Ongoing Project During April 2024-March 2025

Project Title	Start Date	End Date	Contract Value (RS.in Lakhs)
COLLABORATIVE PROJECTS			
Technology Development For Holistic Utilization Of Red Mud For Extraction Of Metallic Values & Residue Utilisation	01-10-2021	30-06-2025	137.95800
Effective Utilization of Middlings and Fines of Coking Coal Washery for Recovery of Carbon Values.	10-12-2021	31-08-2024	126.52000
Fabrication of Two modified binder percentage detection devices	05-04-2024	31-10-2025	17.70000
CONSULTANCY PROJECTS			
Setting up and Upscaling of a Process for the Production of Copper Powder from Copper Scrap	17-05-2024	16-08-2025	9.44000
CSIR- PROJECTS			
Development of Rare-earth free anisotropic α"-Fe16N2 hard magnetic material	01-04-2024	31-03-2026	67.30000
Unraveling the fundamental correlation of transformation pathway with mechanical and corrosion properties of multicomponent nano-pearlitic steels	01-04-2024	31-03-2026	59.50000
Development of self-healing geopolymer composites	01-09-2024	31-03-2026	52.00000
Low Temperature Co-fired Ceramic (LTCC) based eddy current sensor for Real-time health monitoring of power plant components	15-04-2024	31-03-2026	63.20000
Pilot Upscaling of Indigenously Developed Ultrahigh Strength Armour Steel with Excellent Toughness	01-04-2024	31-03-2026	89.00000
Extraction of vanadium as high pure V2O5, and Ni-salts from coal/coke gasification cinders	01-04-2024	31-03-2026	60.00000
Replacement of Toxic Cadmium Coatings by Electrodeposited Al/Zn-Mn Coatings on High Strength Steels	16-02-2022	15-02-2025	76.94000
Development of an AI based smart alarm system for predicting critical temperature zone of large industrial structure	14-06-2022	13-06-2025	90.18900
High Entropy Alloys for hydrogen storage application operable at Room Temperature (HEART)	01-04-2022	31-03-2025	75.00000
Development of large scale synthesis process for transition metal nano-composite based efficient and stable bifunctional electrocatalyst for anionic membrane alkaline water electrolyzer	01-04-2022	31-03-2025	53.63000
Phenome India-CSIR Health Cohort Knowledgebase	03-08-2022	02-08-2027	25.75000

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CO2 Capture (CC) by Amine Absorption Process with Sequestration by Modified Mineral Carbonation (MC) and Recovery of Marketable Products and Waste Heat (WH)-A Holistic Technology Development Approach	01-06-2023	31-05-2026	199.22000
Recovery of Metal Values from Mining and Steel Plant Wastes	05-09-2023	30-06-2025	146.00000
Development of a process for the production of chromic oxide from chromite beneficiation plant tailing. (WP 6/2)	01-09-2023	31-08-2026	80.00000
Recovery of Lithium from Potential Indian Primary Resources for Battery Applications	01-10-2023	31-03-2025	176.16500
CSIR-Virtual laboratory for school students	03-12-2020	31-03-2026	20.40000
Technology Development For Recovery of Tantalum from Secondary Resources (RETAN)	01-10-2023	30-09-2025	60.00000
Process technology for the recycling of waste c-Si PV modules	01-09-2023	31-08-2026	131.50000
Rare Earth Recovery from Waste Magnet (NdFeB)- Waste Scrap to Metal/oxide/salt Product	01-09-2023	31-03-2026	194.00000
Electrodeposition of corrosion resistant Cr-carbide coatings on SS 316L for Sink Roll applications in Continuous Galvanizing Lines	08-09-2022	07-09-2024	40.00000
Self-healing coating for corrosion protection of structural steel	01-08-2022	31-07-2024	76.00000
Technology development for Holistic utilization of Red Mud for extraction of Metallic values & residue utilization	03-10-2022	01-10-2024	176.26005
Holistic utilization of zinc dross for recovery of high value zinc products	08-09-2022	07-09-2024	145.00000
