

## PROCUREMENT PLAN OF CSIR-IITR (F.Y. 2024-25)

(A)

Sl. No.	Equipment	Cost (Rs. lakh)
1	Automated colony counter	8
2	Automatic Tissue Processor	40
3	Chemiluminescence immunoassay analyzer	20
4	CO2 incubator	7
5	Compressed Filing System	30
6	Computer Workstation	31
7	Cytospin Centrifuge	5
8	Deep freezer	1
9	Desk top PC	1
10	Digital Slide Scanner with Quantitative Tissue Image Analysis Software	40
11	Direct Ophthalmoscope	1.5
12	Grip strength meter	4.25
13	In vitro cells Cloud air-liquid interface Starter Kit/ In-vitro inhalation exposure system	13.5
14	Inverted Microscope	10
15	Laboratory stool / chair (with back support)	0.5
16	Microcentrifuge with temp control	6
17	Office All-in-One Printer (2)	1
18	Phase contrast microscope with camera attachment	21
19	Printer	0.5
20	Real time PCR	24
21	Refrigerator	0.5
22	Shaker incubator	6
23	Small Animal Behaviour Monitoring System	18
24	Split Air Conditioners (3)	2.5
25	Temperature humidity data logger	1
26	Tissue Embedding Station	10
27	Tissue homogenizer	1
28	Ultraviolet/Visible Spectrophotometer (Double beam)	9
29	Universal Testing Machine	25
30	Urine Analyzer	3
31	Vacuum Pump	0.8
32	Water bath	0.5
33	Western Blot Apparatus with Compatible Power Pack	3.5

(B)

Sl. No.	Equipment	Cost (Rs. lakh)
1	-20 degree freezer	1
2	-20 °C refrigerator	0.8
3	4-degree High-Performance Refrigerator	0.8
4	Analytical Balance	4
5	Analytical balance	2
6	Auto-desiccator cabinet	2
7	Benchtop Centrifuge	4.5
8	Benchtop UV transilluminator	1
9	Biosafety cabinet	6
10	Camera and Software with workstation for upgradation of the existing fluorescence microscope	7
11	CO <sub>2</sub> incubator	6
12	CO <sub>2</sub> Analyzer / Sampler -01	15
13	CO <sub>2</sub> Incubator	6
14	Deep freezer (-20°C)	1
15	Fast protein transfer system	4.5
16	Franz Diffusion Apparatus	3
17	Frost-free double-door refrigerator -4 stars or more (capacity 450-500 liter)	0.7
18	Gel rocker	0.3
19	Gel rocker	0.5
20	Gel Running Assembly	3
21	Gel system Vertical Mini gel System with accessories	3.5
22	Gradient PCR	5
23	Heat block	0.5
24	High-End Server-workstation	18
25	Homogenizer	1.25
26	Hot air Oven	0.5
27	Hot heating mantles with stirring	0.17
28	Hotplate magnetic stirrer	0.6
29	Inverted fluorescence microscope	24
30	Liquid Nitrogen tank	5
31	Magnetic Stirrer	0.5
32	Magnetic stirrer	1
33	Media filtration unit/pump	1
34	Microfuge	1
35	Mini Bioreactor System (50-200ml)	15
36	Moisture Analyzer	3

Sl. No.	Equipment	Cost (Rs. lakh)
37	Multiposition Magnetic Stirrer with temperature probe	2.5
38	NO <sub>2</sub> Analyzer / Sampler -01	15
39	Online UPS (with battery) 5kVA	1.2
40	Overhead Stirrers	0.2
41	PAGE Electrophoresis unit	2.5
42	pH meter	0.5
43	pH Meter	0.5
44	pH meter	0.75
45	pH meter	0.5
46	Quickspin minicentrifuge	0.25
47	Refrigerator	1
48	Refrigerator (4°C, -20°C)	1
49	Rocker Shaker	0.5
50	Rocker Shaker	0.5
51	Rocker shaker	1
52	SO <sub>2</sub> Analyzer / Sampler -01	15
53	Sonicator	3
54	Table Top Laminar For RNA/DNA Work	5
55	Tubes roller mixer	0.2
56	Ultra-deep freezer (-80)	7
57	Upright microscope	8
58	UV-Vis Spectrophotometer (Microvolume)	14
59	Vacuum Desiccator	0.25
60	Vacuum Pump	0.6
61	Vacuum pump	1.5
62	Vertical tetra gel electrophoresis unit with high current power supply	3.5
63	Viscometer (Small volume Spindle accessory)	0.35
64	Vortex	0.15
65	Vortex	0.3
66	Vortex	0.3
67	Vortex	0.3
68	Vortex	0.5
69	Water Bath	0.5
70	Water bath	1
71	Water bath Shaker	0.25
72	Water Bath Sonicator	0.45
73	Weighing balance	1
74	Weighing balance	3
75	Western Blotting (Running unit)	2

Sl. No.	Equipment	Cost (Rs. lakh)
76	Western blotting transfer unit	1.5
77	Wet unit for western blotting	3.5
78	Workstation desktop for regular use with high capacity ~64GB ram and >20 cores	4

(C)

