

Patent Applications Filed in India

Patent Applications Filed in India during 2025-26: 13

| SNo | NFNO | Country | Lab | Title | Inventors | Prov. Filing Date | Comp. Filing Date | Application No. | Status | Grant Date | Patent No. |
|-----|---------------|---------|-------|---|--|-------------------|-------------------|-----------------|----------------|------------|------------|
| 1 | 0064NF2025/IN | IN | CIMFR | P-F-B-OXO THIOKETAL AS ANTIBACTERIAL AGENT AND PROCESS FOR PREPARATION THEREOF | KESHAV RAGHUVANSHI, SUDARSHAN SINGH RATHORE, SOUVIK BARMAN, PRADIP KUMAR BANERJEE | --- | 08-Apr-2025 | 202511034622 | PP | --- | --- |
| 2 | 0109NF2025/IN | IN | CIMFR | CONTAMINATED AMMONIUM NITRATE BASED COMPOSITION, PROCESS FOR PREPARATION AND APPLICATION THEREOF | Firoj Ali, Arvind Kumar, Vivek Kumar Himanshu, Chhangte Sawmliana, Arvind Kumar Mishra | --- | 09-May-2025 | 202511046164 | PP | --- | --- |
| 3 | 0113NF2025/IN | IN | CIMFR | A High-Temperature Thermo-cracker Retort Furnace and method for generation of tar-free hydrogen-rich lower-hydrocarbon gases | DHAIGUDE NILESH DHANANJAY, SAHU ARTI, SINGH RUPESH KUMAR, SAHU GAJANAN, SAHA SUJAN, CHAVAN PRAKASH DHONDIRAM | 09-May-2025 | --- | 202511045748 | PP | --- | --- |
| 4 | 0037NF2025/IN | IN | CIMFR | Formulation and Method for Dust Suppression in Mining Operations Post-Blasting | Shrenik M Trivedi, Rushay S Trivedi, Dipak B Parmar, Debashish Mishra, Santosh Kumar Ray, Aditya Kumar, Jai Krishna Pandey, Kumari Anjali, Ajay Khalkho, Jitendra Pandey | --- | 31-May-2025 | 202521037675 | PP*/CIMFR/SIPL | --- | --- |
| 5 | 0003NF2025/IN | IN | CIMFR | A Photo-mediated Metal Free Process for the Preparation of Thioketal from beta-oxo dithioester using CO2 as Methylating Agent | KESHAV RAGHUVANSHI, SOUVIK BARMAN, SOUMYADIP MALIK, PRADIP KUMAR BANERJEE | --- | 10-Jun-2025 | 202511056072 | PP | --- | --- |

