

**CSIR-NATIONAL PHYSICAL LABORATORY  
PROCUREMENT PLAN**

*(\*Please read the note given at the end)*

**A FOR THE FINANCIAL YEAR 2024-25**

**A (a) EQUIPMENT**

**(i) Equipment: Out of CSIR Infra Grant**

Sr. No.	Name Category of Equipment/ Vehicle Item	Quantity (Nos.)	Approximate Cost (Rs. In Lakhs)
1	Small sine bar – 300 mm long	1	0.30
2	Retroreflector 150mm	1	3.00
3	Dehumidifier, Capacity: 30L /Day	1	0.70
4	Hydraulic Trolley	1	1.50
5	Micrometer	1	1.40
6	Precision DC Power Supply.	1	5.00
7	Digital portable Density meter.	1	6.00
8	Soldering rework station with specification	1	3.00
9	Dehumidifier	1	1.20
10	Programmable DC power supply	1	2.00
11	10 kA AC high Current Source with accessories	1	15.00
12	Soldering station	1	1.00
13	Light source with different wavelengths	1	3.50
14	Mass flow controller	1	2.50
15	Fibre coupled Laser sources with 523 and 1064 nm wavelengths along with accessories	1	3.50
16	Pfeiffer DCU 400 Display controller including power supply	1	2.50
17	Polarizing microscope	1	1.10
18	CMOS Color Camera with Software	1	1.10
19	Portable weather monitor for field and balloon observation	1	2.80
20	Pump with mass flow controller	1	0.70
21	PID programmable temperature controller and 2" dia sputter source	1	2.50
22	PM1 Sampler	2	2.00
23	Centrifuge Machine	1	1.50
24	Single beam Visible Spectrophotometer	1	1.50
25	Ultrasonic sonicator	1	1.00
26	Digital pH meter	1	0.50
27	3KVA online UPS with batteries	1	0.75
28	Ultrasonic Cleaner with timer & power controller	1	0.30
29	Desicator Cabinet	1	2.25
30	PM10 Sampler	2	2.00
31	Stainless Steel Syringe	1	1.50
32	Anemometer	1	1.00

33	Cabinet Desiccator	1	1.00
34	One Set of Pyranometer, UV Radio meter and Prygeometer with data logger	1	15.00
35	Climate chamber for controlled temperature and humidity	1	1.50
36	Repair of Optical table legs	1	2.00
37	DC motors of chillers of	2	0.50
38	O2 and H2O analyser of Glove box	1	1.50
39	High temperature Oven	1	3.00
40	Palletiser and hydraulic press	1	1.40
41	Ultrasonic Bath	1	1.00
42	High Resolution Multimeter	1	1.50
43	OVERHEAD MECHANICAL STIRRER	1	0.40
44	3D Scanner for 3D Printer	1	0.35
45	Micro Dispenser controller DSD 55	2	0.50
46	3D Filament dry Storage cabinet - 160 Ltr.	1	0.33
47	High volt DC power Supply for Electrostatic Seperator	1	1.50
48	Precision high voltage DC Power supply	1	3.85
49	standalone power backup	1	0.30
50	UPS 5KVA with isolation transformer	1	1.50
51	Attenuator in 2.4 mm (3 dB, 10 dB)	1 each	1.00
52	Attenuator in N-type (3 dB, 10 dB, 30 dB)	1 each	1.50
53	Function Generator (Low Frequency)	1	4.00
54	RF Millivoltmeter with required TVCs at nominal voltages	1	8.40
55	Shielding Door	1	0.95
56	Antenna Positioner	1	5.50
57	DC Current source meter	1	5.00
58	Brush Cutter	3	2.00
59	Walk behind Lawn Mower Petrol Engine	2	1.20
60	Leaf Shredder	2	1.40
61	Pole Pruner	2	1.30
62	Leaf Blower	2	1.50
63	Water Pump	1	0.30
64	Lawn mower diesel operated 20" with 5HP engine	2	1.50
65	Fogging machine	1	0.45
66	Heavy duty garbage collect tricycle rikshaw (with metal body)	3	0.60
67	Heavy duty floor cleaning machine (cingo) with extra brush wheel pad	2	1.50
68	Heavy duty industrial vaccum cleaner	2	1.00
69	Window & split AC 5 star	100	50.00
70	Meger 5000 Volt	1	1.00
71	Sumersible pump 5HP	2	0.80
72	Ceiling fan BLDC 5 star	50	1.50
73	Data centre renovation	1	25.00
74	2 Ton Tower Air Conditioner	1	1.00
75	Servers	5	30.00
76	Books (English & Hindi)	As req.	2.50

