Updated on 24-04-2024

[CSIR-IHBT]

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.)
1.	Single Cystal XRD Instrument	1
2.	LC-MS MS System	1
3.	Hot-melt extruder	1
4.	Photosynthetic Gas Analyzer	1
5.	Hyperspectral Sensor for drone	1
6.	Tulip Grader	1
7.	LAN/WAN equipment's (Switches, convertors, security appliances)	1
8.	UV PAM Fluorometer (Portable Handheld)	1
9.	Works & Services	1
10.	Procurement of Computers	1
11.	Server/Workstation with new generation AMD Epyc 9004 series processor supporting better memory bandwidth of 4800 Mbps and CUDA parallel programming of compute level 8.6 or above	1
12.	Plant Growth Chamber	1
13.	Flash Chromatography	1
14.	Wi-Fi Access points	1
15.	Multi solvent recovery unit cap minimum 50 L to max 200 L along with pump and other accessories	1
16.	Computer (2 Nos.)	2
17.	Spray Apparatus for bioassay studies (1 No.)	1
18.	Desktop Workstation (One) with at least 1TB RAM and 40 processors	1
19.	Industrial Tray Dryer	1
20.	Sap Flow System (06 units)	6
21.	Upgradation of Imaging system for Olympus BX53 microscope	1
22.	Procurement of Servers	1
23.	Incubator with humidity and temperature control (1 No)	1
24.	Microtome	1
25.	Leaf area meter	1
26.	Parallel UPS 20KVA	1
27.	Muffle furnace with accessories	1
28.	Open Air incubator shaker (50 flask capacity)	1
29.	Biochemistry Auto-analyser with Deionized water plant	1
30.	Haematology Analyser	1
31.	Shelf-life stability chamber with inbuilt photochemical stability unit as per ICH guidelines	1
32.	Computer Software	1
33.	Stereozoom Microscope (2 No.)	2
34.	Centrifuge with swinging bucket rotor	1

35.	Sparkler type filter press with zero hold up 14 inch X 10 plates having filtration area atleast 1.0 sqm All stainless steel 304 along with tanks and accessories	1
36.	Emulsifying Paste Making Machine	1
37.	Micro-Kjeldahl apparatus 6 positions	6
38.	Gel doc system	1
39.	UPS 250KVA	1
40.	Stereozoom microscope	1
41.	Work station	1
42.	Digital Weighing balance cap 05 kg max	1
43.	Fume Hood	1
44.	Sulphitation Chamber	1
45.	Field equipment (Handheld GPS (02 No.; Data loggers, etc.)	2
46.	Stability chamber	1
47.	Miscellaneous Equipment's	1
48.	Projector screens for J.C. Bose Conference Hall, Academic Class room	1
49.	4K HDMI Switcher	1
50.	Computer and digital equipment (Rs. 23.72 laksh)	
51.	UPS 2 n. (Rs. 0.8 lakhs)	
52.	Balance and measuring equipment (Rs. 18.65 lakhs)	
53.	Minor molecular biology tools (Rs. 14.6 lakhs)	
54.	Incubator, shaker, water bath etc (Rs. 33.55 lakhs)	
55.	Specific Minor equipments (Rs. 24.45 lakhs)	

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

B (a)	EQUIPMENT

Sr. No.	Name Category of Equipment/ Vehicle Item	Quantity (Nos.)
1.	Phenomics Facility for High Altitude Plants • Phytotron: automated plant growth facility (4 Nos) • Environment controlled greenhouses • Tissue culture facility • Digital imaging and phenotyping • Plant Physiology equipment (IRGA, Chlorophyll Fluorometer, SPAD meter Spectrofluorometer, Porometer, Canopy Analyzer, Leaf Spectrometer, Oxygen Electrode System) • Rhizotron facility • Other equipment (Homogenizers, shakers, blenders, sonicators, pH meters, Centrifuges, Microscopes: Inverted Phase Contrast Microscope, Biosafety cabinets, Chemi Gel documentation system)	1
2.	High Resolution Accurate Mass Spectrometer (HRAMS)	1
3.	NMR-600	1
4.	Fermenters	4
5.	FE Scanning Electron Microscope	1
6.	FESEM	1
7.	MALDI Imaging	1
8.	HPC/Data Center Facility	1