Scale up study for the recovery of potash fertilizer and iron oxide from Indian glauconitic rocks	08-09-2022	07-09-2024	54.00000
Indigenous Development of Benzoic Acid Reference Material for Calorimetry Analysis	08-09-2022	07-09-2024	54.40000
Technological intervention in the Dokra handicrafts for increased productivity, aesthetic and quality	01-04-2024	31-03-2027	65.00000
Battery to Battery: Recovery of Metal Values from Spent Lithium Ion Batteries and Fabrication of New Lithium Ion Batteries-A Circular Economy Approach (B2B)	01-07-2024	31-03-2027	416.16000
Potash fertilizer recovery from indigenous silicate minerals K-feldspar with simultaneous production of valuable by-products	01-09-2024	31-03-2027	114.00000
Development of process for the recovery of Selenium as metal/oxide and Tellurium as metal from Copper anode slime	01-09-2024	31-03-2027	90.00000
Recovery of Tin and Antimony from Lead-Tin_Antomony Dross	01-09-2024	31-03-2027	170.00000

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13-05-2024	31-03-2026	21.92000
01-04-2024	31-03-2026	62.81200
01-04-2020	31-03-2025	395.75000
01-11-2018	25-09-2024	138.49200
01-11-2018	25-09-2024	295.59400
01-11-2018	25-09-2024	209.75000
01-04-2020	01-04-2024	21.00000
01-08-2020	31-07-2025	100.00000
15-10-2020	31-03-2025	83.90639
17-07-2021	27-12-2024	52.60654
01-03-2022	31-08-2025	67.53100
11-03-2022	10-09-2025	86.47000
01-06-2022	31-05-2024	40.00000
13-06-2022	12-06-2027	78.34000
01-07-2022	31-03-2025	85.98100
22-06-2023	21-06-2025	47.43962
06-02-2023	05-02-2026	64.35366
14-03-2023	13-03-2026	33.33312
13-02-2023	12-02-2026	44.36128
21-02-2023	20-02-2026	42.85570
	01-04-2024 01-04-2020 01-11-2018 01-11-2018 01-04-2020 01-08-2020 15-10-2020 17-07-2021 01-03-2022 11-03-2022 11-03-2022 22-06-2023 06-02-2023 14-03-2023	01-04-2024 31-03-2026 01-04-2020 31-03-2025 01-11-2018 25-09-2024 01-11-2018 25-09-2024 01-04-2020 01-04-2024 01-08-2020 31-07-2025 17-07-2021 27-12-2024 01-03-2022 31-08-2025 11-03-2022 10-09-2025 01-06-2022 31-05-2024 13-06-2022 12-06-2027 01-07-2022 31-03-2025 22-06-2023 21-06-2025 06-02-2023 05-02-2026 13-02-2023 12-02-2026

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Eco-Friendly Solution with Metal Recovery and Value Added Products from Stainless Steel Spent Pickle Liquor: A Zero Waste Business Model.	01-05-2023	31-03-2025	67.72400
Centre for Excellence in Wear and Corrosion Resistant Coatings Technology	19-08-2023	18-08-2026	937.71040
Informal sector capacity building up-gradation with formation of recycling clusters under MSME scheme and enabling technology for recovery of resources from electronic waste thereby promoting resource efficiency and circular economy	03-07-2023	02-01-2027	304.56000
Sustainable Technology for the Production of High-grade synthetic rutile (TIO2) from Odisha Ilmenite under Women Scientist Scheme-A (WOS-A, DST)	29-03-2023	28-03-2026	33.00450
Science and Technology Innovation Hub in village Gamharia, Saraikela Kharsawan Block, West Singhbhum District, Jharkhand State	10-01-2024	14-03-2026	97.87687
Development of novel micro-structure and inhibitors to combat molten salt corrosion of thermal energy storage materials in concentrated solar power plant	27-06-2023	26-06-2026	27.23328
Process Development for Refining Commercial Magnesium Metal through Vacuum Distillation in Semi- Continuous Mode at 5-6 kg Scale.	02-06-2023	01-06-2026	97.70100
Evaluation of Mechanical Properties such as Tensile, Creep, LCF, KIC, CCG values of an Important Cast Ni Based Superalloy (BZL-12Y)	16-10-2023	15-10-2027	29.09000