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|----|---------------|----|-------|--|---|-------------|-------------|--------------|----|-----|-----|
| 6 | 0156NF2025/IN | IN | CIMFR | BIOCHAR BASED ACTIVATED CARBON SUPPORTED ORGANOCATALYST AS ANODIC MATERIAL FOR ELECTROCHEMICAL CARBON DIOXIDE CONVERSION TO VALUE ADDED PRODUCTS | KESHAV RAGHUVANSHI, VALLU RAMAKRISHNA, SOUVIK BARMAN, PRADIP KUMAR BANERJEE | --- | 02-Jul-2025 | 202511063303 | PP | --- | --- |
| 7 | 0005NF2025/IN | IN | CIMFR | System, method for the prediction, maximization of ore recovery Controlling Ore Dilution for ringhole blasting | Ashish Kumar Vishwakarma, Vivek Kumar Himanshu, Murari Prasad Roy, Chhangte Sawmliana | --- | 05-Aug-2025 | 202513074646 | PP | --- | --- |
| 8 | 0200NF2025/IN | IN | CIMFR | Synthesis And Characterization Of Malenonitrile Tethered Homobimetallic Zn(II) Complex By C-C Bond Formation | KESHAV RAGHUVANSHI, SOUVIK BARMAN, PRADIP KUMAR BANERJEE | 12-Sep-2025 | --- | 202511087419 | PP | --- | --- |
| 9 | 0199NF2025/IN | IN | CIMFR | SCHIFF BASED COMPOUND AND ITS METHOD OF PREPARATION THEREOF | Keshav Raghuvanshi, Souvik Barman, Shweta Kumari, Pradip Kumar Banerje | 15-Oct-2025 | --- | 202511099941 | PP | --- | --- |
| 10 | 0063NF2025/IN | IN | CIMFR | A Process for the Bio-Mining of Rare Earth Elements from Red Mud | VETRIVEL ANGUSELVI | --- | 12-Feb-2026 | 202611015988 | PP | --- | --- |
| 11 | 0264NF2025/IN | IN | CIMFR | Low-Density Bulk Emulsion Composition and Manufacturing Process Therefor | Firoj Ali, Arvind Kumar, Chhangte Sawmliana | --- | 17-Feb-2026 | 202611017954 | PP | --- | --- |
| 12 | 0270NF2025/IN | IN | CIMFR | A passive electronic detonator system for tracing of explosives | Swades Kumar Chaulya, Dilip Kumbhakar, Sanjay Kumar Roy, Prabhat Kumar Mandal, Preity, Jitendra Kumar Singh, Naresh Kumar, Vikash Kumar | --- | 26-Feb-2026 | 202611023268 | PP | --- | --- |
| 13 | 0312NF2025/IN | IN | CIMFR | A PYRAMIDAL POLYHEDRON BEARING PLATE FOR ROCK BOLT REINFORCEMENT IN UNDERGROUND MINES AND OPENINGS | Ranjan Kumar, Kumar Gaurav, Prabhat Kumar Mandal, Arka Jyoti Das, Subhashish Tewari, Rana Bhattacharjee | --- | 18-Mar-2026 | 202611033602 | PP | --- | --- |

Patent Applications Filed in Foreign Countries

Patent Application Filed in Foreign Countries during 2025-26: 03 (PCT Applications)

| SNo | NFNO | Country | Lab | Title | Inventors | Prov. Filing Date | Comp. Filing Date | Application No. | Status | Grant Date | Patent No. |
|-----|---------------|---------|-------|--|---|-------------------|-------------------|-------------------|--------|------------|------------|
| 1 | 0015NF2025/WO | WO | CIMFR | Transition Metal Catalyst Free Expedient Catechol Oxidation to Quinone via Photo-Catalysis | KESHAV RAGHUVANSHI, SOUVIK BARMAN, PRADIP KUMAR BANERJEE | --- | 04-Aug-2025 | PCT/IN2025/051185 | PP | --- | --- |
| 2 | 0064NF2025/WO | WO | CIMFR | P-F-B-OXO THIOKETAL AS ANTIBACTERIAL AGENT AND PROCESS FOR PREPARATION THEREOF | KESHAV RAGHUVANSHI, SUDARSHAN SINGH RATHORE, SOUVIK BARMAN, PRADIP KUMAR BANERJEE | --- | 26-Aug-2025 | PCT/IN2025/051342 | PP | --- | --- |
| 3 | 0156NF2025/WO | WO | CIMFR | BIOCHAR BASED ACTIVATED CARBON SUPPORTED ORGANOCATALYST AS ANODIC MATERIAL FOR ELECTROCHEMICAL CARBON DIOXIDE CONVERSION TO VALUE ADDED PRODUCTS | KESHAV RAGHUVANSHI, VALLU RAMAKRISHNA, SOUVIK BARMAN, PRADIP KUMAR BANERJEE | --- | 06-Oct-2025 | PCT/IN2025/051610 | PP | --- | --- |