9.	Liquid Nitrogen Plant	1
10.	Visual Upgradation of Auditorium J.C. Bose Conference Hall and CV Raman Hall	
11.	SAN	1
12.	UPLC	2
1.	Plant Growth Chamber	6
13.	Isothermal titration calorimeter	1
14.	Nano Differential Scanning Calorimeter (Nano DSC)	1
15.	Prep-HPLC	1
16.	Ultracentrifuge	1
17.	3D Food Printer (Year 2026-2027)	1
18.	Pressurized solvent extractor system along with accessories	1
19.	ECD (Electronic Circular Dichroism)	1
20.	Rheometer	1
21.	Stainless steel indigenized Bioreactor for plant cell and tissue culture 50 ltr & 100 ltr.	2
2.	Lyophilizer	4
22.	Fragment Analyzer	1
3.	GC-MS	1
4.	Lab scale high pressure homogenizer	1
5.	Cryogrinder	1
6.	Freeze dryer	1
7.	Microplate Reader	1
8.	Gel Imaging Documentation System	1
9.	Flash chromatography	1
10.	FT-IR	1
11.	Honey equipment with accessories (As a Unit)	1
12.	Quantitative real Time PCR	1
13.	Refrigerator (-80^{0}C) (-20oC)	4
14.	Rotary evaporator with chiller	2
15.	Nano drop	1
16.	Seed germinator	2
17.	Hematology Analyzer	1
18.	Incubators	2
19.	Ultra Low Chilling Freezer	1
20.	Minor Equipment's (pH meter, Gel Electrophoresis unit, Weighing Balance, Camera attachment for microscope, Power tiller, Power Backup Facility UPS, Microscope etc.) Rs. 55.00 lakhs	

IT FACILITY		
.Sr. No.	**Name Category of Equipment/ Vehicle Item**	**Quantity (Nos.)**
1.	Wi Fi Access Points	60
2.	Network Security Appliance (firewall)	4
3.	Network Switches	93
4.	Servers	4
5.	END point Protection (AntiVirus)	600
6.	Desktop Workstation	2
7.	Printers	60

COMPUTATION FACILITY		
.Sr. No.	**Name Category of Equipment/ Vehicle Item**	**Quantity (Nos.)**

1.	Servers with parallel high end GPUs, their dedicated networking system, Cooling system, at least 500TB Network storage system	4

WORK & SERVICES		
.Sr. No.	**Name Category of Equipment/ Vehicle Item**	**Quantity (Nos.)**
1.	Work and Services (Submersible water bore well)	2

VEHICLE	
.Sr. No.	**Name Category of Equipment/ Vehicle Item**
1.	Utility Vehicle for High Altitude Areas Research

(ii)	**Equipment**: Out of CSIR Funded Projects

Sr. No	Name Category of Equipment/ Vehicle Item	Quantity (Nos.)	Project Number/ Code
1.	Nanobiospectrophotometer	01	FTT020507
2.	Chlorophyll content meter	1	HCP-0057
3.	Multipigment meter	1	HCP-0057
4.	Complete plant stress kit	1	HCP-0057
5.	Leaf spectrometer	1	HCP-0057
6.	Anaerobic Gas Reactor (procurement in process)	1	HCP0054
7.	PCR Machine	1	Genome editing network
8.	Minor equipment (inclu. PCR, -20, fridge etc)	1	FBR NCP
9.	Incubators	02	CSIR-First
10.	Wireless Portable Bluetooth speaker with mic (JIGYASA and ATL) activities Minor Equipment etc.	02	HCP-101

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

Sr. No	Name Category of Equipment/ Vehicle Item	Quantity (Nos.)	Project Number/ Code
1.	Fume Hood	1	SSP-0126
2.	Vertical Gel running apparatus for protein seperation	1	SSP-0126
3.	Refrigerator	1	SSP-0126
4.	Microwave	1	SSP-0126
5.	Desktop	1	SSP-0126
6.	Printer	1	SSP-0126
7.	Air conditioner	1	SSP-0126
8.	Hot air oven	1	SSP-0126
9.	Work station	1	Project submitted NSF-DBT
10.	Stereo zoom microscope	1	Project submitted NSF-DBT
11.	Glass house	1	Project submitted NSF-DBT
12.	PCR	1	DBT-Approved

13.	Gel Doc	1	DBT-Approved
14.	Spectrophotometer	1	DBT-Approved
15.	Desktop Workstation with 128 GB RAM and 16 GB GPU and 32 Processors	01	GAP-0338
16.	Desktop Workstation with 128 GB RAM and 8 GB GPU with 64 processors	01	GAP-0338
17.	Fume Hood	1	SSP-0126
18.	Vertical Gel running apparatus for protein seperation	1	SSP-0126
19.	Plant Growth Chamber	1	GAP307

B (b)	CONSUMABLES

Sr. No.	Category	Expected Procurement Value (Rs. In Lakhs)
1	R&D Consumables for closed loop systems (by equipment name)	600.00
2	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.)	2500.00
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.)	1600.00
4	Glass wares (ex- name the different glass wares)	275.00
5	Plastic wares (ex- Name the different plastic wares)	300.00
6	Toner Cartridges.	100.00
7	Batteries, etc.	500.00
8	Gases (ex- tentative names)	150.00
9	Maintenance/AMC/repairing of existing equipment	2150.00
10	Stationery items (ex- name a few)	75.00
11	IT / software-related Items (Name the items required during year)	100.00
12	Furniture (Name the items required during year) 1. Sofa Set 5 seater 2. Computer Table- 02 Nos. 3. Almira Bookcase (4 Nos.), Computer table and student table 4. Chairs, Almirah etc	125.00
13	Electric Items (Name the items required during year)	25.00
	Library Budget Head P50 Expenditure Details 1. Book Purchased & Print Journals Subscriptions: Rs. 20 Lakh 2. E-Journals & Databases subscribed 2024 onwards through the NKRC, New Delhi.	

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.