77	Journal of Pure and Applied Ultrasonics, Open Source For You, Electronics For You, Collnet Journal of Scientometrics and Information Management	1	0.15
78	Rotary Pump	1	2.00
79	Hot Air Oven(12'x12'x12')	1	0.40
80	Infrared Thermometer	1	0.10
81	refurbished dry vacuum pump	1	1.50
82	Stability and Homgenity Chambers, Oven	1 each	7.00
83	Vacuum pump/Suction pump	02 nos	0.50
84	Bench Top laboratory Fume hoods	01 nos	1.50
85	Auto titrator with wide range of pH,mV and high resolution of pH	01 no	3.00
86	Ultrasonic cleaner bath	1	0.50
87	Gold smith furnace. DSO	1	0.60
88	Double distillation apparatus	1	0.50
89	Items for instrument development (power supply, vacuum pump, Fiber coupled laser source with different wavelengths with accessories	1 each	7.00
90	Box Furnace	1	3.00
91	Air compressor	1	0.50
92	High back office executive chair	1	0.07
93	MFP Printer laserjet mono with duplex printing	1	0.25
94	chair	2	0.24
95	Water filter	1	0.48
96	Multifunction printer	1	0.62
97	1 KVA UPS	1	0.15
98	Oil Purifier Room Heater	2	0.70
99	Printer	1	0.70
100	Executive Chair	1	0.15
101	Visitor Chair	10	0.25
102	Digital Barometer	1	3.60
103	Digital temperature and humidity meter	1	4.00
104	Dehumidifier	1	2.30
105	Digital Multimeter	1	1.00
106	Ultra precision capacitance bridge	1	60.00
107	Upgradation of remote machine control system of liquid helium plant	1	25.00
108	Air Compressor for cleaning The Machine	1	0.20
109	Standards to Support R&D Activity of NPL	35	6.00

<b>(ii)</b>	<b>Equipment: Out of CSIR Funded Projects</b>
-------------	---

Sr. No	Name Category of Equipment/ Vehicle Item	Quantity (Nos.)	Project Number/ Code	Approximate Cost (Rs. In Lakhs)
1	Incubator Analyzer	1	FTT 070507	15.00
2	Neonatal Incubator	1	FTT 070507	7.00
3	Temperature sensor	1	FTT 070507	1.25

4	Hygrometer	1	FTT 070507	4.00
5	Anemometer	1	FTT 070507	0.65
6	Dry well	1	FTT 070507	9.00
7	Humidity Chamber	1	FTT 070507	4.45
8	Sound Calibrator	1	FTT 070507	0.65
9	Wind tunnel	1	FTT 070507	4.00
10	Anti-Vibration Table	1	FTT 070507	1.00
11	Humidifier with dry air controller	1	MLP 201232	6.00
12	Sheffield Head with sensors	1 Set	MLP 201232	7.00
13	IR Thermal Imager	1	MLP 201232	13.00
14	Integrating Nephelometer	1	FTT 050502	20.00
15	Optical Particle Counter	1	FTT 050502	20.00
16	Tethered Balloon Kit	1	FTT 050502	2.50
17	Light Weight PM Sampler	2	FTT 050502	1.00
18	Denuder	1	FTT 050502	1.00
19	Data acquisition system	1	HCP 52	7.00
20	Dual Frequency Comb Based THz Comb. Consisting of : optical Frequency Comb (02) with THz emitter and detectors: ORS-Mini Ultrastable Laser System Beat Detection unit-02 Customized electronics module including THz emitters, Detectors,	2,1,2,1	MMP 015201	1014.00
21	Sound Level Analyzer	1	NWP 100	4.00
22	Multifunction Sound Calibrator	1	NWP 100	3.00
23	Hydraulic Pressure Gauge	1	NWP 100	5.00
24	Printer (Multi Function),	2	NWP 100	0.80
25	Check Master	1	NWP 100	10.00
26	Muffle Furnance	1	NWP 100	2.00
27	Civil and Electrical work for maintaining class rooms & Jigyasa Lab	As Req.	HCP 0101	2.00
28	Electrometer	1	MLP 231932	23.00
29	Power supply, incubator, waterbath, RO	1 each	HCP 52	2.86
30	Workstation, Printer	1 each	HCP 52	1.00
31	Lab bench	3	HCP 52	1.14
32	Vector Network Analyzer (110GHz - 170GHz) two port along with base unit, calibration kit, adapter, enabled TDR option and appropriate Cables. (Output power upto +5dBm or higher)	1	MMP 015201	250.00
33	Signal Generator with power (built in or additional) amplifier (D band, 110GHz-170GHz) with vector software	1	MMP 015201	250.00
34	Spectrum Analyzer (D band, 110GHz-170GHz)	1	MMP 015201	150.00
35	Data Server	1	FBR 010307	9.50
36	355 nm pulsed laser source	1	FBR 010302	10.00

