



ATAL INCUBATION CENTRE
CENTRE FOR CELLULAR
& MOLECULAR BIOLOGY



Prayas Centre Name: Atal Incubation Centre-Centre for Cellular and Molecular Biology

City Hyderabad

State Telangana

Fablab Page Link <https://aic.ccmb.res.in/instruments/>

Equipment available at AIC- CCMB DST PRAYAS Shala

Section		Electronic/Prototyping Facility
Sr. No.	Equipment Name	Equipment detail
1	Ph Meter	Brand – LabWan Model – (Lw-501) Specification – pH Meter – LabWan LW-501, Range: 0.00–14.00 pH, Resolution: 0.01 pH, Accuracy: ±0.01–0.02 pH, Digital LCD Display, Multi-point Calibration with Temperature Compensation Ph Meter (Lw-501) Operational area – Measurement of acidity/alkalinity in liquids for chemistry or biology experiments (prototyping and lab analysis) Filtration System: Dual high-powered fans with HEPA H14 filter and UV-C lights, removing 99.995% of particles and microorganisms Link of the user manual - https://mkp.gem.gov.in/ph-meter/ph-meter/p-5116877-34496550890-cat.html
2	Bench Top Non-Refrigerated Centrifuge	Brand - Eppendorf Model – (M417591J) Specification – Centrifuge minispin plus G Inc. Black Line rotor 230V/50-60 HZ Operational area – Separation of liquids from solids or cell/tissue samples for biology experiments and sample preparation (Bio / Prototyping) Link of the user manual - https://www.eppendorf.com/product-media/doc/en/335460/Centrifugation_Operating-manual_MiniSpin-plus.pdf
3	Refrigerated Centrifuge with LCD display	Brand - Eppendorf Model – 5702 RG Specification – 1. Centrifuge 5702 RG (refrigerated), 230V/50-60Hz inc rotor A-4-38 and 13/16mm adapters 2. Adapters for 85/100ml round bucket for use with 1 ea. 15ml falcon tube, 2 pcs 3. Adapters for 85/100ml round bucket for use with standard, Vacutainer and Falcon tube 2 pcs Operational area – Separation of biological or chemical samples at controlled temperatures for experiments requiring cold centrifugation (Bio / Lab prototyping) Link of the user manual - https://www.eppendorf.com/product-media/doc/en/327547/Centrifugation_Operating-manual_Centrifuge-5702-5702-R-5702-RH.pdf

4	Laminar Air Flow Cabinets	Brand – Amaze Instruments Model –AI-LAF Specification – Laminar Air Flow cabinets or Stations Operational area – Provides a sterile work environment for handling sensitive biological or chemical samples (Bio / Lab prototyping)
5	Bio-Rad Gel Documentation System with CCD Camera	Brand – Bio-Rad Model – ChemiDoc MP Specification – 1. CHEMIDOC MP IMAGING INSTRUMENTS 2. WHITE SAMPLE TRAY WDT 3. HP 280 G9 MT DESKTOP INTEL CORE i7 Operational area – Imaging and documentation of gels (DNA, RNA, or protein) for molecular biology experiments and analysis (Bio / Lab prototyping) Link of the user manual - https://www.bio-rad.com/webroot/web/pdf/lr/literature/10000076957.pdf?utm_source=chatgpt.com

Metalworking Facility		
Section		
Sr. No.	Equipment Name	Equipment detail
6	Bio X Gen3, 3D BioPrinter	Brand – Cellink Model – S-1001-001 Specification – BIO X Gen 3 Standalone Instrument with inbuilt features 365nm Built-in Photocuring Module for bioink crosslinking, 405nm Built-in Photocuring Module for bioink crosslinking, 485nm Built-in Photocuring Module for bioink crosslinking, 520nm Built-in Photocuring Module for bioink crosslinking Clean Chamber Technology: HEPA Filter + Sterilization UV + Enclosure, Heating/Cooling Print Bed (4 - 65°C) BIO X Pneumatic Printhead 3ml Operational area – 3D bioprinting of biological structures and tissue engineering prototypes for research and lab applications (Bio / Prototyping) https://www.manualslib.com/manual/2111502/Cellink-Bio-X.html?utm_source=chatgpt.com
7	Bioprinting Consumable Kit	Brand – Cellink Model – S-1001-001 Specification – 1. DNA STUDIO 4 Software with perpetual license 2. Cellink Xplore Ink 45ml 3. Empty cartridges with end and tip caps, 3 mL (10 pieces) 4. Empty cartridges without end and tip caps, 3 mL (50 pieces) 5. CELLMIXER Kit 6. CELLMIXER Part 4 - Mixing Unit Sterile 5pcs 7. Female/Female luer lock adaptor (50pieces) 8. Sterile high-precision conical bio printing nozzles, 50 pieces 25G 9. Sterile high-precision conical bio printing nozzles, 50 pieces 22G 10. Petri Dish 11. Air Adaptor Connector (3 pieces) 12. Sterile high-precision blunt needles 22G, 50 pieces, 6.35 mm (0.25 inch) 13. Sterile high-precision blunt needles 25G, 50 pieces, 6.35 mm (0.25 inch) 14. Cytosoft Discovery Kit

		<p>15. External pressure pump 16. Desktop computer system</p> <p>Operational area – Consumables and accessories for 3D bioprinting, enabling preparation, printing, and handling of biological samples for prototyping and tissue engineering experiments (Bio / Prototyping)</p> <p>Link of the user manual https://www.manualslib.com/manual/2111502/Cellink-Bio-X.html?utm_source=chatgpt.com</p>
8	High Pressure Homogenizer	<p>Brand – GEA Model – Panda plus 2000 Specification – Model: PandaPLUS 2000 Brand: GEA Type: Laboratory High-Pressure Homogenizer Maximum Operating Pressure: 2000 bar (200 MPa) Flow Rate: 9 L/h Minimum Sample Volume: 30 mL Feeding Hopper Volume: 0.4 L Internal Volume: 15 mL Dimensions (W × D × H): 540 × 810 × 440 mm Weight: 105 kg Sound Pressure Level: <69 dB(A) Electrical Supply: Three-phase motor, suitable for variable speed drive Control Panel: Touch screen display for machine control Safety Features: Built-in safety protection against overpressure Material: High-grade stainless-steel construction Applications: Nanoparticles, nanoemulsions, nanodispersions, cell disruption, dairy products, fruit juices, liquid food, food additives, cosmetics, and chemical products</p> <p>Operational area – High-pressure processing for creating nanoparticles, nanoemulsions, and dispersions, cell disruption, and preparation of liquid food or cosmetic formulations (Bio / Prototyping / Food & Chemical Research)</p> <p>Link of the user manual - https://www.app.rootsciences.com/wp-content/uploads/2022/10/PandaPlus-2000-Manual.pdf</p>