

# CSIR-North East Institute of Science and Technology

## Procurement Plan (Equipments)

Financial Year 2025-26

**Table-1: Equipment for procurement during the FY 2025-26 and subsequent 3 – 5 years (under Non-project mode; out of CSIR Grant / Lab Grant): P50**

Financial Year 2025-2026

Sl. No.	Name of the Equipment/Item	Quantity
1	-80 Deep Freezer	1
2	Agarose Gel electrophoresis system	1
3	Assemble Light measuring meter with portable dark cabinet. ( Range: 0% darkness)	1
4	Automated DNA Extractor	1
5	Automated rotatory microtome for histology	1
6	Automatic Outdoor Environment weather station with accessories for data analysis	1
7	Biosafety Cabinet	1
8	BOD Incubator	2
9	Centrifuge 40C (15000rpm) Multitorotor	1
10	Chemiluminescent gel doc system	1
11	Chiral HPLC system	1
12	CHNS	1
13	CO2 incubator	1
14	Combiflash	1
15	Culture rack	1
16	Dehumidifier	1
17	Film making machine	1
18	Flash Chromatography	1
19	FT-IR	1
20	Fume Hoods	19
21	Gas Chromatogram (GC)	1
22	GCMS with ECD/FID detector	1
23	Gel Doc System	1
24	Glass Reflux Reaction Cum Fractional Distillation	1
25	Gradient Thermocycler	1
26	High-end desktop computer/server	1

27	Hollow fiber coating machine	1
28	Hoods	2
29	Horizontal laminar airflow	1
30	Hot plate Magnetic Stirrer with Temperature Knob	5
31	IVC cage system	3
32	Kjelhahl system	1
33	L2 Featured Managed Network Switch and Restructuring of Institutional LAN	1 Set
34	Laminar Airflow	1
35	Long Read Real Time Nanopore Sequencing System (Upgradation of existing Nanopore system as the existing model is now obsolete)	1
36	Lyophilizer	2
37	Magneto-Telluric Equipment	1
38	Mechanicalshaker(reciprocating)	1
39	Membrane set up for Produced Water Treatment	1
40	Micromode Reader	1
41	Microwave oven	1
42	Mini Spray Dryer	1
43	Multi-channel Analysis of Surface Waves Equipment (48 Channel)	1
44	Multimode Elisa Plate Reader	1
45	Multimode Microplate reader	1
46	Multipurpose Stirrer	4
47	Network Attached Storage (NAS)-Equipped with server and network switch	3
48	NIR Laser System with variable wavelength	1
49	Online Gas Chromatography	1
50	Optical Tensiometer	1
51	Opto digital Microscope for 2D and 3D imaging	1
52	PCR GRADIENT	1
53	Permeability/porosity meter	1
54	Photoluminescence spectrometer	1
55	Photoperiod-controlled plant tissue culture racks	2
56	Photosynthetic Apparatus	1
57	Plant Tissue Culture Facility with cooling system	1
58	Portable Gas Analyser	1
59	Portable water quality analyser	1
60	Pressure Nutsche Filter	1
61	Radiographic/ NDT Testing Set up for Steel and Metal	1

62	Reactor with electrical heating arrangement, VFD controlled stirring - 25 lit	1
63	Recirculating Chiller	1
64	Refrigerated Table Top Centrifuge	1
65	Refrigerator (-20°C)	1
66	Rota Vapor	1
67	Rotarod Apparatus	1
68	Rotary evaporators	3
69	Rotor Centrifuge 2-16P (As spare parts) Sigma Cat. No. 12071, Rotor angle for 12 x 15ml culture e.g. no. 15115 and 6 x 50ml culture e.g. no. 15151	1
70	Shaker Incubator	2
71	Surface Plasma Cleaner	1
72	TDS /Conductivity meter (multiparameter)	1
73	Teflon Lined Hydrothermal Autoclave	1
74	Tensiometer	1
75	TGA-MS	1
76	Turbidity meter	1
77	UV-Vis-NIR Spectrophotometer	1
78	Vacuum pump with controller	1
79	Water Vapour Permeability Analyser	1
80	Western blot apparatus complete with all accessories	1
81	Workstation for simulation and modelling software	3

