

Information on Patents of CSIR-CIMFR for the period 1st April 2023 to 31st March 2024 Patents Filed in India: 03, Filed in Abroad: 02

i) Patent Filed in India: 3

SNo	NFNO	Country	Lab	Title	Inventors	Prov. Filing Date	Comp. Filing Date	Application No.	Status	Grant Date	Patent No.
1	0092NF2022/IN	IN	CIMFR	A LIGHTWEIGHT BLAST MAT FOR MUFFLING BLAST HOLES AND CONTROLLING FLYROCK IN NEAR-FIELD BLASTING	MORE RAMULU, PARTHO BISWAPATI CHOUDHURY, SAURAV RUKHAIYAR, BANTI KUMAR DHAR, ABDUR RAHMAN	21-Dec-2023	---	202311087917	PP	---	---
2	0093NF2022/IN	IN	CIMFR	A DEVICE AND METHOD OF ROCK SPLITTING BY BLASTING OF SMALL SIZED HOLES DRILLED BETWEEN LARGE SIZED HOLES	MORE RAMULU, PARTHO BISWAPATI CHOUDHURY, SAURAV RUKHAIYAR	21-Dec-2023	---	202311087918	PP	---	---
3	0031NF2024/IN	IN	CIMFR	One-Pot, Single-Step Ultrasonication Method For Preparation Of White-Light-Emitting Graphene Quantum Dots From Coal Soot	Vikram Singh, Shiv Rag Mishra, Tuhin Mandal	---	15-Mar-2024	202411019849	PP	---	---

ii) Patent Filed in Abroad: 2

No	NFNO	Country	Lab	Title	Inventors	Prov. Filing Date	Comp. Filing Date	Application No.	Status	Grant Date	Patent No.
1	0231NF2021/WO	WO	CIMFR	EFFICIENT VOLUMETRIC HIGH PRESSURE ADSORPTION ISOTHERM EXPERIMENTAL SET UP	DEBADUTTA MOHANTY, SUJOY CHATTARAJ	---	11-Apr-2023	PCT/IN2023/050355	PP	---	---
2	0076NF2022/WO	WO	CIMFR	SOLAR-BASED MULTIPURPOSE UTILITY SYSTEM	SWADES KUMAR CHAULYA, GIRENDRA MOHAN PRASAD, SUJIT KUMAR MANDAL, GAUTAM BANERJEE, SURAJIT DEY, VIRENDRA KUMAR, NARESH KUMAR, PREITY, VIJAY KUMAR RAWANI, GOPALJEE SAW	---	16-May-2023	PCT/IN2023/050460	PP	---	---

iii) Patent Granted in India: 15

No	NFNO	Country	Lab	Title	Inventors	Prov. Filing Date	Comp. Filing Date	Application No.	Status	Grant Date	Patent No.
1	0243NF2015/IN	IN	CIMFR	A method to design optimum size of rib/snook in mechanised depillaring under moderate roof strata	Singh Rajendra, Singh Arun Kumar, Ram Sahendra, Kumar Ashok, Kumar Rakesh, Singh Amit Kumar	---	18-Nov-2015	3765DEL2015	IF/2024	30-Jun-2023	436799
2	0118NF2015/IN	IN	CIMFR	An intigrated strata, gas and environment monitoring system for underground mines.	Swades Kumar Chaulya, Girendra Mohan Prasad, Ajay Kumar Singh	---	12-Aug-2015	2477DEL2015	IF/2024	18-Sep-2023	452543
3	0117NF2015/IN	IN	CIMFR	A process of reduction of overall ash percentage of coal	Devendra Kumar Sakhare, Shripal Singh, Ranjit Kumar Acharya, Prakash D Chavan, Rahul Mehatre, Swati Singh	---	01-Jul-2015	1977DEL2015	IF/2024	05-Oct-2023	457040
4	0201NF2017/IN	IN	CIMFR	A novel portable device for providing hydration in remote areas	Pallabi Das, Sudhir Kumar Kashyap, Gautam Chandra Mondal, Krishna Kant Kumar Singh, Pradeep Kumar Singh	---	16-Apr-2018	201811014399	IF/2025	20-Nov-2023	470557
5	0046NF2018/IN	IN	CIMFR	A chemical inhibitor composition for controlling and combating high intensity	Ran Vijay Kumar Singh, Niroj Kumar Mohalik, Rakesh Kumar Mishra, Durga Dutt Tripathi, Ajay Khalkho, Jitendra Pandey, Pradeep	---	24-May-2018	201811019438	IF/2025	09-Dec-2023	479723

