल सोसाइटीज टेक्निकल कैंपस, बोकारो स्टील सिटी, टेकनो इंडिया यूनिवर्सिटी कोलकाता एवं बीआईटी वेल्लोर के 21 छात्रों एवं सिंफर के सात अधिकारियों एवं परियोजना सहयोगियों ने भाग लिया. कार्यक्रम को सफल बनाने को लेकर मुख्य वैज्ञानिक दिलीप कुंभकार, वरिष्ठ तकनीशियन डॉ शंखजीत मित्रा व सिंफर के अन्य अधिकारी व कर्मचारी सक्रिय हैं.

सीआईएसआर के स्थापना दिवस समारोह में बोले सीआईएल चेयरमैन औद्योगिक दृष्टिकोण को आगे बढ़ाने में सीएसआईआर का अहम योगदान

वरीय संवाददाता, धनबाद

देश के विकास में सीएसआर की प्रयोगशालाओं का अहम योगदान रहा है। ये औद्योगिक दृष्टिकोण को आगे बढ़ाने में काफी मददगार साबित हुई हैं। यह कहना है सीआईएल के चेयरमैन पीएम प्रसाद का। वह बुधवार को केंद्रीय औद्योगिक अनुसंधान परिषद (सीआईएसआर) 82वें स्थापना दिवस समारोह को बतौर मुख्य अतिथि संबोधित कर रहे थे।

उन्होंने सीएसआईआर-सिंफर के साथ अपने अनुभवों को भी साझा किया। सिंफर में कार्यक्रम शुरू होते ही निदेशक प्रो अरविंद कुमार मिश्रा ने अतिथियों, सेवानिवृत्त कर्मचारियों, प्रतिभागियों और अन्य उपस्थित लोगों का स्वागत किया। साथ ही



स्थापना दिवस समारोह का उद्घाटन करते कोल इंडिया चेयरमैन व अन्य.

सीएसआईआर प्रयोगशालाओं के महत्व एवं प्रौद्योगिकी उन्नति में महत्वपूर्ण भूमिकाओं का वर्णन किया। उन्होंने बताया कि कैसे इन सीएसआईआर प्रयोगशालाओं के

प्रयासों ने समाज के जीवन पर सकारात्मक प्रभाव डाला है। इसके अलावा सीएसआईआर-सिंफर के सेवानिवृत्त एवं 25 वर्षों से अपनी सेवा सीएसआईआर को प्रदान कर रहे

कर्मचारियों को सम्मानित किया गया। स्थापना दिवस के उपलक्ष्य में आयोजित प्रतियोगिता के विजेताओं को सम्मानित किया गया। इस प्रतियोगिता में सीएसआईआर-सिंफर के कर्मचारियों और उनके बच्चों ने अपनी प्रतिभा को प्रदर्शित किया। अपने समापन भाषण में सिंफर के मुख्य वैज्ञानिक जेके सिंह ने सभी प्रतिभागियों, मेहमानों, और कर्मचारियों का आभार व्यक्त किया और संगठन के मिशन के सफलता में उनके योगदान के लिए धन्यवाद दिया। यह समारोह सीएसआईआर-सिंफर के समर्पण, भारतीय विज्ञान, प्रौद्योगिकी, और औद्योगिक विकास को आगे बढ़ाने में और संस्थान के नवाचार, प्रगति, और समाज पर गहरा प्रभाव डालने के निरंतर प्रयास का प्रमाण था।

सिंफर. स्थापना दिवस समारोह में जीएसआई के महानिदेशक जनार्दन ने वैज्ञानिकों से की अपील लिथियम खनन के लिए नयी तकनीक विकसित करें

□ खनन के क्षेत्र में कई संस्थानों के साथ मिल कर रहे काम : सिंफर निदेशक विशेष संवाददाता, धनबाद