Beneficiation of coking coal by hybrid mode: dry and wet processing to reduce the ash forming impurities	04-12-2023	03-06-2025	90.09000
Development of efficient bi-functional electrocatalyst of transition metal for anion exchange membrane (AEM) based alkaline water electrolyser, scale-up and prototype fabrication of membrane electrode assembly (MEA)	25-01-2024	24-01-2027	36.76924
Upgradation of lean grade ore/slimes through reduction roasting to develop blast furnace grade pellet	12-03-2024	30-06-2025	47.00000
Development of process for Beneficiation of Lean grade iron ores with less than 45% Fe content	28-03-2024	30-06-2025	36.56000
Environmental assisted cracking behavior of RRA and modified RRA treated AA7085 and AA2519 in 3.5%NaCl, humid air, hydrogen environments under cyclic loading	06-03-2024	31-03-2027	45.42000
Guided wave nonlinear ultrasonic and wave mixing techniques to assess fatigue damage in Al-Mg-Sc alloy	21-05-2024	20-05-2027	35.44128
Thermal stability of nanocrystalline Cu-Nb binary alloy thin films: Phase separation, Microstructure, Residual stress and Crystallographic texture	14-05-2024	14-05-2027	40.95401

Large-scale production of M2AX (M=Ti/V, A=Al, & X=C) type MAX and corresponding MXenes based electrodes for developing aqueous based coin and cylindrical supercapacitors	21-05-2024	20-05-2027	30.66724
Development of process for synthesis of copper and nickel metal powders from WEEEs for additive manufacturing	01-07-2024	30-06-2026	46.53674
Reduction of surface contamination of Teri heavy mineral sand and dewatering studies on slimes	02-09-2024	01-09-2025	27.64000
Scale up of a pyro-hydrometallurgical processes for holistic recycling of variable Zinc dross (high grade and low grade)	01-11-2024	30-11-2026	65.81000
Hot corrosion behaviour of Ni-base and Co-base Superalloys using thermo-gravimetric and electrochemical methods	15-10-2024	14-10-2027	83.42640
Decarburisation of high carbon ferro manganese for preparation of low carbon ferro manganese.	06-03-2025	05-03-2027	63.00000
IN-HOUSE PROJECTS			ı
A study on hydrodynamics characteristics in separation of minerals in a monolithic flotation column	01-11-2021	30-09-2024	2.70000
Flow Accelerated Pipeline Corrosion (Module-I): Probing the FAC mechanisms of API 5L grade steels through gravimetric and different electrochemical techniques Flow Accelerated Pipeline Corrosion (Module-II): Microstructure & FAC behavior correlation in API 5L grade steels; Effect of different Fe-C phases & phase fractions Flow Accelerated Pipeline Corrosion (Module-III): Microstructure, Inhibitor performance & FAC behavior correlation in API 5L grade steels; Effect of Microstructural Constituents on Inhibitor'S Effectiveness	01-11-2021	30-09-2024	5.55000
Near net shape 3D manufacturing of Inconel 718 by optimizing controlled parameters of wire arc additive manufacturing with Cold metal transfer process.(Module I)(Module II)	14-04-2022	31-03-2025	5.70000
Microstructural evolution of Superalloy Inconel 740H during Thermomechanical Processing(Module I)(Module II)(Module III)	14-04-2022	31-03-2025	1.71000
(Module - I) Thermodynamics and Kinetic Investigation on the Gas-Solid reduction of premixed lean grade Mn/Fe Ores (Module - II)Thermodynamic and Kinetic investigation on the Gas-Solid reduction of premixed lean grade Mn/Fe ores	01-12-2022	30-09-2024	6.65000
Microstructure and Mechanical Property evolution of WAAM-ed Inconel 625 (Module-I + Module-II)	01-12-2022	30-09-2024	1.70000

Analytical strategies for elimination of Memory effect in ICP-MS for the quantification of mercury (Hg) in Coal and fly ash samples	01-05-2023	30-04-2024	10.66000
