INVITATION

FOR

REQUEST FOR PROPOSAL (RFP)

FOR

PROCUREMENT OF INSTRUMENTS FOR RESEARCH AND DEVELOPMENT AND QUALITY TESTING,PERTAINING TO MEDICAL TECHNOLOGY, BIOTECHNOLOGY AND ALLIED AREAS AT THE INCUBATION FACILITY

BIO VALLEY INCUBATION COUNCIL, AMTZ CAMPUS, VISAKHAPATNAM

Section – I

Instructions to the Bidders

Bio Valley Incubation Council (Bio Valley), a Section 8 company formed under the Companies Act, 2013 located at the Andhra Pradesh MedTech Zone (AMTZ) Campus, Visakhapatnam (herein after referred as "Authority") invite applications for the purpose of **Quotation on instruments pertaining to medical technology, biotechnology and allied areas at the incubation facility** from reputed Private/ Public sector units with relevant experience.

1. The information to be furnished for Request For Proposal (RFP) is given in Annexure–A. Interested parties can submit the RFP along with Annexure-A duly filled in with all relevant supporting documents as mentioned in the RFP document.

2. A Pre-bid meeting of all the Bidders, if felt necessary, may be convened on 24th October 2018 at AMTZ office for clarifying queries, if any.

3. The RFP's submitted should be sealed properly and marked "RFP for Bio Valley" so as to reach the following address on or before 31st October 2018 till 11:00 hrs.

   To:

   The CEO
   Bio Valley Incubation Council,
   AMTZ Administrative Office Building,
   C/o AMTZ campus, Pragati Maidan,
   VM Steel Project S.O., Visakhapatnam,
   Pin -530031, Andhra Pradesh – India
   E-mail: **info@amtz.in**

The RFP bids shall be opened on 31st October 2018 at 03:00 PM.

Bio Valley may at its discretion, extend this deadline for the submission of RFP by amending the RFP documents in which case all rights and obligations of Bio Valley and bidders previously subject to the deadline will thereafter be subjected to deadline as extended.

4. To assist in the examination, evaluation and comparison of RFP, Bio Valley at their discretion can ask the bidder for the clarification of its RFP. The request for clarification and the response shall be in writing. However, post submission of RFP, no clarification at the initiative of the bidder shall be entertained.

5. Bidders if they choose, may prior to submitting their Request for Proposal (RFP), visit Bio Valley, with prior appointment.

6. Bidders may be called for making a presentation before the committee.

7. Selected bidder(s) would abide by payment conditions as per standard business practices and mutually decided upon. However 5% of the amount fixed as part of the contract finally shall be payable only after expiry of the warranty period of the equipments (if the warranty terms are different, the last of the warranty expire shall be taken into account for this purpose)

8. At any time before the submission of RFP, the Authority may carry out amendment(s) to this RFP document and/or the schedule. The amendment will be made available on our websites and (https://amtz.in/) and will be binding on the bidder. The Authority may at its discretion extend the bid schedule for the submission of proposals.

Floating of RFP	:	16th October 2018
Pre-bid Meeting	:	24th October 2018 at 11:00 AM
RFP Submission	:	31st October 2018 at 11:00 AM
Technical Bid Opening	:	31st October 2018 at 03:00 PM
Financial Bid Opening	:	31st October 2018 at 05:00 PM
TENDER APPLICATION FEE	:	Rs. 10,000/- (Ten Thousand Only) *

9. The Authority reserves the right to accept or reject any application without assigning any reason thereof.

10. Bids that are incomplete in any respect or those that are not consistent with the requirements as specified in this document or those that do not adhere to formats, wherever specified may be considered non-responsive and may be liable for rejection and no further correspondences will be entertained with such bidders.

11. Canvassing in any form would disqualify the applicant.

12. For any clarifications on the Request for Proposal, the following may be contacted through email/-/Letter

The CEO
Bio Valley Incubation Council,
AMTZ Administrative Office Building,
C/o AMTZ campus, Pragati Maidan,
VM Steel Project S.O., Visakhapatnam,
Pin -530031, Andhra Pradesh – India
E-mail: info@amtz.in
Phone : +91 8885092122

** Payable by Demand Draft drawn in favour of AMTZ Ltd., payable at Visakhapatnam or by online payment to AMTZ account along with the bid documents.

Section – II

2.1 Bio Valley Incubation Council (Bio Valley)

Bio Valley Incubation Council (BVIC) is a Incubation company set up by The Andhra Pradesh MedTech Zone (AMTZ) incubator with support from BIRAC (BioNEST scheme, DBT, Government of India in Visakhapatnam for manufacture of products of Medical Technology, Biotechnology, Convergent technologies and allied areas, meeting with global standards. This facility located in the premises of the pioneering of medical devices manufacturing ecosystem is an open facility for innovators across the milieu to foster ideas and formalize prototypes to realizable products. Bio Valley is under the aegis of BIRAC- DBT as a BioNEST incubation centre. This will be the only Innovation Centre developing medical technologies and allied areas located within a manufacturing zone. Bio Valley has a host of mentors from academia, industry, business community and policy makers and is process of creating a unique holistic system of focused innovation in the healthcare domain.

2.2 Andhra Pradesh MedTech Zone (AMTZ)

Andhra Pradesh MedTech Zone (popularly known as AMTZ) is an enterprise under the Government of Andhra Pradesh, a 270 Acre zone, dedicated for Medical Device Manufacturing. The objective behind this 'One-Stop- Solution' is not only to reduce the cost of manufacturing up to 40% or to just simplify the end-to- end operations but also to reduce the import dependency, which is presently around 75%. AMTZ envisions to put India on the global map of high end medical equipment production and make health care products affordable and accessible not only for India but for world at large.

