



CSIR-Indian Institute of Toxicology Research (CSIR-IITR)
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CSIR-IITR BH/P-50 requirements for FY 2025-26 (As of April 25, 2025)

(1) Division: REACT

Sl. No.	Equipment	Tentative budget (Lakhs)
1.	Digital lux meter	0.2
2.	Sound level meter	0.2
3.	Digital programmable electronic timer	0.2
4.	Microwave oven	0.25
5.	Temperature humidity data recorder	0.3
6.	Horizontal deep freezer (-20)	0.4
7.	Incubator	0.45
8.	Magnetic stirrer with heating	0.5
9.	Water bath (cell culture)	0.5
10.	Vortex mixer	0.6
11.	Fridge (cell culture)	0.6
12.	Mini centrifuge	0.66
13.	Vortex with head	0.8
14.	Hot water pressure jet machine	1.0
15.	RO system, 50 L/hr capacity at CRK Campus (2 Nos.)	1.0
16.	-20 degree deep freezer	1.0
17.	ELISA plate washer	2.7
18.	Magnetic stirrer (Multiplate)	3.0
19.	Centrifuge	3.0
20.	iSPAWN-S	3.75
21.	Weighing balance (5-digit Precise weighing)	4.0
22.	Autoclave	5.5
23.	Inverted microscope	7.0
24.	CO ₂ euthanasia system	8.0
25.	Cooling incubator (2 Nos.)	11.8
26.	Tissue homogenizer	11.8
27.	Compound upright microscope with image analyzer	15.0
28.	Fully automatic Cryostat microtome	20.0
29.	Microinjection system (microinjector, micromanipulator, pipette puller)	22.0
30.	Advanced imaging system for western blot	24.0
31.	Real Time PCR (Not finalized in 2023-24)	24.0
32.	Histology Grossing Station (From 2023 List – Re-tender)	30.0
33.	Fluorescence spectrophotometer	30.0
34.	Laboratory water purification system (pure and ultra-pure water)	36.0

35.	Cigarette smoke exposure system - in-vitro and whole-body	40.0
36.	CASA (Computer-assisted semen analyzer)	50.0
		360.21

(2) Division: ASSIST

Sl. No.	Equipment	Tentative budget (Lakhs)
37.	Grinding mill	0.25
38.	Sonicator bath	0.50
39.	UV inspection cabinet	0.3
40.	Microwave oven,	0.3
41.	Ultra Sonicator (3-4 L)	0.4
42.	Manual bottle sealing machine with foil	0.5
43.	Vortex (Multitube position) (02 nos)	0.5
44.	Ultraviolet Viewing Cabinet with lamps	0.5
45.	pH meter	0.5
46.	Laboratory shower and Eye washer with a suitable pump	0.6
47.	Sonicator	0.6
48.	Wireless Temperature and Humidity Sensors (2 pcs)	0.6
49.	Dehumidifier	0.7
50.	Hydrothermal autoclave reactor	0.7
51.	-20 Refrigerator	0.75
52.	Mini Vortex (2)	0.8
53.	Sonicator	1
54.	Refrigerator (-20° C)	1
55.	Conductivity meter	1
56.	Dry Bath	1
57.	-20°C Double-door refrigerator	1.25
58.	Autoclave	1.5
59.	UV chamber and red, green, and blue emitting light source	1.5
60.	pH Meter (02 nos)	1.75
61.	Incubator	2
62.	Centrifuge	2
63.	Centrifuge	2
64.	Hot air Oven	2.5
65.	Muffle furnace	2.5
66.	Balance (one five digits and one four-digit)	3
67.	Fume hood	3
68.	Solid phase extraction (SPE) vacuum manifold	3
69.	Thermomixer	3
70.	Moisture analyser	3.5
71.	Moisture analyser	3.5
72.	Multi-position magnetic hot plate stirrer (02 nos)	4
73.	BOD Incubator	4
74.	PCR Thermocycler	4
75.	Laminar Flow Cabinet	4.5
76.	Hot air oven	4.5