Understanding the occurrence of Rare Earth Elements and Yttrium within coal beds, partings, and overburden (Module-1)(Module-2)	15-05-2023	31-03-2025	3.97500
To Explore Ferrochrome Slag as a Protective Coating Material to Prevent Corrosion of Caster Rolls	01-01-2024	30-09-2024	9.10000
Deposition and Characterization of Antimony Chalcogenide-based Light Absorbers Coatings for Photovoltaic Applications	01-11-2023	30-09-2024	20.50000
Development of Eddy Current sensor for crack detection in bilayer riveted engineering structures	01-11-2023	30-09-2024	9.40000
Development of indigenous Coal CRMS for different grade of Ash, VM & GCV in Indian coal	01-11-2023	30-09-2024	3.27000
Design of efficient corrosion inhibitor for mild steel surfaces using density functional theory and reactive molecular dynamics simulations	15-11-2023	30-09-2024	2.30000
Zirconium rich alloys for Dental implant	01-05-2024	31-07-2024	36.99000
Column flotation for Indian copper sulphides.	01-05-2024	31-03-2025	6.70000
Design and Development of a novel innovative reactor for the production of Magnetite powder from iron oxide fines	01-05-2024	31-03-2025	17.17500
Thermal Performance Analysis of Additively Manufactured Liquid Cold Plate for EV Battery	01-05-2024	31-03-2025	5.54000
Development of a Data Server , Report Management System & One window access to varied Project Information including APP	01-05-2024	31-03-2025	4.90000
Beneficiation of lithium ore by froth flotation to separate lithium, feldspar, and quartz consecutively	01-11-2024	30-09-2025	1.30000
SPONSORED PROJECTS			
Electronic packages for ultrasonic flow meter for onboard propellant gauging of spacecraft	01-09-2018	31-12-2024	49.72520
Investigations of Fracture and Fatigue Crack Growth Rate Behaviour of Aero Engine Fan Disk of Ti-6AI-4V Alloy	04-02-2019	31-12-2024	95.96383
Coal Characterization of Eastern Coalfileds	11-04-2022	31-03-2025	170.15600
Evaluation and Characterisation of band by band coal analysis of Asansol Coalfields Ltd.(SSP-1262)	01-04-2021	30-04-2025	314.52089
Evaluation of grade of SECL mines	15-12-2021	31-03-2025	97.00001
Fatigue Behaviour Of Primary Piping/vessel Materials If Indian Npps Under Multi Axial Conditions (Ssp 1267)	11-02-2021	31-12-2024	44.48600
Seam Overall Analysis of Jharia Coalfields	25-01-2023	31-03-2026	24.73845

10-02-2022	08-05-2024	18.45722
06-01-2022	19-10-2024	21.24000
20-01-2022	31-03-2025	70.21000
11-04-2022	25-03-2025	117.99999
01-08-2023	31-03-2027	102.07000
15-07-2022	31-12-2024	100.00534
01-05-2022	30-04-2024	56.87954
10-10-2022	30-04-2024	23.60000
16-06-2022	30-06-2025	146.93679
15-07-2022	31-03-2025	119.99997
20-01-2023	31-03-2026	42.26532
01-11-2022	31-03-2025	7.77174
20-01-2023	31-12-2024	26.55000
14-11-2022	14-05-2024	11.80000
01-08-2023	31-03-2026	88.33480
05-10-2023	04-10-2024	11.80000
11-03-2024	10-03-2025	5.90000
29-05-2024	29-09-2024	11.80000
14-06-2024	14-03-2025	7.08000
18-06-2024	06-08-2024	5.90000
	06-01-2022 11-04-2022 11-04-2022 15-07-2022 10-10-2022 16-06-2022 15-07-2022 20-01-2023 01-11-2022 20-01-2023 14-11-2022 15-07-2024 14-06-2024	

Metallurgical Failure Analysis of Roller Boss in a Cement Plant	04-10-2024	03-10-2025	5.90000
Feasibility study of beneficiation of Quartz	29-11-2024	29-05-2025	9.44000
Feasibility study of beneficiation of Quartz	29-11-2024	29-05-2025	9.44000
Failure and microstructure characterization of the cement mill roller shaft	02-01-2025	31-12-2025	5.90000
Metallurgical failure analysis of combines emergency stop valve and control valve (ESVCV) of unit 1 of HP stem turbine	10-01-2025	09-01-2026	9.73500
Seam Overall Characterisation of Coal sample of CMPDIL	01-08-2023	31-03-2026	83.45745