The creation of such a zone is based on the fact that medical devices manufacturing requires certain high investment facilities which are too capital intensive for individual manufactures to invest upon. The zone with in-house high investment scientific facilities would help manufacturers reduce the cost of manufacturing by more than 40%-50%. Currently, due to lack of such centrally located sharable facilities, either manufacturers do not undertake production of technologies requiring them or send their products abroad for process up-gradation and value addition. The zone would have all such facilities in-house to reduce manufacturing process costs.

Section – III

Technical Specifications for the RFP

Equipment open for Bid

A brief description of the equipment proposed to be procured through this RFP along with the technologies involved are as follows:

S/No.	Equipment	Specifications
1	Spray Dryer	Specification: • The spray drier must have an evaporation rate of 1000 ml/hr or more of water evaporation. • Must be suitable for handling aqueous solution, suspensions, emulsions and slurries. • The entire system shall be provided with all required accessories for its standalone operation. • The body of spray dryer should be flame proof with stainless steel contact parts. • Drying temperature range: Ambient to 250°C or above. Temperature accuracy: ± 1°C. • Temperature controller must be PIC based and sensors for measurement and display of inlet and outlet temperatures must be provided. • Must be provided with suitable air heater to maintain the desired maximum temperature and with air inlet filter. Must be provided with suitable control for process, data storage and data logging of system functions. • Dual feed ultrasonic nozzle of the 30 ± 10 kHz, 60 ± 10 kHz & 120 ± 10 kHz frequencies for wide angle spraying of suitable capacity must be provided along with all relevant accessories like frequency generators, cables, pumps, etc for standalone operation. • The nozzles should be easily replaceable into the dryer for easy changing and fitting as and when required. • The system should be provided with all accessories required for a fully functional spray dryer.
2	Encapsulator	• Dimensions (W x D x H) : 320 x 340 x 290 mm • Weight : 7 kg • Power consumption: max. 150 W • Connection voltage: 100-240 VAC • Frequency: 50/60 Hz • Heating: 10 – 80°C • Vibration frequency: 40 to 6000 Hz • Electrode tension: 250 to 2500 V

<table>
<tr><td></td><td></td><td>• Nozzle diameter of single nozzles: 0.08, 0.12, 0.15, 0.2, 0.3,•0.45, 0.75, 1.0 mm</td></tr>
<tr><td>3</td><td>Microfluidizer (High Pressure Homogenizer)</td><td>Maximum Pressure : 45,000 psi (3100 bar)
Flow rate : 250 ml/min; 15 Ltr/Hr, 4 gal/Hr
Required Air : 50/150 SCFM/PSI
Dimensions : 84 X 36 X 46 cm/H / 33” X 14” X 18” H
Weight : 36 kg/80 lb
Minimum Volume : 12 ml with Small Volume Option.</td></tr>
<tr><td>4</td><td>Water purification set up. Ultra Water Purification System</td><td>Specifications
<table><tr><td>Feed Water Requirements Parameter</td><td>Value or Range</td></tr><tr><td>Pressure</td><td>2 – 6 bar</td></tr><tr><td>Flow rate</td><td>>10 L/min at 2 bar</td></tr><tr><td>Feed water type</td><td>Potable water</td></tr><tr><td>Temperature</td><td>5 – 35 °C</td></tr><tr><td>Conductivity</td><td>10 – 2000 µS/cm at 25 °C</td></tr><tr><td>pH</td><td>4 – 10</td></tr><tr><td>Hardness (as CaCO3)</td><td><300 ppm</td></tr><tr><td>Silica concentration</td><td><30 ppm</td></tr><tr><td>Carbon dioxide concentration (CO2)</td><td><30 ppm</td></tr><tr><td>Langelier Saturation Index (LSI)</td><td><0.3</td></tr><tr><td>Fouling Index (FI5) or Silt Density Index (SDI)</td><td>≤7(*)</td></tr><tr><td>Total Organic Carbon (TOC)</td><td><1 ppm</td></tr></table></td></tr>
</table>

<table>
<tr><td></td><td></td><td>
<table>
<tr><td rowspan="2">Free chlorine for Milli-Q® HR 7060 LC, 7120 LC, 7170, 7220 systems</td><td><1.5 ppm</td></tr>
<tr><td>≥1.5 ppm and <3 ppm</td></tr>
<tr><td colspan="2">Free chlorine for Milli-Q® HR 7060 HC, 7120 HC systems</td></tr>
<tr><td colspan="2">* < 12 when the optional UF pretreatment is installed.</td></tr>
<tr><td>Parameter</td><td>95% ionic rejection (99% particulates rejection)</td></tr>
<tr><td>Conductivity</td><td>99% organic rejection for MW >200 Dalton</td></tr>
</table>
</td></tr>
<tr><td>5</td><td>(Micro) Ball Mill</td><td>The mixer mill is a compact versatile bench-top unit, which has been developed specially for dry, wet and cryogenic grinding of small amounts of sample. It can mix and homogenize powders and suspensions in only a few seconds. It is also perfectly suitable for the disruption of biological cells as well as for DNA/RNA and protein extraction. With its high performance and great flexibility the mixer mill should be versatile.
• Applications: size reduction, mixing, homogenization, cell disruption, cryogenicgrinding
• Field of application: agriculture, biology, chemistry / plastics, construction materials, engineering / electronics, environment / recycling, food, geology / metallurgy, glass / ceramics, medicine/ pharmaceuticals
• Feed material: hard, medium-hard, soft, brittle, elastic, fibrous
• Size reduction principle: impact, friction
• Material feed size*: ≤ 8mm
• Final fineness*: ~ 5µm
• Batch size / feed quantity*: max. 2 x20ml
• No. of grinding stations:2
• Setting of vibrational frequency: digital, 3 - 30 Hz (180 - 1800 min^{-1})
• Typical mean grinding time: 30 s - 2min
• Dry grinding: Yes
• Wet grinding: Yes
• Cryogenic grinding: Yes
• Cell disruption with reaction vials: Yes, up to 20 x 2.0ml
• Self-centering clamping device: Yes
• Type of grinding jars: screw topdesign
Material of grinding tools: hardened steel, stainless steel, tungsten carbide, agate, zirconium oxide,PTFE</td></tr>
<tr><td>6</td><td>Hot air oven</td><td>Features:
• Glass window in-built into the door.
• Forced convection design ensures a high level of control accuracy and uniformity.
• Automatic cut off of heater & blower when door opened.
• Digital PID temperature controller with timer, alarms and auto tuning.
• Non contact type door switch.
• Aero dynamic internal design for achieving horizontal air circulation.</td></tr>
</table>

