

COMPLETED PROJECTS OF CSIR-NML DURING APRIL 2020-MARCH 2021

S.No.	Project.No.	Project Title	Start Date	End Date	Contract Value in Lakhs
1	CLP 0189	Laboratory Scale Processing and Technology Transfer of 18 Karat Low Melting Point Gold Alloys for Jewellery Application.	28-03-2017	28-02-2021	15.433
2	CLP 0191	Dry Beneficiation of High Ash Indian Thermal coal. (CLP-0191)	08-11-2017	30-09-2020	197.87
3	CLP 0197	Evaluation of density/homogeneity of TC rings[of rolls] through NDT technique.(CLP-	01-12-2017	31-03-2021	35.4
4	CLP 0204	Beneficiation studies on low grade manganese ore samples.	01-05-2019	28-02-2021	53.1
5	CLP 0205	Identifying the enablers to reduce the K ₂ O and SiO ₂ contents in Gomardih dolomite	01-06-2019	30-11-2020	53.1
6	CLP 0207	Ultra Fine Grinding of Steel Slag (CLP-0207)	01-05-2019	30-04-2020	23.6
7	CLP 0208	Advanced Gravity Concentration of Chromite Beneficiation Plant.	01-05-2019	30-04-2020	27.081
8	CLP 0209	Development of new techniques for producing AHSS steels by optimizing annealing process parameters (CLP0209)	01-05-2019	31-12-2020	29.5
9	CLP 0210	Effect of Deformation and Chemistry on X70 properties (CLP 0210)	27-02-2020	31-03-2021	20.06
10	CLP 0211	Up-Scaling of the process for the production of DRI Briquettes utilising LD Sluge,BF Sluge,Mill Scale and CDQ in Tunnel Kiln Phase-I:Heat transfer study to optimize the	24-04-2019	23-06-2020	29.6652
11	CLP 0212	Thermal Mapping of Tuyere through FBG	02-01-2020	31-03-2021	17.7
12	CNP 0134	Consultancy for design,erection,commissioning and process stabilization of flotation column for	22-11-2018	30-04-2020	15.517
13	CNP 0182	Consultancy on Preparation of Basic Engineering Package for 10,000 TPA EMD Plant at Dongri-Buzurg Site of MOIL Ltd.	10-12-2019	30-09-2020	29.5
14	GAP 0268	Development of cost-effective green technology for pre-reduction of chromite ore in tunnel Kiln & production of high carbon	25-09-2017	31-03-2021	134.5
15	GAP 0277	Development of graphene based membranes from graphite ore for desalination(in Collaboration with CSIR	01-01-2019	31-12-2020	17.73
16	GAP 0278	Recovery of germanium as metal/salts from secondary resources	07-01-2019	06-01-2021	39.27
17	MLP 3117	Industrial Hot Rolling Run Out Table and Continuous Annealing Line Simulations for developing Advanced High Strength Steels	01-04-2020	31-03-2021	186