High Cycle Fatigue Characterization of Compressor Aerofoil Material GTM-SU-718.	30-01-2023	31-07-2025	106.90500
Beneficiation study of quarzitic sand to produce a sand glass grade	10-02-2023	31-08-2024	17.70000
Exploratory studies on creep crack growth rate behaviour of GTM Su 718 alloy	21-02-2023	19-06-2025	81.25000
Evaluation and health assessment of center buffer coupler parts: Body. Yoke, Knuckle	01-03-2023	28-02-2026	90.27000
Evaluation and assessment of field withdrawn CBC components	01-04-2023	31-03-2026	100.30000
Metallurgical Failure Investigation of Line Pipe Steel API 5LX70M PSL2	09-05-2023	08-05-2024	11.21000
Metallurgical Investigation to explore the root cause of U1 Boiler SH Tube Failure	19-05-2023	18-05-2024	5.90000
Development of corrosion resistant spray coatings for TMT rebars	01-07-2023	30-06-2024	11.80000
Processing and Property Optimization of Iron based Soft Magnetic Nanocrystalline Alloys	02-06-2023	01-06-2024	10.00640
Development of Ultra High-strength Al-Mg-Sc alloy	01-07-2023	31-05-2025	33.38220
Root Cause Analysis of failure of the reheater tube and economizer tube.	20-06-2023	19-06-2024	9.44000
Salvaging Lithium mixed metal oxide and converting into value added product from spent Li-ion Battery	01-08-2023	31-12-2024	21.24000
Smelting Studies for Nickel Laterite Briquettes in Electric Arc Furnace.	03-07-2023	02-07-2024	17.70000
Pre-reduction and smelting studies of biochar for ferroalloy production	03-07-2023	31-03-2025	13.27500
Forging, Hot Rolling and Salt Bath Heat Treatment of Different Grades of High Carbon Steels.	01-08-2023	31-07-2025	58.92920
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Transfer of technological Know-How to recycle spent lithium ion batteries (LIBS) to produce value added products of Li, Co, Mn, Cu, Ni as metals/salts, saleable plastics and graphite	01-08-2023	30-11-2024	25.00000
Transfer of technological Know-How for the extraction of Cu, Al and Au as metals/salts from waste PCBs	01-08-2023	30-11-2024	25.00000
Up-scaling of process for production of Electrolytic Mn Metal from MOIL MnSO4 solution	01-09-2023	31-08-2024	48.04960
Evaluation of debonding area in Con rods using Ultrasonic Imaging	30-08-2023	31-12-2024	6.19500
Work package to upscale, characterize and realize the properties in Complex concentrated alloys (CCA).	12-07-2023	31-12-2024	40.56861
Feasibility Studies on the Preparation of Zirconium Iron Alloy	09-09-2023	03-09-2024	8.85000
Creep behavior of different grades of stainless steels and nickel-based super alloys	08-09-2023	31-03-2025	14.27800
Metallurgical Failure Investigation of the Blasted Oxygen Cylinder	31-07-2023	30-07-2024	7.67000
Technology transfer of a sensing device Zincometer for Zinc coating weight measurement in GI line	06-10-2023	31-10-2024	9.44000
Validation of know-how for the recovery of REEs from variable Spent NdFeB magnets of variable sources	01-11-2023	30-04-2025	31.86000
Instrumentation of billet mould with sensor and installation at CC3 for breakout prevention	15-10-2023	31-01-2026	28.88640
Filling the gap in silver recovery process at PMP, Pant Nagar, Uttarakhand	04-12-2023	30-06-2025	63.72000
Studies on creep behavior of SS304L base and weld material	14-12-2023	13-12-2025	45.90200
Corrosion Damage Analysis of steel pipelines and material selection for Ammonia Distillation Unit	12-01-2024	11-01-2025	8.68480
Transfer of Know-how/Technology for the development of Ti3AlC2 MAX phase	01-02-2024	31-01-2025	5.90000
Simulation analysis for the grinding circuit for Ambaji Project	09-02-2024	09-10-2024	11.80000
Development of High Temperature Low Sag Al-alloy conductor	13-02-2024	12-04-2025	52.10880