<table>
<tr><td></td><td></td><td>
• Solid and plain bottom without electrical.
• Seamless round cornered edge of internal chamber ensures easy cleaning & prevents any leakage. Supplied with stainless steel wire mesh shelves. Shelf height adjustable in 25mm steps.
• Temp range: +50ºC to 200ºC. 2
• Control accuracy: ±0.2ºC.
• 30 to 40% lower power consumption when compared to local brands.

<u>Technical Specifications:</u>

<table>
<tr><th>Inner dimensions (WxDxH)/ Capacity</th><th>Outer Dimension (WxDxH)</th><th>Shelves</th><th>Packing Dimensions (WxDxH) / Gr weight</th></tr>
<tr><td>450 x 450 x 450 mm / 91 L</td><td>640 x 780 x 800 mm</td><td>2</td><td>970 x 810 x 990 mm/89 kg</td></tr>
</table>
</td></tr>
<tr><td>7</td><td>Ultrasonic Bath</td><td>
Technical Specifications:

• Ultrasonic Frequency : 33 KHz
• Operating Voltage : 230V, 1 Phase,
• Timer : 0 – 99 min. Digital.
• Capacity : 3.3 / 6.5 Ltrs
• Tank Dimension : 240x140x100/290 x 150 x 150
• Power Output : 100/200 Watts.
• Single Unit of Tank Rectangular in shape.
</td></tr>
<tr><td>8</td><td>Microscopes with image capture facility</td><td>
• Digital Microscopy Camera with measuring software:5 Megapixels, color, CMOS Camera with USB 2.0 connection - Basic resolution: 2560 (H) x 1920 (V) = 5.0 Megapixels ; Pixel size: 2.2 µm x 2.2 µm Sensor size: 5.7 mm x 4.28 mm equivalent 1/2.5"" (diagonal 7.1 mm) Digitization: 3 x 8 bit/pixel ; Integration time:10 µs up to 2 s

• Interfaces: 1x SD card slot; 1x mini USB 2.0, 1x AV (S-Video), 1x DVI-D (HDMI)Spectral range: Approx. 400 nm-700 nm, IR-Filter

• Optical interface: C-mount Power supply via USB 2.0 or external power supply (optional) Dual color LED: Power on and ready for capture (green); Recording (blinking green); Not ready (red); Error (blinking red) Integrated slot: SD card slot for SD and SDHC cards
• Recording: Switch for image capture Set new white balance: Switch for new setup
• Supported operating systems: Windows XP x32 Prof. SP3 and Windows 7 x32
Ultimate.
</td></tr>
<tr><td>9</td><td>GDS Gel Documentation System</td><td>
Description:

Multi-functions image system for DNA, RNA, Protein analysis. It is equipped with high sensitivity CCD and capable of capturing the weak signal from western blot samples or other blotting membranes and even animal tumor or plant leaves. It includes the functions of gel documentation, Chemiluminescence, multi- color detection, realtime
</td></tr>
</table>

		Electrophoresis etc. Applications: Chemiluminescence, EtBr Gel, SyBr Green Gel, SyPro Orange Gel, SyPro Ruby, Western Blot, Southern Blot, Northern Blot, Dot Blot, Slot Blot, ECL, X-ray film, TLC, Tissue Sample, Commasie blue Gel, Sliver stain Gel, Colony plate, Real-time electrophoresis. Technical Specifications: • Cool CCD system, grayscale 24 • Temperature cool down : -40°C (bellow ambient) • CCD resolution : 4,190,000 pixels • Software resolution : 16,700,000 pixels • Quantitative resolution : 16Bits, 65535scale • Exposure time : 0.001 s to 100,000 s (>24 hours) • Stand alone operation, WiFi, 300GB storage space , USB output • Fix lens : 50mm / f0.95 • Reflectance light : white, 8WX2. (optional: UV 254nm, 306nm, 365nm) Integrate touch monitor 8”
10	Plate Reader	• Detection capability with high power laser excitation • Fluorescence intensity detection capability, top and bottom, with quad-monochromator • Ultra-sensitive luminescence, glow and flash • Choice of filter- or quad-mono chromator based absorbance detection • Integrated computer with touch screen is user friendly, even with gloves • Integrated data analysis software with data export (Excel or text files) features • 21 CFR Part 11 support
11	Anaerobic Chamber	• Exterior Dimensions : 48.75"W x 31.3"D x 26.5"H (1238 x 795 x 673 mm) • Interior Dimensions : 33"W x 28.5"D x 25.2" (838 x 724 x 640 mm) • Incubator Interior Dimensions : 26.5"W x 9.2"D x 8.2"H (673 x 234 x 208 mm) • Airlock Interior Dimensions : 9"W x 10.7"D x 9"H (229 x 272 x 229 mm) • Pass Box : 9"W x 9"H (229 x 229 mm) • Electrical : 220-240V/1440W • Material : Heavy Duty Stainless Steel and Plexiglass • Interior Outlet : 1 (230V), one amp max • Exterior Outlet, Vacuum 5 amp. Max. • Capacity : 300 plates • Shipping Weight : 480 lbs. (217.72 kg) 25 • Over temperature Alarm : Yes • Airlock Volume: 0.5 cu. Ft. (14 L) • Working Chamber Volume : 13.7 cu. Ft. (388 L) • Incubator Volume: 1.7 cu. Ft. / 48L • Temperature Range : 5°C above ambient to 70°C • Temperature Uniformity : +/- 0.5°C