Sl. No.	Equipment	Tentative budget (Lakhs)
77.	Milli-Q water purification system	5
78.	Glutomatic system with kneader and gluten dryer	5
79.	Centrifuge, operating at 6000 ± 5 rpm and equipped with gluten index cassettes	5
80.	Acid Digestion Fume Hood with installation	5
81.	CO & CO ₂ real-time monitoring instrument	5
82.	Automatic digital Vacuum Desiccator (2 nos)	5
83.	Microscope	5
84.	Fume hood	5
85.	Ampule sealing machine with gas	5
86.	Muffle Furnace	6
87.	Rotary Vacuum Concentrator	7.5
88.	Incubator shaker	8.0
89.	Nanodrop Spectrophotometer	10
90.	-80°C Refrigerator	10
91.	Liquid nitrogen tank	10.0
92.	-80 deep freezer	10.0
93.	Dual-beam spectrophotometer	15.0
94.	Vacuum Rotary Evaporator with chiller	15.0
95.	Bomb Calorimeter	15.0
96.	20L rotary evaporator with chiller and pump	20.0
97.	Glassware washer	20.0
98.	Steam sterilizers (Autoclave)	20.0
99.	Multimode Plate Reader (preferentially 4 channel)	20.0
100.	Sample homogenizer and sampler	25.0
101.	Type II water preparation unit with 40 L storage capacity	25.0
102.	Gel doc	25.0
103.	Gas chromatograph with ECD and FID detector	30.0
104.	Fluorescent Microscope (with multicolour Imaging attachments and analysis software)	30.0
105.	Vector network analyzer	32.0
106.	Steam sterilizers (Autoclave)	40.0
107.	FTIR with ATR and transmission mode	45.0
108.	Fluorescence Spectrophotometer	50.0
		603.0

(3) Division: FEST

Sl. No.	Equipment	Tentative budget (Lakhs)
109.	Waterbath shaker	0.25
110.	Waterbath sonicator	0.45
111.	Magnetic stirrer with hot plate (for 2-5L capacity)	0.5
112.	Online UPS system-3KVA capacity	0.5
113.	Semi-Dry Unit	1.0
114.	Gel electrophoresis equipment with accessories	2.5

Sl. No.	Equipment	Tentative budget (Lakhs)
115.	Deep Freezer (-20C)	1.5
116.	T-Maze	1.5
117.	Open Field Test	1.5
118.	Elevated Plus Maze (Anxiety like behaviour)	2.0
119.	Deep freezer (-20°C)	2.0
120.	Polymerase chain reaction machine	4.0
121.	Novel Objects Recognition Instrument	2.5
122.	Automated Rotarod	3.0
123.	Analytical Balance	3.0
124.	Biosafety cabinet [medium sized]	3.0
125.	Grip Strength Meter	3.5
126.	Gel system Vertical Mini gel System with accessories	3.5
127.	Semi-dry electroblotting System with compatible power supply	4.0
128.	Western blotting unit	4.5
129.	Automated Y-maze Animal Behaviour System	5.0
130.	Laminar Flow Cabinet	5.0
131.	Ice flaking machine	6.0
132.	Liquid Nitrogen Tank with accessories	6.0
133.	Biosafety cabinet	6.0
134.	Sonicator	6.0
135.	Portable (Field) Multi-parameter Water quality Meter	6.0
136.	Ultra Sonicator	6.0
137.	Shaker Incubator	6.5
138.	Bio-safety Level 2	7.0
139.	Fluorimeter	7.0
140.	CO2 Incubator	7.0
141.	BOD incubator	7.0
142.	Portable hand-held sensing platform with accessories	7.0
143.	CO2 Incubator	8.0
144.	Centrifuge (for microcentrifuge tubes)	8.0
145.	Centrifuge refrigerated	10.0
146.	Electroporator	10.0
147.	Deep freezer (-80° C)	10.0
148.	High-end Server workstation	20.0
149.	Chemidoc system (Central Facility)	25.0
150.	Cryomicrotome	30.0
		253.2

Grand total: Rs. 1216.5 lakhs

(4) Facility Creation Equipment

Sl. No.	Equipment	Tentative budget (Lakhs)
1	120 KV Transmission Electron Microscope	450.0

Sl. No.	Equipment	Tentative budget (Lakhs)
1	Electrochemical workstation (Vth PGRC)	10,00,000
2	Portable incubator cum fluorimeter (Vth PGRC)	14,00,000
3	Portable Raman spectrometer (VIth PGRC)	3000000
4	Vacuum filtration unit (VI th PGRC)	50,00
5	TOC analyzer (VI th PGRC)	15,00,000