Analytical Method Development and Chemical Analysis of Western Region NGCM Samples	01-04-2023	31-12-2025	184.92960
Feasibility studies of recovery of Manganese values as MnO2 and Mn304 from cell sludge generated during zine electro-winning	01-05-2024	31-12-2025	23.60000
Metallurgical investigation of fractured rails involved in derailment of NE Express	22-02-2024	21-02-2025	23.60000
AC Core-loss Studies on Additively Manufactured FeSi Toroidal Cores	05-03-2024	31-03-2025	10.32500
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Metallurgical Failure Analysis of KSA Clamp of MIG-29 Aircraft	01-05-2024	30-10-2024	3.25000
Corrosion assessment of anti-corrosion coating for TBSPL	20-03-2024	19-09-2024	8.52550
Transfer of technology on the recovery of Zinc as Zinc salts and metal from lean grade Zinc dross	01-04-2024	31-12-2026	8.00000
Analysis of low grade/sub grade chromite overburden, study at 5-10 kg scale in pot sinter and metallurgical characterization of supplied sample.	01-04-2024	30-09-2025	16.52000
WAAM of 316L Stainless Steel: A cost Effective Alternative to SLM for Critical Components and Repair	01-05-2024	09-01-2026	11.21000
Development of Wear-resistant Steel for Segment of Coal Sizer	15-04-2024	14-07-2025	49.56000
Pilot scale flotation of coal using a synthesized collector reagent	01-01-2024	31-03-2025	31.86000
Hot Rolling and Cold Rolling Followed by Salt Bath Heat Treatment of High Strength Steels	29-04-2024	29-04-2026	60.94700
Recovery of valuables from spent stainless steel pickle liquor	01-06-2024	31-12-2025	25.00000
Pre-reduction and advanced smelting studies of biochar for ferroalloy production	13-06-2024	12-06-2025	13.27500
Metallurgical Investigation of Fractured Rails Involved in Derailment of Train No. 15904 Dn	16-08-2024	15-08-2025	21.24000
Band-by-Band and Overall Coal Core Study of Rasulpur and Shrimatpur Area through Chemical and Physical Characterization	01-09-2024	31-08-2025	15.09869
Transfer of process flow sheet for production of a self- healing coating and primer suitable for application on rusted steel	01-12-2024	30-11-2025	17.70000
Metallurgical investigation of sheared Starboard Faring of KBU-702 MIG-29 Aircraft for root cause analysis	06-09-2024	05-09-2025	4.48400
Metallurgical test of wagon components related to the side collision of Train No. 12810	09-09-2024	08-09-2025	7.67000
Metallurgical investigation for damaged condensate feed system water pipeline and worn out spline shaft of kg linkage	22-05-2024	21-05-2025	7.08000
Creep behavior studies of martensitic grade steel	27-08-2024	26-08-2025	6.53720
Parametric validation of the process for the recovery of Zn, Pb and Ag from Jarosite	01-09-2024	31-12-2025	11.80000
Material Evaluation of LHB Railway Wheels	08-02-2024	31-05-2025	7.61100
Transfer of technology know-how for the "Magnetoimpedance (MI) Based Array Sensing Device for Detection of Carburisation and Defective Welds: MagRays"	17-10-2024	31-03-2026	15.34000

18-10-2024	17-04-2025	32.19026
22-10-2024	30-11-2025	12.98000
01-01-2025	31-12-2025	17.70000
04-12-2024	31-03-2026	13.27500
24-01-2025	31-03-2026	34.51500
29-01-2025	28-01-2026	51.92000
25-01-2025	31-03-2026	40.12000
03-03-2025	03-03-2026	83.94103
24-02-2025	24-11-2025	17.70000
03-02-2025	02-02-2026	5.90000
17-02-2025	16-02-2026	20.06000
03-02-2025	31-07-2025	5.90000
	22-10-2024 01-01-2025 04-12-2024 24-01-2025 29-01-2025 25-01-2025 24-02-2025 03-02-2025 17-02-2025	22-10-2024 30-11-2025 01-01-2025 31-12-2025 04-12-2024 31-03-2026 24-01-2025 31-03-2026 29-01-2025 28-01-2026 25-01-2025 31-03-2026 03-03-2025 03-03-2026 24-02-2025 24-11-2025 03-02-2025 02-02-2026 17-02-2025 16-02-2026