		• 13.7 cu. Ft. Work space with a 300 petri-plate capacity incubator. • Operates as a one gas (Anaerobic Mixed Gas [AMG]) or two gas (AMG and nitrogen) system • Airtight construction and gloveless design with patented cuffs seal around operator's arms . • Ergonomic arm port doors simplify access and maintain a strict anaerobic environment • User-friendly Control Panel Layout and Microprocessor (has pre-programmed sequence) • Manual or automatic airlock with sliding shelves
12	Handheld Automated Cell Counter	Technical Specifications: The handheld automated cell counter provides a fast and convenient method for counting cells and particles and is compatible with both the 40 and 60uM sensor. The system employs the Coulter principle in a miniaturized, handheld, format enabling rapid cell counting; what used to take 10 minutes now takes less than 30 seconds. The user prepares a dilution of the cell culture of interest and uses the Scepter cell counter to aspirate a sample of this dilution into the Scepter sensor. The cell counter's screen displays: • Cell concentration • Average cell size • Average cell volume • Histogram of size or volume distribution • 72 histograms can be saved to the device. • Upload data to your computer using the USB cable provided. • Perform additional data manipulations by exporting data to Microsoft Excel. Performance: • The cytometer counts cells or particles between 8 and 25 µm. • Samples should be diluted within the operating range (10,000-500,000 cells/mL).
13	Super C Benchtop Supercritical CO2 Extractor.	Capacity : One ounce Unit Size : 18 7/8"W x 12 1/2"D x 12 3/4"H, weight: 37lbs Motor : ½ hp, 120 volts ac, 8.5 amps, 1725 RPM's, 1000 watts, continuous Collection Vessel : 1 L media bottle Pressure Range : 800-4500 psi Temperature Display : Independent LED display Temperature Control : Ambient–90 degrees C Run-time : 60-90 minutes (for most extraction applications)
14	Laminar Flow Horizontal Laminar Air Flow with UV	Technical specification of Laminar Air Flow Product : Laminar Air Flow

	lamp and Stand	• MOC	:	Complete SS 304 Grade
		• Internal Dimension	:	L1200 mmXW600mmXH600mm
		• External Dimension	:	L1000mmXW750mmXH2200mm
		• Direction of flow	:	Horizontal
		• Cleanliness	:	Class 100 as per ISO 14644–1(replace US FED STD 209E
		• Internal Work Area	:	Made of IS 304 Grade Stainless steel with satin finish
		• Front door	:	By 6mm clear Acrylic Door with Double Folding
		• AIR FLOW	:	Designed for 0.4m/s to 0.65 m/s when measure across the entire filters Space during the rated life cycle of filters
		• PRE- FILTER		
		• Size	:	800 x 400 x 50mm- 1 No.
		• Type	:	Flange Type
		• Media	:	Synthetic, Non-oven Polyester fiber, Washable Type
		• Casing	:	G.I. Powder Coated
		• Gasket	:	Neoprene
		• Retention	:	5 Micron
		• Efficiency	:	95%
		• Pressure Drop	:	6 to 8 mm
		• SUPPLY HEPAFILTER		
		• Size	:	1220 x 610 x 100mm- 1 No.
		• Type	:	Box Type, Deep Pleat
		• Media	:	Ultra clean glass fiber paper-imported
		• Casing	:	G.I.Powder Coated
		• Gasket	:	Neoprene
		• Retention	:	0.3Micron
		• Efficiency	:	99.97%
		• Pressure Drop	:	25 mm of W.c.
		• MOTOR – BLOWER		
		• Make	:	AUE
		• Volts	:	230 V
		• Hz	:	50
		• HP	:	1/4
		• PRESSURE MONITER		
		• Type	:	Dial Type Gauge
		• Housing	:	Acrylic cover
		• Accuracy	:	+/- 2 % of Full Scale
		• Pressure limits	:	15 Psi 7
		• Range	:	0-25 mm
		• ILLUMINATION:		
		• 2 feet, 40 watts florescent tube lights		
		• >800 Lux at measured at work surface level		
		• Ultra violet lamp 3 feet, 36 watt makes.		
		• NOISE LEVEL:		

<table>
<tr><td></td><td></td><td>• 65 +/- 5 db
• VIBRATION LEVEL:
• LESS THAN 2.5 um(0.0001)
• POWER SUPPLY:
• 230 VAC, Single phase, 50 Hz</td></tr>
<tr><td>15</td><td>Freeze Dry System</td><td>• This has the following salient features.
• Has an lce capacity of 5Kg.
• Occupies minimum bench space.
• Ideal for all common freeze drying applications.
• Can also be used as a cold trap for various laboratory applications.
• Corrosion resistant S.S Chamber.
• Suitable for the Indian Environment.
• CFC Free refrigerants.
• Freeze drying in Flasks, vials, Ampoules & in bulk trays are possible.
• Most silent running
• Easy to clean.
• Analogue/ Digital Vacuum gauge.
• Optionally trolley mounted.
• Ideally suitable for modern Biotechnology Labs.