**Next 3-5 Years**

<b>Sl. No.</b>	<b>Name of the Equipment/Item</b>	<b>Quantity</b>
1	4 Degree Fridge	1
2	Advanced overhead stirrer	1
3	Aerosol monitoring station	1
4	Audio Visual Equipment for Dr J N Auditorium	1 Set
5	Automated flash chromatography system	1
6	Automated Ice flaking machine for molecular biology work	2
7	BioMerieux VITEK 2 COMPACT System	1
8	Broadband seismograph	5
9	Clevenger Apparatus	1
10	Cluster Server (Equipped with Five High-end servers with recent configuration, InfiniBand High Data Transfer Switch, Network Switch with suitable rack)	1

11	CO2 Incubator	1
12	Continuous Distillation Unit	1
13	Digital pH meter	3
14	DMA	1
15	Double Door FREEZER	1
16	Flow cytometry	1
17	Fraction collector for existing HPLC	1
18	FT-IR	1
19	Gas sorption analyzer	1
20	Glove Box	1
21	Graphite furnace	1
22	High Pressure Reactor	2
23	High-end servers	2
24	Hot air oven	1
25	Inert gas chamber	1
26	Laboratory ball mill	1
27	Laboratory furniture	1
28	Laboratory Water Chiller	1
29	Laser cutting machine with accessories	1
30	Light Microscope with Imaging Facility for cell biology work	1
31	Liquid Chromatography-Mass Spectrometry (MS-triple quadruple)	1
32	Lyophilizer	2
33	Lyophilizer of 4 litres with compressor and vacuum pump for freeze drying at -110 °C	1
34	Maze system (animal house)	1
35	Metal 3d Printer with wash station and sinter station with gas supply accessories	1
36	Microwave extraction unit	1
37	Microwave synthesizer	1
38	Mini Capsule Filling Machine	1
39	Muffle Furnace	1
40	Multi-mode microplate reader	1
41	Nanodrop	1
42	NF membrane testing machine	2
43	NIR laser with thermal imaging system for photothermal therapy and other biomedical application	1
44	One Gradient Thermocycler (PCR)	1

45	Oven	1
46	Petrographic microscope with complete rock sample preparation kit	1
47	Portable unblock electronic Balance	1
48	Power Backup for Instruments (2 KVA)	3
49	Probe Sonicator	1
50	Radon monitoring system for water and soil	1
51	Refrigerated table top centrifuge	2
52	Refrigerators	2
53	Shaker bath	1
54	Shaker Incubator	1
55	Shelf Life Measurement Device	1
56	Stability chamber	1
57	Stirrer	4
58	Strong motion accelerograph	5
59	TGA-DSC	1
60	Tower workstation (56 cores, 256 GB RAM)	1
61	Type I and Type II water purification system	1
62	Ultra Refrigerator -20°C & -80°C	2
63	Ultra-Centrifuge	1
64	Ultrasonic processors	1
65	UV-Visible Spectroscopy with NIR and Low Temperature	1
66	Vertical autoclave	3
67	VoIP Telephone Network	1 Set
68	Water Distillation unit of 50 litres/hour	1
69	XRD	1

**Table 2: Equipment for procurement during the FY 2025-26 and Next 3-5 years under CSIR-Funded**

**Financial Year 2025-2026**

<b>Sl. No.</b>	<b>Name of the Equipment/Item</b>	<b>Quantity</b>
1	Autoclave	1
2	Centrifuge	2
3	Customized Bio-floc Based Farming Units	4
4	Different experimental equipments for demonstration for students under jigyasha project along with computer and camera	01 set
5	Electrochemical work station for H2 evolution reaction	1
6	Feed Pellet Maker	1

7	Flotation column	1
8	Fluorescence Imaging System	1
9	GC	1
10	Gravity separation set-up	1
11	Heating mantle	5
12	High-end desktop computers	10
13	Hollow fiber casting machine (small scale)	1
14	Hot Air Oven	1
15	Membrane bioreactor system	1
16	Membrane Gas separation portable system	1
17	Membrane Reactor	1
18	Muffle Furnace	1
19	Multi-channel electrical resistivity meter	5
20	Overhauser magnetometer (for MPMO)	1
21	Pilot scale setup/reactor system and accessories	1
22	Plant Growth and Hardening Facility for Genome-Edited Plants	1
23	Plant Tissue Lysis System	1
24	Portable Gas Analyser	3
25	Sieve Shaker set-up	1
26	Solid State Fermenter and Accessories (Bioreactor)	1
27	Ultrasonic bath	1
28	Vacuum pump with filtration unit	1

