**All-India Institute of Medical Sciences** 

Ansari Nagar, New Delhi-29

(RESEARCH SECTION)

Ref. No. 36/Prop./Biotechnology/RKS/18-19/RS

Dated: 24.01.2019

Subject: Purchase of CO2 Incubator with accessories for the Deptt. of Biotechnology,

AIIMS, New Delhi-29 on proprietary basis- Inviting comments thereon.

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The request has been received from Dr.Rupesh Kr.Srivastava, Assistant Professor, Deptt.

of Biotechnology, AIIMS to purchase the subject item from M/sEmpirical Scientific,

Authorized distributors (Authorized Dealer M/s.SciMed(Asia) Ptd Ltd.) (Mfg.M/s.PHC

Corporation). on proprietary basis. The proposal submitted by M/sEmpirical Scientific and

Performa Invoice and Departmental PAC certifications 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 issue of 15 days giving reference No. 36/Prop./Biotechnology/RKS/18-19/RS. The

comments should be received by office of Stores Officer (RS), Research Section at AIIMS on or

before 08/02/2019 upto 12:00 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.

**STORES OFFICER (RS)** 

**Encl: Related documents enclosed.** 

1. PAC Certificate enclosed.

2. Performa Invoice

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

## RESEARCH SECTION

## PROPRIETORY/SPECIFIC BRAND GOODS CERTIFICATE

- Item/Type/Model No. required alongwith specification.
- CO2 Incubator (MODEL NO. MCO-170 AICUVH) Specifications Enclosed
- Is the item a spare parts attachment or accessory for an existing equipment

NO

Name of the manufacturers/supplier of the item proposed by the Indentor.

PHC Corporation (BRAND: PHCbi, Japan)

Are they sole manufacturers/sole distributors of the item.

Yes

5. Is there any other item with similar/ equivalent specification available in the market to meet the job requirement envisaged. If the answer is yes, why the same can't be procured. Demanding officer should bring out comparative functional advantages/cost effectiveness of the recommended item from these offered by other.

No

- 6. What were the efforts made to locate alternative source of supply or use
- other substitutes. Why open/limited tender can't be resorted to, for locating after
- Are the proprietory items certifiving that the rates are reasonable or not.
- yes, the ratis are reasonable

Technology is manufactured by Single Manufacturer

Any other justification for procuring item from single source.

We have not found any model with same technology and functional feature

verification in Catalogs and website of other manufacturers.

Signature of Indentor

native source.

COUNTERSIGNE (Head of the Department)

(Strike out whichever is not applicable)

Or, BUPERN ZUMAN SRIVASINATION

OR SUPPLIES A STANDARY PORTAGE

OF SUPPLIES A STANDARY VERBAL

### SPECIFICATIONS OF CO2 INCUBATOR (WITH ACCESSORIES)

- CO2 sensor: Should have a combination of dual infrared CO2 sensor and PID (Proportional, Integrated and Differential) control with Recovery time ≤ 3 minutes Relative Humidity Control: Should have gentle air flow through duct, a removable water pan combined with an independent heater, at the base of the incubator for maintaining humidity. Humidifying pan should be easily removable & should have an optical water level. Should have any optical for progression water level.
- Should have option for programmable decontamination with continuous UV sterilization of air & humidity source (UV lamp should be completely isolated from cell cultures, decontamination method should not trap contaminants inside the incubator or require temporary removal of any components)
- Walls & shelves: Should be of copper-stainless steel alloy & should have the ability to kill mycoplasma
- Interior chamber should have fully rounded corners
- Direct Heat & Air jacket system with three sources of heat sides, door and independent bottom heaters, all of which should be located outside the chamber

  Should have Color LCD Touch Panel Display for full control of different protocols

  Should have standard USB port for convenient data transfer for a period of 1.5 months wise.
- using 2-minute intervals
- Should have Automatic Electric Door Lock
- Should have Low profile, stackable design
- Should have user friendly door-mounted control panel
- Interior Volume: At least 160 L
- Temperature Range: 5°C above ambient temperature to +50°C Temperature Uniformity: ±0.25°C, Temperature Controllability: ±0.1°C Chamber humidity: 95 ±5%RH
- CO2 range: 0 to 20%, CO2 controllability:  $\pm 0.15\%$
- Alarm system: High/low temperature, CO2 level, door & UV lamp failure, independent overheat protection
- Shelves: 4
- Should have field reversible door
- 30mm diameter access ports Should have programmable UV Decontamination System to prevent contamination without affecting cell cultures in-vitro
- Should also have High Speed Decontamination System using vaporized H2O2 for time saving and documented chamber decontamination

Dr. Rupesh K. Srivastava Assistant Professor & PI Department of Biotechnology AIIMS, New Delhi

Dr. RUPES HUMAN SAWASTWA
Dr. RUPESH KUMAN SAWASTWA
Dr. RUPESH KUMAN SAWASTWA
Dr. G. BOTTO
Dr. Rupesh
Dr.