Sl. No.	Equipment	Cost (Rs. lakh)
1	-20 Degree Refrigerator	1
2	4 Degree Refrigerator	0.5
3	4 plate magnetic stirrer with heat + thermometer	1.6
4	4°C refrigerator	1.2
5	Access Control System	50
6	Analytical Weighing Balance	3
7	Aspiration Pump	1.45
8	Auto titrator	3
9	Balance (five digits) (2)	7
10	Balance (one five digits and one four digit)	3
11	Cell Counter with reusable slides	7.8
12	Clinical Centrifuge -15ml capacity	0.75
13	CO2 Incubator with Nitrogen Controller	12
14	Deep Fridge (-20C°)	1.5
15	Double door refrigerators (2)	3
16	Dry bath Incubator	3.5
17	Dual-beam spectrophotometer	15
18	Electrochemical workstation (2)	13
19	Electrophoresis (BIORAD)	4
20	Fermenter	5
21	Flow cytometer with three lasers	80
22	Fume hood	2.5
23	Fume hood	3
24	Fume Hood (2)	6
25	Gas chromatograph with ECD and FID detector	28
26	Gel Doc	3.8
27	GEL Rocker & Shaker	0.75
28	Glove Box	1.5
29	Haemocytometer	0.1
30	Heating mantle	0.5
31	Homogenizer with probe	2
32	Horizontal Shaker	2

Sl. No.	Equipment	Cost (Rs. lakh)
33	Hot air Oven	2.5
34	Hot air Oven (2)	5
35	Hot Plate (2)	3
36	Hydrothermal autoclave (100 mL)	0.25
37	Hydrothermal autoclave (250 mL)	0.35
38	ICP-OES	75
39	Incubator (37°C)	1
40	Incubator (4°C)	1.5
41	IR camera	0.8
42	Laboratory glassware washer	5
43	Laboratory shower and Eye washer with a suitable pump (2)	1.2
44	Laminar hood	4.5
45	Laptop	2
46	Laptops/ PC/ All-In-One	2
47	Laser pointer (LED)	0.4
48	Liquid Nitrogen Tank	2.75
49	Luminometer	3.6
50	Magnetic stirrer with heat	0.75
51	Melting Point device	1
52	MFP- Printer	0.5
53	Mic	0.2
54	Mic Speaker (2)	1.2
55	Microcentrifuge	1
56	Microcentrifuge	0.25
57	Mini CO <sub>2</sub> incubator	5
58	Monitor (4)	1.2
59	Multi-position (4 positions) heating mantle with Soxhlet apparatus set (2)	3
60	Multi-position magnetic hot plate stirrer (2)	5
61	Multi-position magnetic hot plate stirrer (2)	4
62	Multi-position Magnetic Hot-Plate Stirrer (with Temp. Probe)	2.5
63	Nephelometer	0.25
64	Nitrogen Generator	5
65	Orbital Shaker	1
66	Oven	2
67	pH meter	1
68	pH Meter	1.25
69	pH Meter (2)	1.75
70	PTZ Camera1 (2)	1.6

Sl. No.	Equipment	Cost (Rs. lakh)
71	Refrigerated Centrifuge	7
72	Refrigerated Centrifuge	8
73	Refrigerator (~400 L) (2)	1
74	Rota spin (2)	1.5
75	Solvent filtration unit with vacuum pump	2
76	Sonicator	1
77	Sonicator (01 Prob Sonicator and 01 Normal Sonicator)	6
78	SPE Manifold	2
79	Speaker	0.5
80	Spin coater	3
81	Storage 64 TB (2)	10.0
82	Thermo shaker	2.5
83	Type II water preparation unit with 40 L storage capacity	5
84	Vacuum Pump	11.5
85	Vacuum Pump	0.7
86	Vacuum pump	0.7
87	Vacuum Rotary Evaporator with chiller (2)	20
88	Vernier Callipers	0.15
89	Vertical Electrophoresis Cell	2.5
90	Vertical Gel Electrophoresis unit with universal power pack and accessories	4.5
91	Vortex	0.2
92	Vortex (2)	0.5
93	Vortex (Multitube position)	0.25
94	Vortex (Multitube position) (2)	0.5
95	Water bath	1
96	Waterless bath cell culture with aluminum beads	5.5
97	Web server 1 (internal hosting)	15
98	Web server 2 (external hosting)	15
99	Weighing balance	3
100	Wifi routers & system	20
101	Workstation	8

(D)

Sl. No.	Equipment	Cost (Rs. lakh)
1	Multistage Cascade Impactor	30
2	Automated Isothermal Calorimetry Instrument	198
3	Phase Contrast Microscope with Camera	21
4	Black Carbon Sampler	12
5	Lyophilizer (Freeze Dryer)	20
6	BET Surface Area Analyzer	30
7	UV Visible Microplate Spectrophotometer	12
8	Histology Grossing Station	30
9	Double Door Bulk Autoclave	100
10	Microscope	9
11	Rack Server	10
12	RT-PCR	25
13	Analytical HPLC System	35
14	Tower Workstation	31
15	High performance Computing System	45

(E)

Sl. No.	Equipment	Cost (Rs. lakh)
1	Accelerated stability testing chamber	6
2	Electro Spinning	10
3	Automated Rotary Microtome	15
4	Microinjection Unit: Micropipette puller, Micromanipulator, Pneumatic Picopump with vacuum	17
5	N-FRM samplers for PM10 and PM2.5	18
6	Semen and Sperm Analyzer	20
7	Automated Tissue Processor	25
8	UHPLC with UV and FLD detector	55
9	Gas Chromatography-Mass Spectrometry	70
10	Confocal Microscope ( <i>Proposed</i> )	325

**Note:**

- The above procurement plan is dynamic and could be revised as often as may be necessary with the approval of competent authority.
- The procurement is subject to the fund availability/release of sufficient grant from CSIR/or funding agency.
- The indicated procurement value is an estimate cost only.