Patents Granted in India

Patent Granted in India during 2025-26: 02

| SNo | NFNO | Country | Lab | Title | Inventors | Prov. Filing Date | Comp. Filing Date | Application No. | Status | Grant Date | Patent No. |
|-----|---------------|---------|-------|---------------------------------------|--|-------------------|-------------------|-----------------|---------|-------------|------------|
| 1 | 0151NF2018/IN | IN | CIMFR | Intrinsically Safe Digital Fuel Meter | Singh Jitendra Kumar, Chaulya Swades Kumar, Banerjee Gautam, Singh Pradeep Kumar, Prasad Gajendra Mohan, Abhishek Chaudhury, Naresh Kumar, Virendra Kumar | 17-Dec-2018 | 12-Dec-2019 | 201811047607 | IF/2026 | 07-Nov-2025 | 573463 |
| 2 | 0002NF2020/IN | IN | CIMFR | Digital mine using Internet of Things | Chaulya Swades Kumar, Prasad Girendra Mohan, Mandal Sujit Kumar, Banerjee Gautam, Singh Pradeep Kumar, Chowdhury Abhishek, Preity, Naresh Kumar, Virendra Kumar, Singh Jitendra Kumar, Chandan Kumar, Pandit Dewangshu, Mitra Mitrabarun, Mishra Shyam Sundar, Khusbhu Kumari, Mishra Richa, Kunal Saurabh, Dey Prasanjit, Md. Nadim, Saw Gopaljee | --- | 10-Jul-2020 | 202011029344 | IF/2027 | 16-Feb-2026 | 580680 |

Patents Granted in Foreign Countries

Patent Granted in Foreign Countries during 2025-26: 01

| SNo | NFNO | Country | Lab | Title | Inventors | Prov. Filing Date | Comp. Filing Date | Application No. | Status | Grant Date | Patent No. |
|-----|---------------|-------------------|-------|---|---|-------------------|-------------------|-----------------|--------|-------------|------------|
| 1 | 0090NF2021/ZA | ZA (south Africa) | CIMFR | Development of Oxygen Enriched Air Blown Pressurized Fluidized Bed Pilot Scale Gasifier | PRAKASH DHONDIRAM CHAVAN, SUJAN SAHA, NILESH D DHAIGUDE, VISHAL CHAUHAN, GAJANAN SAHU, SUDIPTA DATTA, PRADEEP KUMAR SINGH | --- | 08-Aug-2024 | 2024/06117 | IF | 26-Nov-2025 | 2024/06117 |

Copyrights: Filed or Registered

Copyrights Filed during 2025-26: 03

| SNo | Lab | Ref NO | Title | Diary No | Date of Filing | Registration No | Date of Registration | Lab Ref No |
|-----|-------|-----------|--|------------------|----------------|-----------------|----------------------|-----------------------------|
| 1 | CIMFR | 105CR2025 | SOFTWARE FOR PREDICTION OF COAL GCV & GRADES WITH THE INPUTS OF ONLY AIR-DRIED ASH & MOISTURE VALUES | LD-12040/2026-CO | 06-Mar-2026 | --- | --- | IPR/CIMFR/CRA/01/11(01) |
| 2 | CIMFR | 018CR2026 | Product Manual of Smart Algal Liquid Tree SALT | LD-12481/2026-CO | 11-Mar-2026 | --- | --- | IPR/CIMFR/CRA/02/02(01)2026 |
| 3 | CIMFR | 019CR2026 | A Product of Coal based tortoise craft | LD-12483/2026-CO | 11-Mar-2026 | --- | --- | IPR/CIMFR/CRA/03/02(02)2026 |

Designs: Filed or Registered

Design Applications Filed in India during 2025-26: 02, Registered during 2025-26: 01

| SNo | Lab | Ref NO | Title | Application No | Date of Filing | Registration No | Date of Registration | Lab Ref No |
|-----|-------|-----------|---|----------------|----------------|-----------------|----------------------|---------------------------------|
| 1 | CIMFR | 004DN2020 | CROW MODEL BIOMETHANE REACTOR | 333418-001 | 21-Sep-2020 | 227195 | 16-Mar-2026 | IPR/CIMFR/DR/01(01)2020 |
| 2 | CIMFR | 025DN2025 | Facile Mixed Matrix Membrane Design for Selective REE recovery | 461794-001 | 03-Jun-2025 | --- | --- | IPR/CIMFR/Design/01/05(01)/2025 |
| 3 | CIMFR | 036DN2025 | Integrated Microbial and Algal Approach to Utilize Mine Pit Water for Carbon Capture and Biofuel Production | 480641-001 | 03-Nov-2025 | --- | --- | e-mail |