18	OLP 0325	Development of hard and optically transparent nanocomposite coating for wear and optoelectronic application(Module 1)	01-10-2017	15-10-2020	4.8575
19	OLP 0349	Hydrogen assisted degradation and fracture in pipeline steel	16-04-2018	15-04-2020	3.14502
20	OLP 0356	Enhancement of wear,abrasion and corrosion resistance through friction stir processed ceramic particle reinforce	15-04-2019	14-04-2020	1.55
21	OLP 0357	Beneficiation of tribocharged particles on multiproperty separator	15-04-2019	14-04-2020	4
22	OLP 0358	Study on effect of coal maceral on plastic behaviour of different coking coal	01-04-2019	14-07-2020	7.957
23	OLP 0361	Development of high efficiency Tin Selenide based Thermoelectric and optically tunable coatings for alternative energy harvesting from different industrial applications	16-04-2019	15-04-2020	5.6325
24	OLP 0362	Predicting the probability of failure of power plant components using NDE parameters	16-10-2019	15-10-2020	9.6
25	OLP 0363	Influence of process parameters on properties of SS316L components produced by metal 3D printing using SLM technique	16-10-2019	15-10-2020	6.25
26	OLP 0364	Investigation on Advanced Short-Circuiting Gas Metal Arc Joining of Dissimilar Materials for Automotive Applications	16-10-2019	31-10-2020	2.8
27	OLP 0365	Implication of grain boundary engineering to combat molten salt corrosion of Alloy617 and Super 304H in concentrated solar power	16-10-2019	15-10-2020	1.4
28	OLP 0366	Mechanical properties evaluation of weld joints through ball indentation technique and its verification by standard test	16-10-2019	15-10-2020	1.95
29	OLP 0367	Study of fluidized angles and boundary wall effects on density stratification in pulsated air stratifier using Particle Image Velocimetry	16-10-2019	15-10-2020	4.5
30	OLP 0368	Phase field modelling on microstructure evolution of Mg-alloys during solidification	16-10-2019	15-10-2020	0.8
31	OLP 0370	Preparation and certification of Hydrogen Standard (CRM) in Steel	16-10-2019	15-07-2020	2.7
32	OLP 0371	Development of a pseudo-capacitive nanocomposite electrode material for high energy supercapacitors (Module-I)	16-10-2019	15-10-2020	7.77
33	OLP 0373	Thematic research category title investigation on the machinability and wire	01-06-2020	30-11-2020	1.15
34	OLP 0375	Biomass derive activated carbon-based prototype supercapacitor for real application	01-06-2020	30-11-2020	1

35	OLP 0376	Controlled electro fabrication of nanostructure corrosion and powering resistant compositionally modulated multilayer (CMM) Zn-alloy coating on advance high strength steel alternate to	01-06-2020	30-11-2020	1.15
36	OLP 0377	Ceramic Coating for Anti-corrosion and High Temperature Oxidation Resistance of Mild	01-06-2020	30-11-2020	3.95
37	OLPR 0016	Development of a customizable web-based system that can facilitate the e-recruitment of scientific & technical staff at CSIR-NML(Phase 1 would focus on Gr.IV & Gr. III)	01-01-2020	31-12-2020	8.35
38	OLPR 0024	Design and Development of an integrated, web-based information management system for managing Creep Test jobs, calibration, maintenance and reporting of test results at	01-02-2020	31-01-2021	15.4
39	SSP 1066	Development to improve corrosion performance and service life of aluminium	01-06-2017	31-12-2020	32.19999
40	SSP 1074	Optimisation of al-based metallic foam production method and development of metal foam for BARC applications	13-06-2017	31-03-2021	39.215
41	SSP 1082	n-line Oxide Scale Removal of Wires using Ultrasonic Assisted Electrochemical	10-08-2017	31-03-2021	30.68
42	SSP 1093	Metallurgical failure investigation of waste recovery boiler (WRB) tube from Zinc Plant.	15-02-2020	31-10-2020	7.32
43	SSP 1122	AUSC-1 Generation of creep data of Ausc Rotor(Alloy 617 M forge) and casing (alloy	03-01-2018	31-03-2021	354
44	SSP 1123	ASUC-2 evaluation of creep crack growth(CCG) behaviour for SS304HCU base	07-12-2017	31-12-2020	336.3
45	SSP 1124	ASUC-3 Evaluation of creep crack growth (CCG) behaviour for 10Cr-alloy 617 BMW	03-01-2018	31-12-2020	354
46	SSP 1125	AUSC-4 fireside corrosion Behavior of 304 HCU Alloy 617M in simulated India coal-fired	01-09-2017	30-06-2020	176.1
47	SSP 1141	Microstructure and mechanical of centre buffer coupler component	17-01-2018	31-07-2020	56.05
48	SSP 1143	RLA of Crude and Vacuum Heater tubes.	01-05-2018	30-04-2020	22.0424
49	SSP 1150	STRESS CONTROLLED LCF BEHAVIOR OF	22-06-2018	21-06-2020	29.5944
50	SSP 1162	Corrosion aggressivity of mine water samples	01-11-2018	31-03-2021	20.06
51	SSP 1169	Thermo-mechanical processing and heat treatment of low carbon steel	26-11-2018	27-01-2021	40.946
52	SSP 1177	Establish suitable microstructure for improving high strain rate tensile behaviour of advanced high strength steel	01-12-2018	30-11-2020	27.14
53	SSP 1178	Remaining life assessment of Hydrogen Reformer, Pig tail,Visbreaker-1, and	01-02-2019	31-08-2020	50.032