				fire in surface coal mines	Kumar Singh, Rajesh Hiralal Sabadra						
6	0234NF2015/IN	IN	CIMFR	Stemming-Plug Augmenting Resistance to Stemming in Holes (SPARSH)	Saharan Mani Ram	---	11-Jan-2016	201611000896	IF/2025	19-Dec-2023	485079
7	0174NF2017/IN	IN	CIMFR	Vision Improvement Device for Harsh Atmosphere caused by Temperature Attenuation (VIDHATA)	CHAULYA SWADES KUMAR, BANERJEE GAUTAM, SINGH PRADEEP KUMAR, PRASAD GIRENDRA MOHAN, VIRENDRA KUMAR, CHATTERJEE DEBASHIS, RAJ KUMAR, KUNAL SAURAV	---	08-Mar-2018	201811008501	IF/2025	27-Dec-2023	489733
8	0244NF2016/IN	IN	CIMFR	A METHOD FOR EFFICIENT DESIGN OF ROOF BOLT BASED BREAKER LINE SUPPORT IN MECHANISED DEPIILLARING	RAM SAHENDRA, SINGH RAJENDRA, KUMAR DHEERAJ, SINGH ARUN KUMAR, KUMAR ASHOK, KUMAR RAKESH, SINGH AMIT KUMAR	---	11-Jan-2017	201711001140	IF/2025	30-Dec-2023	492348
9	0270NF2016/IN	IN	CIMFR	A device useful for supporting the underground mine side wall for highly dipping mine having pillars with acute angle corners	KUSHWAHA ANGAD, TEWARI SUBHASHISH, BHATTACHARJEE RANA, MANDAL PRABHAT KUMAR, DAS ARKA JYOTI	---	08-Mar-2018	201811008499	IF/2025	01-Jan-2024	492987
10	0089NF2018/IN	IN	CIMFR	Blocks and Sand Manufacturing Process	Chaulya Swades Kumar, Singh Raj Shekhar, Singh Shailendra Kumar,	---	26-Oct-	201811040429	IF/2025	01-Jan-	492939

				Using Mine Wastes	Singh Krishna Kant Kumar, Banerjee Gautam, Singh Pradeep Kumar, Singh Ranjeet Kumar, Chatterjee Debashis, Kunal Saurabh, Virendra Kumar		2018			2024	
11	0178NF2017/IN	IN	CIMFR	Dual Height Partial Recoverable Bolt	Dr. RANJAN KUMAR, Mr. NIRAJ KUMAR, Dr. GAUTAM BANERJEE	---	29-Oct-2018	201811040691	IF/2025	11-Jan-2024	498159
12	0009NF2017/IN	IN	CIMFR	A DEVICE FOR DIRECTIONAL ILLUMINATED SUPPORT UNDER HARSH AMBIENCE (DISHA)	Saharan Mani Ram, Chaulya Swades Kumar, Saurabh Kunal, Rajpurohit Pushpendra	---	01-Mar-2017	201711007179	IF/2025	11-Jan-2024	498106
13	0216NF2017/IN	IN	CIMFR	Biometric-based exploder	Chaulya Swades Kumar, Roy Sanjay Kumar, Pal Roy Pijush, Singh Pradeep Kumar, Banerjee Gautam, Singh Jitendra Kumar, Naresh Kumar, Virendra Kumar, Chatterjee Debashis, Ghosh Tanmoya Nema	---	26-Oct-2018	201811040426	IF/2025	22-Jan-2024	501665
14	0095NF2017/IN	IN	CIMFR	A DEVICE FOR WHEEL CONTROLLED ODOURLESS AND WATERLESS SEWAGE DISCHARGE SYSTEM IN TRAINS	SUDHIR KUMAR KASHYAP, PRADEEP KUMAR SINGH	---	14-Jun-2019	201911023586	IF/2025	15-Mar-2024	528163

15	0083NF2018/IN	IN	CIMFR	Automatic headlamp dimming device	Chaulya Swades Kumar, Banerjee Gautam, Singh Pradeep Kumar, Prasad Girendra Mohan, Chatterjee Debashis, Naresh Kumar, Virendra Kumar, Singh Jitendra Kumar, Kunal Saurabh	---	26-Oct-2018	201811040427	IF	22-Mar-2024	529841
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iv) Patent Granted in Abroad: NIL