**Next 3-5 Years**

<b>Sl. No.</b>	<b>Name of the Equipment/Item</b>	<b>Quantity</b>
1	Broadband seismograph	10
2	Long-period seismograph	10
3	Strong motion accelerograph	5

**Table 3: Equipment for procurement during the FY 2025-26 and Next 3-5 years under Externally Funded Financial Year 2025-2026**

<b>Sl. No.</b>	<b>Name of the Equipment/Item</b>	<b>Quantity</b>
1	Self-Standing single bore porous tube manufacturing unit	1
2	Acid no tester	1

3	Ash content tester	1
4	Atomic Force Microscope (AFM)	1
5	Automatic freezing point tester	1
6	Automatic smoke point apparatus	1
7	Automatic softening point apparatus	1
8	Bio diesel analyser	1
9	Biodiesel Production Unit	1
10	Bioreactor	1
11	Bitumen and asphaltene tester	1
12	Broad-band seismograph	45
13	BSL-2	1
14	Centrifuge	1
15	Chiller	1
16	Cleveland Flash Point Apparatus	1
17	Closed cup flash point apparatus	1
18	Cloud and Pour Point Apparatus	1
19	Cloud Point Apparatus	1
20	Coal biomass gasifier with gas engine	1
21	Colour measurement instrument	1
22	Contact angle analyser	1
23	Cyclic voltameter	1
24	Density Meter	1
25	Density tester	1
26	Differential Scanning Calorimetry (DSC)	1
27	Dynamic light scattering instrument	1
28	Electro reactor	1
29	Electrochemical Workstation	1
30	Electrometer	1
31	Environment control high temperature furnace	2
32	Fire Point	1
33	Flash Point Apparatus	1
34	Fluorescence microscope	1
35	Fuel analyser	1
36	Fuel Cell apparatus	1
37	Gas analyser (CAAQMS)	2
38	Gas permeability measurement system	1

39	Gas separation unit with gas distribution	1
40	Grease wax testing analyser	1
41	High energy XRD system	1
42	High power ultra sonicator	1
43	High Power Ultrasonicator	1
44	High-end computer/server system	10
45	HRTEM	1
46	Injet 3D Printer	1
47	Laptop, MAC book	2
48	Liquid hydrocarbon tester	1
49	Lubricity Tester	1
50	Magnetic stirrer	2
51	Membrane distillation unit	1
52	Membrane modulation unit	1
53	Membranes fabrication unit by temperature induced phase separation (TIPS)	1
54	Network Attached Storage Cluster (Equipped with server and network switch)	1
55	Octane no tester	1
56	Oil content from water tester	1
57	Oil Extractor	1
58	Oven	1
59	Photo electro chemical system	1
60	Shaking Plant Growth Refrigerated Incubator	1
61	Solar Simulator	1
62	Solar Simulator	1
63	Stirrers	6
64	Thermo gravimetric analyzer (TGA)	1
65	Total sediment tester	1
66	Ultra freezer	1
67	UV visible cabinet	1
68	Vacuum pump	2
69	Viscosity Meter	1
70	Water bath, bath sonicator	2
71	Weather monitoring system	45
72	Workstation (20 core, 128 GB RAM)	1

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 equipments 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.

The procurement Plan is updated with the approval of the competent authority.

## Procurement Plan (Consumables)

**Table 3: Consumables likely to be procured during Financial Year 2025-26 (Annual):**

Sl. No.	Category	Expected Procurement Value (Rs. In Lakhs)
1	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.)	409.00
2	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.)	166.00
3	Glass wares (ex- name the different glass wares)	58.40
4	Plastic wares (ex- Name the different plastic wares)	70.50
5	Cartridges, Batteries, etc.	61.00
6	Gases (ex- tentative names)	74.50
7	Maintenance/AMC/repairing of existing equipment	287.50
8	Stationary items (ex- name a few)	29.50
9	IT / software-related Items : Material Studio, MATLAB, ARCGIS, BioRender, CLC Genomic Workbench Software and Network License, Desktop Computer (5 nos), Sigma Plot Software, Qiagen CLC genomic workbench, Commander Software with GTGPU high performance compute system with data storage for the above Long Read Real Time Nanopore Sequencing System, etc.	142.70
10	Furniture: chair, Lab stool, lab bench	178.25
11	Electric Items (Air conditioner/Fan)	50.50
	<b>Total</b>	<b>1527.85</b>

- 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.

The procurement Plan is updated with the approval of the competent authority.