54	SSP 1179	Bench scale leaching optimization for improvement of Mn recovery from reduced	18-01-2019	30-09-2020	35.4
55	SSP 1180	Development of alternate reduction roasting process using gaseous reductant for	18-01-2019	30-06-2020	76.7
56	SSP 1181	Failure Investigation of Reactor Effluent Air Cooler 132-EA-201C in Hydrocracker Unit	10-01-2019	31-12-2020	24.485
57	SSP 1182	Evaluation of Welding Joints of Thermal Power Plant Boiler Pipes through	04-02-2019	03-05-2020	5.9
58	SSP 1188	Studies on Creep deformation and fracture behavior of Cr-Mo Steels	01-02-2019	31-12-2020	9.8648
59	SSP 1193	Development of adherent Zn coating on Mg-Zn-Mn for enhancing implant life	01-04-2019	31-03-2021	17.936
60	SSP 1194	Residual stress investigation of rails from DFCCIL-MGS	04-04-2019	28-02-2021	47.2
61	SSP 1195	Residual stress investigation of rails from DFCCIL-Agra	01-03-2019	31-05-2020	51.92
62	SSP 1199	Residual Stress Measurement on Bend Tubes (Axle Beams).(SSP-1199)	05-04-2019	01-12-2020	12.685
63	SSP 1202	Magnetic separation on limestone and clay samples for the removal of iron bearing and other magnetic impurities	01-06-2019	30-10-2020	11.8
64	SSP 1203	Complete analysis of failed water wall tubes of unit # 1 boiler	11-06-2019	30-06-2020	5.9
65	SSP 1204	Studies on stress rupture behaviour of Alloy 690 base and weld metal	10-05-2019	31-07-2020	24.4496
66	SSP 1212	Material Evaluation and Health Assessment of Center Buffer Coupler.	30-08-2019	30-11-2020	22.78
67	SSP 1214	Transfer of Know-How for the extraction of cobalt and manganese from the black cathodic material of Li-Cobalt batteries.	18-11-2019	17-11-2020	14.75
68	SSP 1217	Creep deformation behavior of Titan 26A	01-04-2019	31-03-2021	14.5376
69	SSP 1221	Study of mechanical properties and microstructure for health assessment of Centre Buffer Coupler for RDSO	02-12-2019	31-08-2020	15.045
70	SSP 1222	Microstructural and mechanical property evaluation of Center Buffer Coupler	02-12-2019	01-03-2021	15.045
71	SSP 1226	Root cause analysis of failure of runner of	25-11-2019	25-01-2021	6.49
72	SSP 1231	Creep and stress rupture property evaluation of T11 (1.25Cr-0.5Mo) steel	16-01-2020	31-03-2021	11.8944
73	SSP 1232	Indigenous production of electronic iron power from mild steel	21-01-2020	31-03-2021	14.16
74	SSP 1233	Pilot scale study on hydrocyclone	03-02-2020	31-10-2020	11.21
76	SSP 1235	Transfer of KNOW-HOW for Extraction of Cobalt metal Salt from Black Powder of	13-07-2020	12-10-2020	7.08

77	SSP 1238	Coating thickness measurement of metallic (Galvanized/glavalume) coated and pre-	24-02-2020	23-02-2021	11.564
78	SSP 1239	Performance Evaluation of Protective	20-02-2020	19-08-2020	6.7968
80	SSP 1242	Development of Methodology for Real-time Volumetric Inspection of Copper Rods	01-02-2020	31-03-2021	9.086
82	SSP 1245	Galvanizing coating simulation using hot dip process simulator	03-02-2020	31-07-2020	6.47999
83	SSP 1247	Residual Life Assessment Study of Gas Turbine generator (1250-2E class)	01-07-2019	31-03-2021	27.4586
84	SSP 1253	Lab-scale study on reducing ash content (mineral matter) from Bhubaneswar, Kaniha and Hingula coal through oil agglomeration	15-09-2020	14-01-2021	11.22577
86	STS 0005	Scientific and Technical Services of MST	01-12-2010	01-12-2020	2.01187