Specification:
• Condenser Temperature : -55°C / -85° C
• Condenser Capacity: 3Kg/24 Hours & 5 Kg T.
• Chamber Size: 180 mm Dia X 180 mm Ht.
• Material of construction: Electro polished S.S.
• Refrigeration Compressor : 0.5H.P/2X0.5 H.P
• Refrigerant: CFC Free R 404A.
• Heat Extraction: 70 W @ - 40° C.
• Mains: 220/230 V 50 Hz. Single Phase</td></tr>
<tr><td>16</td><td>Ultra Sonic Homogenizer</td><td>Technical Specifications:

• Power Rating : 400 watts
• Volume : 250 µl to 250 ml (With Two Probes)
• Output Frequency : 20 kHz
• Timer : 0 to 15 minutes
• Control Unit Dimensions : 9 5/8 in. (24.45cm) length, 11 1/8 in. (28.26 cm) width, 6in. (12.24cm) height
• Transducer Dimensions : 7.6 x 14.3 cm
• Weight : 18 lbs</td></tr>
<tr><td>17</td><td>Rheometer</td><td>
<table>
<tr><th colspan="2">Specifications</th></tr>
<tr><td>Transducer</td><td>FRT</td></tr>
<tr><td>Torque Range</td><td>0.05±N.m to 200mN.m</td></tr>
<tr><td>Normal/Axial force Range</td><td>0.001 to 20N</td></tr>
<tr><td>Motor</td><td>Digital Air bearing</td></tr>
</table>
</td></tr>
</table>

		<table><tr><td>Strain Amplitude</td><td>1±rad to unlimited</td></tr><tr><td>Minimum Strain in Transient</td><td>20nrad</td></tr><tr><td>Frequency Range</td><td>1E-7 to 628rad/s</td></tr><tr><td>Angular Velocity Range</td><td>1E-6 to 300rad/s</td></tr><tr><td>Step Change in Velocity</td><td>5ms</td></tr><tr><td>Step Change in Strain</td><td>10ms</td></tr><tr><td>Force Convection oven "FCO"</td><td>-150 to 600°C</td></tr></table>
18	Gel Imaging System, Gel Logic	• It is a full-feature instrument for imaging and analyzing gels and western blots. It is designed to address multiplex fluorescent western blotting, chemiluminescence detection, general gel documentation applications, and stain-free technology imaging needs. • Automatic recognition of application-specific tray and adjustment of imaging parameters and software options. • Precalibrated focus for any zoom setting or sample height • Two user-defined modes (rapid or optimal auto-exposure) for all blot and gel imaging applications • Dynamic; precalibrated and optimized for each application. • Touch-screen functionality
19	Optical microscope	• Optical System :Galilean Optical System • Total Magnification : 2.1x-690x*1 • Zoom Body Zoom Ratio : 16.4 (0.7x-11.5x) • AS : Built-in • Observation Tube : Binocular/Trinocular/Tilting Trinocular Observation Tube • Extendable Eyepoint Adjuster : SZX2-EEPA • Focus Focusing Unit/Coarse Fine Focusing Unit/Heavy-duty Coarse Fine Focusing Unit/Motorized Focusing Unit
20	Hybrid Reader	• Hybrid Multimode Reader With absorbance, fluorescence & Chemiluminescence. successful multi- technology microplate reader platform has been extended in its modu- larity, performance and user-friendliness by adding additional reading technologies and a double monochromator for wavelength selection. •MonochromatorTechnology •High-sensitivity Luminescence •BRET •UV/VISAbsorbance

		•UV/VISFluorescence •UV/VISFRET •Time resolved Fluorescence (TRF) •Time Resolved FRET (TR-FRET / HTRF®) ●Fluorescence Polarization.
21	Flash & Go automatic colony counter	• Reflected Lighting : Ring of 54 white • LED Transmitted Lighting : Two High Flux Led Background field: Dark or Bright • Imaging Device : CMOS with fixed focus lens. • Image field : 97 x 97 mm • Minimum colony size : 0.06 mm • Image capture : True color, 24 bits per pixel • Image resolution : 1536 x 1536 pixels. • Mains : 100/240V AC, 50/60 Hz 22 • Power Consumption : 40W • Operating Temperature : 5º a 40ºC • Operating Relative Humidity : 10% to 90% • Dimensions (WxHxD) : 18 x 36 x 22cm
22	Mastercycler Nexus Gradient	• Sample capacity: 96 × 0.2 ml PCR tubes, 1 PCR plate 8 × 12 or up to 77 × 0.5 mL PCR tubes • Temperature control range of the block: 4–99°C • Temperature control mode: Fast, Standard, Safe • Heating technology of the block: Peltier elements, Triple Circuit Technology • Power supply: 115 or 230 V, 50–60 Hz
23	X2 Flash Chromatography System	RD2 - Detector: The RD2 detector is indispensable to anyone engaged in chromatographic separations in aqueous or organic solvents, of samples between 20 mg and 200 g per typical run, using any preparative column type. Scientists and process engineers who accomplish organic synthesis, protein and 30 peptide purification, or any bench or semi-industrial scale chromatographic procedures will benefit. RD2 Features: • The RD2 detector measures UV absorption at 250 nm and 280 nm wavelengths simultaneously, using a single, embedded flow cell. The measurements are thermally compensated.