भारतीय भूवैज्ञानिक सर्वेक्षण (जीएसआई) के महानिदेशक जनार्दन प्रसाद ने कहा है कि लिथियम सहित महत्वपूर्ण खनिजों के दोहन के लिए वैज्ञानिकों को नवीनतम तकनीक पर शोध करना चाहिए। इस क्षेत्र में काफी कुछ करने की जरूरत है। शुक्रवार को सिंफर के 77वें स्थापना दिवस समारोह को मुख्य अतिथि के रूप में संबोधित करते हुए जीएसआई के महानिदेशक ने उक्त बातें कही। संस्थान के निदेशक प्रोफेसर अरविंद कुमार मिश्रा ने अतिथियों का स्वागत किया। सिंफर के



समारोह में जीएसआई डीजी जनार्दन प्रसाद, सिंफर निदेशक प्रो अरविंद कुमार मिश्रा, बीसीसीएल के सीएमडी समीरन दाता व अन्य.

स्थापना और इतिहास के बारे में बताया। यहां के संरचनात्मक डिजाइन, स्थिरता विश्लेषण, रोक मास रेटिंग, सॉफ्ट कोक जैसे विकसित प्रौद्योगिकियों, अभूतपूर्व उपलब्धियों, समाज व राष्ट्र के लिये किये गये महत्वपूर्ण योगदानों

पर भी प्रकाश डाला। कहा : आने वाले दिनों में सिंफर जीएसआई, बीसीसीएल, सेल, टाटा स्टील जैसे प्रतिष्ठित संस्थानों के साथ मिलकर खनन एवं ईंधन क्षेत्रों में और अधिक उन्नत प्रकार के शोध कार्य करेगा।

स्वच्छ कोयला खनन के लिए ड्रोन के उपयोग पर हो विचार : सीएमडी विशिष्ट अतिथि बीसीसीएल के सीएमडी समीरन दाता ने कहा कि सिंफर व बीसीसीएल ने लंबे समय से साथ काम किया है। उन्होंने अनुसंधान व

आइआईटी, सिंफर व बीसीसीएल से प्रसिद्ध है धनबाद

जीएसआई के महानिदेशक ने सिंफर की उपलब्धियों और कोयला विश्लेषण में इसकी महत्वपूर्ण भूमिका की सराहना करते हुए कहा कि धनबाद तीन चीजों के लिए प्रसिद्ध है। सिंफर, आइआईटी आइएसएम और बीसीसीएल। उन्होंने जीएसआई द्वारा किए जा रहे कार्यों पर भी प्रकाश डाला। कहा कि जीएसआई ने लिथियम सहित विभिन्न क्रिटिकल खनिजों के मानचित्रण आंकड़ों को अपनी वेबसाइट पर प्रदर्शित कर दिया है। उन्होंने सिंफर के वैज्ञानिकों से आग्रह किया कि वे ऐसी प्रौद्योगिकियां विकसित करें, जिनसे इन खनिजों को निष्कर्षित किया जा सके। उन्होंने जीएसआई और सिंफर के बीच क्रिटिकल मिनेरल्स पर समझौता करने का प्रस्ताव रखते हुए निरंतर अनुसंधान की आवश्यकता पर जोर दिया।

विकास के आर्थिक महत्व पर जोर देते हुए अपने व्यावहारिक अनुभव साझा किये। कहा कि किसी भी देश के विकास को बढ़ावा देने के लिए पर्यावरणीय, आर्थिक साझेदारी की अहम भूमिका होती है। वैकल्पिक स्वच्छ कोयला

प्रौद्योगिकी खनन के लिए ड्रोन के उपयोग जैसे क्षेत्रों में भी सहयोगात्मक परियोजनाएं करने पर विचार करना चाहिए। उत्कृष्ट वैज्ञानिक डॉ प्रदीप कुमार बनर्जी ने धन्यवाद ज्ञापन किया। संचालन कुमारी अंजलि ने किया।