**(iii) Equipment: Out of Externally Funded Projects (EFP)**

Sr. No	Name Category of	Quantity	Project	Approximate
--------	------------------	----------	---------	-------------

	<b>Equipment/ Vehicle Item</b>	<b>(Nos.)</b>	<b>Number/ Code</b>	<b>Cost (Rs. In Lakhs)</b>
1	Furniture for traceability Lab	As per Req	TSP 180932	5.50
2	Antenna control unit	1	TSP 180932	6.60
3	Works and services for IT	As per Req	TSP 180932	5.50
4	Furniture for RRSLs and DRC	As per Req	TSP 180932	9.00
5	TWSTFT equipment	1	TSP 180932	150.00
6	AC systems	As per Req	TSP 180932	20.00
7	TV /Big Displays	As per Req	TSP 180932	60.00
8	Multifunctional Printers	10	TSP 180932	4.00
9	Office Computers	20	TSP 180932	25.00
10	Rubidium frequency Standard	2	GAP 230732	30.00
11	Time Interval Counter	3	GAP 230732	18.00
12	GNSS receiver with Antenna & cable	2	GAP 230732	26.00
13	Work station	2	GAP 230732	3.00
14	Kernel Virtual Machine	2	GAP 230732	2.50
15	White Rabbit Len Standalone kit	2	GAP 230732	15.00
16	GNSS receiver with accessories	2	GAP 150132	6.00
17	Dry Vacuum Pump	1	GAP 230932	11.00
18	Dry Scroll Vacuum Pump	1	GAP 230932	3.16
19	Softening point apparatus	1	GAP 230332	39.00
20	Optical microscope	1	GAP 230332	25.00
21	Polishing machine	1	GAP 230332	32.00
22	Oxidation oven	1	GAP 230332	50.00
23	Carbonization furnace	1	GAP 230332	50.00
24	Upgradation in existing melt-spinning assembly	1	GAP 230332	15.00
25	Minor Equipments, its accessories and installation	1	GAP 230332	15.00
26	Power supply	1	GAP 231232	1.00
27	Chamber	1	GAP 231232	12.00
28	Sputter guns	2	GAP 231232	6.00
29	Vacuum pumps	1	GAP 231232	3.00
30	Laser interferometer	5	TSP 231232	310.00
31	Mechanical Bed*	6	TSP 231232	110.00
32	Microscopic High Resolution Camera and related accessories	5	TSP 231232	5.00
33	Laptop / Desktop / laser printer with Dual Monitor	5	TSP 231232	5.00
34	UPS system and batteries	As req.	TSP 180932	80.00
35	Conductivity Meter	1	GAP 240332	1.00
36	DC Power Supply (10 A)	1	GAP 240332	4.00
37	Digital overhead stirrer	1	GAP 240332	0.50
38	Digital hot plate stirrer	1	GAP 240332	0.30
39	Waterbath with circulator	1	GAP 240332	0.20
40	Mass comparator, 200 g, 1 micro gram	1	GAP 240232	70.00
41	Rheometer Testing Facility for viscosity measurements	1	GAP 240232	65.00
42	Absolute Gravimeter Testing Facility	1	GAP 240232	530.00
43	Refractive Index Testing Facility	1	GAP 240232	20.00
44	Guarded Hot plate Testing	1	GAP 240232	395.00