		• The chromatogram is graphed in real time on an embedded 5.7- inch LCD. Data is recorded to an internal, non-volatile (non-powered) memory, and can be transferred to a USB drive in a simple format exportable to software of your choice. • Ground breaking patent pending flow cell design allows the user to reliably observe absorption peaks from 0.001 to 100 AU simultaneously. • The flow cell total volume is 30 µl. • Can be used continuously for pressures up to 250 psi. • The flow cell is compatible with any common solvent except HF. • The RD2 can withstand internal pressures of up to 250 psi (17 bar). • The RD4 flow cell supports flow rates from 0.1 to 300 ml/min. • The detector is compatible with virtually any fraction collector. • Included universal column adapter makes attaching the RD4 to any column or cartridge effortless – glass, FPLC, HPLC. • UV LED light sources provide over a decade of consistent function while eliminating warm-up time. • Durable anodized titanium case and shielded display combine a sleek, modern design with near-total solvent-resistance. • Works with both 120V and 220V line voltage, 10W max power draw.
24	Plate reader (Molecular Devices)	**Readmodes** Absorbance Fluorescence (top/bottom read) Luminescence (top read) Time-Resolved Fluorescence (top read) Fluorescence Polarization (top read) HTRF (top read) AlphaScreen (top read) **Wavelength** Abs: 230 - 1000 nm FL Ex: 250 - 830 nm FL Em: 270 - 850 nm Lumi: 300 - 850 nm **Wavelength selection** Cartridge filters and monochromatortunable in 1 nm increments **Absorbance photometric accuracy/linearity** < ±0.010 OD ±1.0%, 0 to 2 OD **Absorbance photometric precision/repeatability** < ±0.003 OD ±1.0%, 0 to 2 OD **Temperature control** Ambient + 4°C to 45°C

25	RT PCR system	Real- Time PCR conducts the whole process of DNA amplification and PCR products in an enclosed tube and realizes real-time detection as well as auto-analysis under computer control. Features : • Good practicability • Real-time data monitoring • Real-time analysis display of the melting cuver • Quantitative analysis • Automatic assessment of negative or positive result • Wide detection scopes (101-1010 copies/ml) • High sensitivity and accuracy Specification: • Sample capacity: 48x0.2ml Channel : 2 channels • Excitation light source: Light emitting diode(LED) Fluorophores detected: F1:FAM, SYBR Green Main reaction volume: F2:VIC, HEX, JOE, etc. • Modular temperature scope: 10-100ul Temperature accuracy: 30-99.9oc Temperature homogeneity: <+0.1oc • Rate of temperature ascending and descending: <+0.3oc4oc/ s(max) Inputting power supply: AC220V,50Hz • Operating system: Windows 2000/XP/WIN7 Energy consumption: 650W • Overall dimensions: 457 mmx420 mmx335 mm

Section – IV

Scope of Work of the Bidder

(Bidder used interchangeably for Manufacturer/trader/ supplier)

Extent of Work

i. To provide instruments for research and development and quality testing, pertaining to medical technology, biotechnology and allied areas at the incubation facility.
ii. To support the testing facilities in Bio Valley which are required to achieve the Extent of Work.
iii. To install& commission the equipment for Bio Valley facility.
iv. To service, maintain and calibrate the equipment at the end users' site.
v. To ensure Quality Control (QC) and ensure compliance of the equipment meant for medicaldevices, Biotechnology and allied areas to Safety Standards &QC provisions of National and International standards.
vi. To upgrade the proposed equipment software and calibrations from time to time as per internationally acceptable guidelines/ benchmarks.
vii. To offer comprehensive sales after service including comprehensive maintenance for 5 Years to offer comprehensive maintenance and warranty for 5 Years and assured supply of spare parts for 15 Years.
viii. Bio valley will provide the laboratory design as mentioned in the scope of the work to the selected Bidder.
ix. Bio Valley will offer guidance to the Bidder in understanding its documents.
x. The selected Bidder is expected to prepare detailed documents of installation, quality check, calibration& testing of various sub-systems.
xi. The selected Bidder should prepare the final documentation as per industry standards.

Incubation facility

This facility proposed to set up the innovation Centre is a dedicated space with about 23,000 sft of space. The equipment and its sub-systems sought through this RFP indigenously as per specifications given in this document.Research and development and Performance Testing Room as well as Quality Control Testing rooms of the facility would consist of dedicated facilities with application electrical accessories. This would help to segregate it from the rest of the rooms of the facility and other facility/unit of AMTZ so that the safety limits of officials/visitors of AMTZ and public would be complied upon. The plan of the testing room is approved by the authorities before the commencement of the construction.

As a part of the scope, the selected Bidder, would require providing for specialized plant & machinery (P&M) and qualified & experienced manpower to setup the components/parts with suitable materials of the machines and its sub-systems. The scope also includes the following

An integration & Assembly of components/ parts

Testing and calibration

Quality Control Testing according to standard protocols

Clinical and lab-basedPerformance Testing and Approval

ISO certification: The Bidder may have facility certified for ISO 9001 / ISO 13485 and any other relevant quality standards (IEC, ASTM) but not mandatory.

Operations & Management

The manpower for installation and periodic quality testing and calibration for the facility above is an indicative and the Bidder can induct the manpower as per their need taking into consideration of the production requirements. No manpower support would be provided by Bio Valley.

