

ALL INDIA INSTITUTE OF MEDICAL SCIENCES  
ANSARI NAGAR, NEW DELHI-29  
STORES SECTION (DO)

Ref. No. 12/Stores(DO)/Biochem/PAC/2021-22/FSC-I

Dated- 29/10/2021

**Sub:-** Purchase of "Hypoxia Workstation – 01 No. for the Department of Biochemisty, at AIIMS, New Delhi-110029, on proprietary basis Inviting comments thereon.

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The Institute is in the process to purchase "Hypoxia Workstation – 01 No. at AIIMS, New Delhi from M/s. Don Whitley Scientific Limited, United Kingdom through M/s. Lab Technologies, Delhi. The PAC Certifications by M/s. Don Whitley Scientific Limited, United Kingdom as well as the user department are attached.

The above documents are being uploaded for open information to submit objections, comments, if any, from any manufacturer regarding proprietary nature of the equipment/item within 15 day from the date of issue/uploading of the notification giving reference No. 12/Stores(DO)/Biochem/PAC/2021-22/FSC. The comments should be received in office of Stores Officer (FSC), Store Section (DO), Animal House Building, Near Biotechnology Building at AIIMS on or before 22/11/2021 upto 12.30 p.m. failing which it will be presumed that any other vendor is having no comment to offer and case will be decided on merits.

Yours faithfully,

  
SR. STORES OFFICER (DO)

Encl: Related documents enclosed.

**Department of Biochemistry**  
**AIIMS, New Delhi-29**

(05)

Approx cost – 45 lakh

**Specifications for closed hypoxia workstation for cell culture**

- 1) The cell culture hypoxia workstation should be efficient enough to produce any gas atmosphere (other than hazardous and inflammable) in a closed culture unit, by programming, required gases (at least 3 gases), O<sub>2</sub>/air, CO<sub>2</sub>, & N<sub>2</sub> (from cylinders of pure gases) as defined by the user.
- 2) The hypoxia workstation must come with fitted internal Hepa filtration system (ISO 14644 – Class 3) so that the entire atmosphere passes through the filter ensuring clean chamber environment after every use.
- 3) The hypoxia workstation should maintain stable O<sub>2</sub>, CO<sub>2</sub>, temperature and humidity as programmed. The noise level of the instrument on working should be < 60 db.
- 4) The hypoxia workstation must have insitu calibration facility of O<sub>2</sub> sensor. O<sub>2</sub> concentration should be calibrated from 20% to 0.1% in a maximum of 15 minutes.
- 5) The hypoxia workstation must have the facility for changing the oxygen concentration without manual intervention for at least 48 hrs in increments of 15 minutes.
- 6) The hypoxia workstation should maintain and control O<sub>2</sub> from 0.0% to 20% in 0.1% increments with +/- 0.1% accuracy, CO<sub>2</sub> from 0.5% to 15% in 0.1% increments with +/- 0.1% accuracy, humidity control from ambient to 80% RH or higher. Temperature control from 5°C above ambient to 45°C in 0.1°C increments.
- 7) The sensors should remain inside the workstation for real time monitoring of O<sub>2</sub> & CO<sub>2</sub> concentration. Should have atleast 2 internal power sockets.
- 8) Programmable integrated gas mixing technology with O<sub>2</sub> and CO<sub>2</sub> sensors capable of programming different O<sub>2</sub> and CO<sub>2</sub> levels and capable of delivering each O<sub>2</sub> and CO<sub>2</sub> level according to the time programmed.
- 9) The hypoxia workstation should have wireless radio-controlled foot switch for control of sleeve vacuum & gas. The unit should have vacuum take off port.
- 10) The hypoxia workstation should be capable of maintaining anaerobic, hypoxic or normoxic conditions to meet the required culture condition for different experiments.
- 11) The hypoxia workstation should be accessible through oval shaped glove ports for easy up and down movement of forearm within the cabinet with maximum efficiency with barehand or gloved hand operation, without altering the internal atmosphere.
- 12) The hypoxia workstation should have touch screen display for simple operation. Alarms and status notices should be displayed clearly on touch screen. The unit should store data in the system memory at least for a month time, with data downloading capability and e-mail alert facility.
- 13) Chamber volume - approximately 300 liters with incubation area of ~ 800 x 400 x 400mm, should accommodate at least 250 culture flasks of 25cm<sup>2</sup>. Should have culture racks to keep the flasks (25 cm<sup>2</sup> and 75 cm<sup>2</sup>) and plates inside the unit.

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- 14) Airlock Volume - Integral 10-12 litre airlock for effective cell ware transfer to and from the workstation in the fastest possible time and should accommodate up to 7 x 0.5-liter flasks per cycle.
- 15) Hypoxia workstation must have removable Front – to permit thorough cleaning and sanitizing between experiments and introduction or removal of items or bulk quantities of samples in a fast way.
- 16) Dimensions of the hypoxia workstation should be approximately 1.2x0.70x0.72 m (LxHx D).
- 17) The hypoxia workstation should have capacity for future upgradation or attachment of similar workstation.
- 18) The hypoxia workstation to be supplied with all necessary accessories as a fully functional unit like: O<sub>2</sub> Sensor, CO<sub>2</sub> Sensor, Sleeve Kit, Glove Retaining 'O' Ring, Evaporator. Assorted components for connecting the Workstation to the required mains and gas supplies. User Manual, Airlock Transfer Tray, Dry lube Lubricating Powder (for sleeves), Fuse Set, Evaporator, Wrist Seals, Glove Retaining 'O' Ring etc.
- 19) The hypoxia workstation should be quoted with height adjustable table with wheels and gas filled cylinders (one N<sub>2</sub>, one CO<sub>2</sub> & two Air/O<sub>2</sub> cylinders of 47L capacity) with gas regulators and pressure gauge.
  - Five years comprehensive warranty (with labor and spares)
  - Five years CAMC, from 6<sup>th</sup> to 10<sup>th</sup> year ( including labor and spares)
  - Power Supply : Power Input : 220 V-240V AC, 50 Hz fitted with plug
  - Standards & Safety: CE (European) Marked product; ISO 9001 : 2015 and any other equivalent to Indian standard.
  - Standard penalty clause