	Facility			
45	Moisture Testing Facility (Moisture Analyzer & Forced convection oven)	1	GAP 240232	30.00
46	Clinical thermometer Testing Apparatus	1	GAP 240232	40.00
47	Power Supply (AC)	2	GAP 240232	15.00
48	Photo current meter	1	GAP 240232	35.00
49	Luminance Meter	1	GAP 240232	30.00
50	Brinell Hardness Testing Machine	1	GAP 240232	120.00
51	Optical based Low Force sensor as a new facility; Electro-optical components	1	GAP 240232	30.00
52	Ultrasonic Pulse Velocity Tester with suitable transducers	1	GAP 240232	15.00
53	Phased array Ultrasonic Flaw Detector Testing Facility	1	GAP 240232	30.00
54	Up-gradation of Microphone Calibration Facility using Insert Voltage method in range 20 Hz to 25 kHz	1	GAP 240232	50.00
56	Up-gradation of Acoustic Free-Field Calibration and Testing facility in frequency range of 125 Hz to 20 kHz	1	GAP 240232	180.00
57	PVTt (Primary gas flow standard)	1	GAP 240232	300.00
58	Aethalometer	1	GAP 161632	45.00
59	Nephelometer	1	GAP 161632	45.00
60	Gas Chromatograph	1	GAP 114732	26.00
61	Water bath with shaker	1	GAP 114732	1.00
62	PM2.5 Sampler	1	GAP 114732	1.25
63	PM1.0 Sampler	1	GAP 114732	1.25
64	Rubidium Frequency Standard	4	GAP 231032	20.00
65	Data Server	1	GAP 231032	12.00

<b>A (b)</b>	<b>CONSUMABLES</b>
--------------	--------------------

Sr. No.	Category	Expected Procurement Value (Rs. In Lakhs)			
		Out of CSIR Infra Grant	Out of CSIR Funded Projects	Out of Externally Funded Project (EFP)	Total (Rs. In Lakhs)
1	Glassware	6.72	0.20	0.93	7.65
2	Miscellaneous	60.73	9.10	286.32	356.15
3	Research & Development Accessories (R & D Consumable)	112.22	120.65	84.35	316.62
4	Electrical & Electronic Items	14.30	28.50	12.60	55.40
5	Computer Accessories	10.56	0.65	0.81	12.02
6	Cartridge	3.70	0.30	0.30	4.30
7	Software	37.17	12.25	0.87	50.29
8	Stationary	0.46	0.51	1.73	2.70
9	Chemical (Gases)	49.52	1.68	4.11	55.31

10	Chemical (Solid)	27.73	4.67	41.66	<b>74.06</b>
11	Batteries	1.60		0.50	<b>2.10</b>
12	Job Work (Repair)	102.47	17.32	30.44	<b>148.53</b>
13	Annual Maintenance Contract (AMC)	74.20		5.00	<b>79.20</b>
14	Furniture	9.62		0.05	<b>9.67</b>

<b>B</b>	<b>FOR NEXT 2-4 FINANCIAL YEARS (2025-29) (From 01/04/2025 to 31/03/2029)</b>
----------	---

<b>B (a)</b>	<b>EQUIPMENT</b>
--------------	------------------

Sr. No.	Name of Equipment / Item	Quantity (Nos.)	Approximate Cost (Rs. In Lakhs)
1	Tabletop SEM-EDS	1	70.00
2	Upgrade of Microphone calibration and testing facility , Multifunction Acoustic Calibrator & Access	1	50.00

<b>B (b)</b>	<b>CONSUMABLES</b>
--------------	--------------------

Sr. No.	Category	Expected Procurement Value (Rs. In Lakhs)
1	R&D Consumables for closed loop systems (by equipment name)	
2	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.)	
3	Other Consumables (ex- Insecticide, Raw Materials, Packing Material, Column, Syringes, Transcriptome and Metagenome Analysis, Metabolites analyses, Farm Consumables, TLC Plates, Filter papers, Planting materials, seeds, Chemical standards, Essential oils, Standard aroma molecules, Animal feed, Cell Lines, Agriculture accessories, etc.)	
4	Glass wares (ex- name the different glass wares)	
5	Plastic wares (ex- Name the different plastic wares)	
6	Toner Cartridges.	
7	Batteries, etc.	
8	Gases (ex- tentative names)	
9	Maintenance/AMC/repairing of existing equipment	
10	Stationery items (ex- name a few)	
11	IT / software-related Items (Name the items required during year)	
12	Furniture (Name the items required during year)	
13	Electric Items (Name the items required during year)	

**Note:**

- The above procurement plan is dynamic and could be revised as often as may be necessary with the approval of the Competent Authority.
- The procurement of the chemicals & consumables would be based on the need and ongoing requirement of R&D activities of Lab/Instt.
- The procurement is subject to the fund's availability/release of sufficient grant from CSIR / funding agency.
- The indicated procurement value is an estimate only.