Section – V

Request for Proposal

5.1 Bio Valley Incubation Council (Bio Valley), located at the Andhra Pradesh MedTech Zone (AMTZ) Campus, Visakhapatnam(herein after referred as "Authority") invite applications for the purpose of **Quotation on Instruments for Research and Development and Quality Testing, pertaining to medical technology, Biotechnology and allied areas at the incubation facility** from reputed Private / Public sector units with relevant experience(An Indian registered legal entity or a Foreign entity registered in India) with relevant experience in the field of Radiology/High end medical equipment.The Bidders are required to submit their 'Request for Proposal' in the format given in Annexure-A.

5.2 The Bidder will be shortlisted based on the information furnished in Annexure-A and assessment of the equipment facilities, after sales services, service &quality and calibration along with maintenance network, financial capability and general company profile by the expert committee.

5.3 Request for proposal should clearly spell out the following extent of interest:
Quotation on instruments for research and development and quality testing, pertaining to medical technology, biotechnology and allied areas at the incubation facility.
The submission of the RFP shall include all such documents that are specified herein to prove the authenticity of their offer and any claim made therein. The burden of proving such claims shall lie with the bidder.

5.4 All cost and expenses associated with submission of RPF shall be borne by the Bidderwhile submitting the RPF. Bio Valley shall have no liability in any manner in this regard or if it decides to terminate the process of short listing for any reason whatsoever.

5.5 Selection of Bids: The bidder would be selected on the relevance and genuineness of the quotations provided for. The technical eligibility on the relevant detailing of each of the individual quotation will be prioritised. The bidders should have sufficient financial and technical background for this purpose the minimum financial eligibility shall be treated as companies/entities **having a turnover of at least 1.5 times the bid amount indicated** in their proposal. i.e., If the bid amount indicated is Rs.100, financial turnover of at least Rs.150 shall be there for last three years.

5.6 For financial eligibility for bidding, the bidder should provide last three years' (2015-16, 2016- 17 and 2017-18) balance sheet and P&L account statements as proof. In case of unaudited figures for 2017-18, these shall be certified by company's/entity's chartered accountant/auditor.

5.7 The bidder would need to provide for at least two years of warranty and at least three years of comprehensive maintenance of the said equipment and sub-parts.

The selection of Eligible Bidder shall be made on the basis of evaluation of all the parameters of indicated above

All qualified/eligible bidders are required to submit their price quotation as per format in Annexure B and enclose the same in **a separate envelope marked "Financial bid for Bio Valley**". This envelope would be opened only if the bidder is found to be eligible based on the eligibility conditions prescribed in this document at various places.

Section VI

ANNEXURE-A – RFP accompanying Documents

The details to be submitted along with RFP

(The information is to be furnished on the company's letter head duly signed on each page)

A	COMPANY PROFILE	Details /Remarks of bidder in response to column requirements
1.	Name of the Organisation: Website:	
2	Name of the contract person: Name: Address: Telephone: Fax: E-mail:	
3	Year of Incorporation	
4	Type of Organization (Public Limited/Private Limited/LLP/Partnership Firm/ Proprietary Firm/ Society/ Any other)	
5.	Address of the registered Office:	
6	Number of Offices with addresses (excluding registered offices): India: Abroad:	
7	Certificate of Registration as a manufacturing Unit	
8	Permanent Account Number	
9	GSTN	
10	Status of ISO9001/ISO13485 Certification (if any)	

B	**ESSENTIAL REQUIREMENTS**	
1	The Bidder (An Indian registered legal entity or a Foreign entity registered in India) having at least 5 years of experience in the field medical technology/Biotechnology equipments/products or having similar background to prove their competence to supply the products listed in the RFP. Supporting documents to be attached.	
2	The Bidder should have a minimum average annual turnover of 1.5 times of the total amount quoted in the Bid (with supporting documents for last 3 financial years. The turnover eligibility is to be supported by audited financial statements duly certified by a Chartered Accountant / Income tax returns for the last 3 years period.	
3	The Bidder profile, giving details of current activities and management/ personnel structure including evidence of incorporation. The Bidder should be registered and/or ISO 9001or equivalent certified or any other certification to indicate he/she is a qualified supplier of the products being bidded for	
4.	The Bidder should have adequate manpower to undertake this work manpower strength (i.Technical; and ii. Non-technical) at various levels to be furnished to install. Calibrate and timely maintain the equipment.	
5	The in-house technological expertise available from the following to be furnished, if sought by procurer: • Electrical and electronics test and measurement equipment • Electrical and electronics test equipment calibrations and corrections • Electrical and electronics prototype fabrications and testing • Control instruments and electronics • Medical electronics and instrumentation • Lasers and optics • Radio Frequency equipment and testing • Precision mechanical equipment, tools, jigs and fixtures • Sensors and actuators relevant to medical devices • Fabrication and prototyping including enclosure designing • Vacuum technology	