*Subrata Sinha*

**(Dr. Subrata Sinha)**  
Professor and Head  
Dept. of Biochemistry

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80

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES**  
**ANSARI NAGAR, NEW DELHI-110029**


**Proprietary Article Certificate (PAC) (Machinery & Equipment)**

- (i) The indented goods are manufactured by M/s. Don Whitley Scientific Limited, U.K.
- (ii) Item Name: Hypoxia Workstation
- (iii) Model No. H35 HEPA
- (iv) Vital Technical Performance Parameters required which makes the requirement proprietary:
1. Automated oxygen calibration facility within the workstation for real time monitoring of O<sub>2</sub> & CO<sub>2</sub> concentration.
  2. Oxygen control system is fast and calibration possible in less than eight minutes.
  3. Easy up-down movement of forearm within the cabinet with maximum efficiency and operator comfort (Oval portholes) without altering the internal atmosphere.
  4. Fully integrated gas mixing.
  5. Vacuum take off port- connecting an external aspirator to remove used media from inside safely and without the risk of contamination and spillage.
  6. Radio controlled foot switch (wireless operation) for control of sleeve vacuum and gas.
  7. Easy monitoring of all parameters through intuitive 7-inch colour touch screen interface.
  8. Data downloading capability
  9. Memory for storage of data in system for one month


(Proprietary and Patent Certificates Attached)

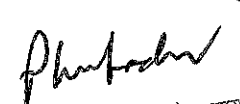
- (v) No other make or model is acceptable for the following reasons:

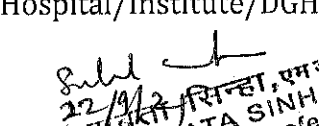
It is certified that market survey has been done and found that no other manufacturer is manufacturing similar/equivalent specifications which can fulfil the vital requirements of end user.

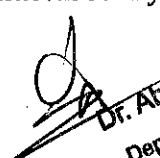
  
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With Name, Designation, Department of Hospital/Institute/DGHS

  
Dr. Kunzang Chosdol (MD, PhD)  
## Professor  
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Ansan Nagar, New Delhi-110029

  
डॉ. पार्थसारथी चट्टोपाध्याय, एम.डी पीएचडी  
Dr. PARTHASARTHI CHATTOPADHYAY, MD PhD  
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Department of Biochemistry  
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Signature of TSEC  
  
22/9/22  
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83



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Email: info@dwscientific.co.uk  
Web: www.dwscientific.co.uk

To whom it may concern,

Proprietary Certificate

This letter certifies that Hypoxia Workstation Model-H35 HEPA is solely manufactured by us & we confirm the following unique technical features are proprietary in nature.

- 1- The oval shape patented portholes (U S Patent no: 5861305) allow greater freedom of movement and operator comfort compared with the use of conventional, circular portholes.
- 2- Fully integrated gas mixing (No separate gas Mixer).
- 3- Intuitive 7-inch color Touch screen interface allows easy monitoring of all parameters simultaneously. Four user level with password protection.
- 4- Data downloading capability. Data remains in the system memory for 31 days.
- 5- Fastest O2 control in the market
- 6- Automated O2 cell calibration in situ. No need to remove the sensor for calibration. The calibration routine (U S Patent no:US2016/0377584) takes only seven minute to complete.
- 7- Radio Controlled foot switch for control of sleeve vacuum & gas. No wires for operator to get tangled in.
- 8- Vacuum take off port Provides a method of connecting an external aspirator so that used liquid media from inside the workstation can be removed safely and without the risk of spillage or contamination

To the best of our knowledge, no other manufacture provides similar technical specifications worldwide.

For any further information please do not hesitate to contact us.

Yours sincerely

For DON WHITLEY SCIENTIFIC LIMITED

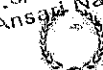
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Export Administrator

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Registered in England No. 1342672

Our Ref: DWS/1203/21-22

Date: 10/09/2021

The Director

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### MANUFACTURER'S AUTHORISATION FORM

We, Don Whitley Scientific Limited who are proven and reputable manufacturers of **Hypoxia Workstation** having factories at Victoria Works, Victoria Street, Bingley, West Yorkshire, BD16 2NH UK, hereby authorize Messrs LAB TECHNOLOGIES, Block I-4/138, Sector-16, Rohini, Delhi-110089 to submit a bid, process the same further and enter into a contract with you against your requirement for the above goods manufactured by us. We also state that we are not participating directly in this bid for the following reason(s):

We have exclusive distributor in India with full authority to participate in the tenders on our behalf.

We further confirm that no supplier or firm or individual other than Messrs. LAB TECHNOLOGIES, Block I-4/138, Sector-16, Rohini, Delhi-110089 is authorised to submit a bid, process the same further and enter into a contract with you against your requirement for the above goods manufactured by us.

We also hereby extend our full warranty, CAMC as applicable as per clause of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for the supply of Hypoxia workstation.

We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent and the spares for the equipment shall be available for at least 10 years from the date of supply of equipment.

We also confirm that the price quoted by our exclusive distributor shall not exceed the price which we would have quoted directly.

For any further information please do not hesitate to contact us.

Yours sincerely

For DON WHITLEY SCIENTIFIC LIMITED

Carin Robinson  
Export Administrator

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INVENTION PROTECTED



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