	• PCB designing, display and battery technologies • Wireless engineering • Microwave Engineering • Thermal Engineering • Fluid mechanics • Optics Others as required and relevant to medical technology, biotechnology, software and allied areas.	
6	The Biddershould have adequate inspection and Quality control facilities for this work. The list of equipment available to be furnished.	
7	The bidder would also provide all the relevant prior art associated with the instrument and the sub-parts, ranging from patents, literature, white papers, market reports, manufacturing details, etc.	
8	The Bidder should be in a position to visit Visakhapatnam whenever needed at short notice for any service/repair of equipments supplied to Bio Valley, AMTZ, Visakhapatnam and also provide a local contact for the same. The bidding organization should be GST/ Import compliant.	
9	The bidder would provide the list of products with general specifications and the customers as a part of the bid	
10	Preference would be given to bidders who can provide supporting claims of having supplied similar products to manfacturers/research institutions in the past, indicating list of products with general specifications and their Principals/clients	
11	List of PSUs/ Govt. customers who have been supplied by the bidder in the past as a mark of the credibility of the organisation may be provided of past procurers (Address, Telephone Number, and the name of contact person)	
12	The Bidder should have service engineers to attend service calls for this unit. The details of this are to be furnished.	
13	The Bidder should have well-established sales and marketing network. The details of this are to be	

	furnished.	
14	The list of technical collaborators on similar technology is to be furnished.	
C	**REQUEST FOR PROPOSAL (RFP):**	
.	**Financial Quotation on instruments for research and development and quality testing, pertaining to medical technology, biotechnology and allied areas on turn key basis for all or any cluster of the products listed in the RFP. at the incubation facility.**	**To be enclosed in a separate envelope marked "Financial bid for Bio Valley"**

I hereby declare that the above information is true to the best of my knowledge.

Signature with Name & Seal

Place:

Date:

NB: # The bidder is required to indicate in the adjacent column his confirmation of compliance of the conditions indicated in part B of the above statement: remarks regarding proof /documents enclosed shall be indicated in the adjacent column. If nothing is indicated, it may be presumed bidder has no claim on the eligibility conditions indicated.

Annexure - B – Bid Form

(To be submitted on the organization's letterhead under the signature of the authorized person)

To,

The CEO

Bio Valley Incubation Council

Reference No.: ……

File No. …….

Subject: "Tender for ……..

Dear Sir,

We hereby submit our tender for collaborating with the ……..

We hereby agree to all the terms and conditions, stipulated by the …… in this connection including delivery, penalty etc. quotations for each group are being submitted under separate covers and sheets and shall be considered on their face value.

We have noted that overwritten entries shall be deleted unless duly struck out & re-written and initiated. Tenders are duly signed (No thumb impression should be affixed).

We undertake to sign the contract/agreement within 30 (thirty days) from the issue of the letter of acceptance and start the work as per instruction immediately, failing which our / my name may be removed from the list of service providers/suppliers at the ……

We agree that until a formal contract is prepared and executed, this bid together with your written acceptance thereof and your notification of award shall constitute a binding Contract between us.

We understand that you are not bound to accept the bid you may receive.

We have gone through all terms & conditions of the tender documents before submitting the same and accept the same.

Yours faithfully.

Signature of the Authorized Signatory of Bidder

Full Address

(with seal of organization)

Annexure C – Financial Bid

[On the Letter head of Bidder and should be separately enclosed in an envelope titled "Financial bid for Bio Valley" and properly sealed]

Reference No.:

Date:

To,

The CEO
Bio Valley Incubation Council
AMTZ Administrative Office Building,
C/o AMTZ campus, Pragati Maidan,
VM Steel Project S.O., Visakhapatnam,
Pin -530031, Andhra Pradesh – India
E-mail: info@amtz.in

Sir,

I/ We hereby submit the following financial a per clause …. of the RFP for supplying the products listed in the RFP:–

Particulars	Amount in INR	Remarks, if any
Category I @Total price of all the …… products listed in the RFP for supplying on turn-key basis		

Category II #Total price of …….. products out of the …… products listed in the RFP		

NB:

1. *The shortlisted bidders selected based on checklist provided for submission of documents, shall be considered for final selection as per above criteria.*
2. *@First Preference would be for bidders in Category I who provide consolidated price for all the ……. Products listed in the RFP*
3. *# Prices quoted in category II for lesser number of products would be considered only if there are insufficient proposals received for consideration as per the terms of the RFP.*
4. *The competent authority reserves the right to select any or all of the products listed in either Category I or Category II and the decision of the competent authority shall be final in this regard.*
5. *For both categories, bidders are required to attach product wise list indicating individual prices for each of the product, to enable the selection of eligible bidder in case of exercising option 4 above.*
6. *The lower the price quoted for the turnkey proposals as in statement the better the chances of selection, subject to eligibility of other criteria indicated for bidding, in terms of the credibility of the supplier, service to be provided, quality of the products etc.*

Annexure D – Letter for Self-Declaration

(On the letterhead of the Organization)

To,

……

……

……..

Dear Sir,

In response to the reference No._____Dt._____ of Ref.

I/We hereby declare that our organization _____ is having unblemished past record and was not declare ineligible for corrupt & fraudulent practice either indefinitely or for a particular period of time by any Govt./PSU/Private Organization.

Thanking you

Signature and Seal of the Bidder

Name:

Date:

Representative Signature_____

Annexure E – Power of Attorney

POWER OF ATTORNEY FOR SIGNING OF BID

Know all men by these presents, We, _____(name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorise Mr. _____/ Ms _____(Name), son/daughter/wife of _____and presently residing at _____, who is {presently employed with us/ the Lead Member of our Consortium and holding the position of _____,} as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our bid for the " **Bid for……”** including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bidders' meetings and other conferences and providing information /responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the Concession Agreement and undertakings consequent to acceptance of our bid, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our bid for the Project(s) and/or upon award thereof to us and/or till the entering into of the Concession Agreement with the Authority or any entity representing the Authority.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE,_____, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF _____, 20**.

For

……

(Signature)

Witnesses:

(Name, Title and Address)

1.

2.

{Notarized}

Accepted

……

(Signature)

(Name, Title and Address of the Attorney)

Notes:

- *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*

- *Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.*

- *Power of Attorney should be executed on a non judicial stamp paper of appropriate value as relevant to the place of execution (if required under applicable laws).*

- *For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued.*