Dr. Jaya S. Tyagi Professor and HOD Department of Biotechnology AIIMS, New Delhi

ठाँ. प्रया सिवस्थामी स्थानी Dr. Jaya Sivaswami Tyagi amai va Reaussau/Prof. & Head का त्रोक्षांको लेका/Dapit. of Biosectinos

DI. BHUPERFIRA KIMAR VERMA TERRE MESS I ASSISTANT Professor City Machiner Transport



# Department of Biotechnology ALL INDIA INSTITUTE OF MEDICAL SCIENCES Ansari Nagar, New Delhi-110 029, India

r. Rupesh K. Srivastava, Pho. MAA Assistant Professor Room # 202 Tel: 011-26593548 (Direct)
Telefax: 011-26588491 (Office)
E-mail: rksrlvastava@aiims.edu
rupesh\_srivastava13@yahoo.co.in

# TO WHOMSOEVER IT MAY CONCERN

This is to certify that the technical specification of the proposed item "CO2 incubator with accessories" are of generalized/broad parameters and do not favor any particular firm.

(Dr. Rupesh Kr. Srivastava) Assistant Professor Department of Biotechnology All India Institute of Medical Sciences, New Delhi-110024 Mob. 09179567399

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Date 21/12/2018 Ref. No. ES/MCO170AICUVH/AHMS/2018/2112

To, Dr, Rupesh K. Srivastava Department of Biotechnology AIIMS New Delhi-110029

# SUB: QUOTATION FOR CO2 INCUBATOR (QTV-1)

With reference to your requirement for CO2 incubator, we are pleased to submit herewith, our offer for the same from PHCbi, Japan formerly Panasonic on behalf of our principals, Scimed (Asia) Ptc Ltd

CO2 Incubator Capacity-165Litres(Qtv-1)

# Make: PHCbi, Japan formerly Panasonic Model.No-MCO-170AICUVH

We understand that creating successful cell cultures requires a CO2 incubator that offers the highest levels of precision, security and ease of use.

Our latest IncuSafe MCO-170AIC CO2 Incubators with innovative technologies offer outstanding quality in performance, maximise cell culture productivity and provide optimum results and reproducibility. The MCO-170AICUVH has a built-in UV lamp and a H2O2 Decontamination board and Electric door lock with password.

## Features:

- Features:

  DHA Direct heat and air jacket system
  Dual IR CO2 sensor
  In CussFe® copper-enriched stainless steel interior
  Standard Safe Cell UV® with NEW increased UV lamp life
  Standard electric door lock with password Integrated shelf supports
  Full colour LCD touch screen
  USB port
  H2O2 Decontamination board

# Benefits:

- Improved insulation performance and lower running costs
   PID Control of CO2 and temperature





- Dual IR CO2 sensor
   Optimum protection for your cell cultures
   More space for more cultures
   PHCb's 1202 vapour sterllisation cycle reduces downtime to less than 3 hours for complete, validatable decontamination for increased productivity.

### Product Information:

- Active Background Decontamination
  Dual Heat Sterilisation
  Exceptional CO2 and O2 recovery times
  InCusaFe Construction for Germicidal Protection
  Zirconia sensor
  Direct Heat and Air Jacket system
  Dual IR Sensor
  H2O2 decontamination process
  Patented SafeCell UV lamp

### Patented SafeCell UV lamp:

The SafeCell UV lamp in IncuSafe incubators plays a pivotal role in continuous decontamination. The figure below shows the summary of four tests on separate strains of mycoplasma using PHCbi incubators. It can be seen that the lamp in the UV range has a much greater decontamination effect on these bacteria than decontamination lamps emitting at visible wavelengths.

To ensure the elimination of any airborne contaminants that may enter the chamber, the isolated narrow-bandwidth, ozone-free UV light (located at the base of the chamber) automatically switches on for a specified period after each incubator door opening. Water-borne organisms in the humidity water reservoir are eradicated in the same way, ensuring the security of any active cell cultures.

# H2O2 decontamination process:

The hydrogen peroxide vapour (HPV) decontamination process, used in <a href="MCO-230AIC">MCO-230AIC</a> Incut-Side CO2 Incubator and 170 range of CO2 and <a href="Multipus Incubators">Multipus Incubators</a>, permits quick una round of the cell culture incubator between processes, even when a complete, validated decontamination is required. Low temperature hydrogen peroxide in biological safety eabinets is a widely used alternative to other decontamination procedures, especially in the pharmaccutical industry.

PHCbi's H2O2 system limits incubator downtime to less than three hours for each total chamber decontamination. Despite this increased speed, the high levels of safety needed to meet regulatory requirements are reliably retained. The quick turnaround of this process means that the equipment is out of action for substantially less time than similar direct heat decontamination systems.

The H2O2 decontamination process follows several steps. Once the cycle is activated, the door is automatically locked and hydrogen peroxide goes through vaporisation. An airflow system circulates interior air to ensure all surfaces come into contact with the vapour. After this an





ultraviolet (UV) light switches on for 90 minutes, causing the H2O2 vapour to decompose into water vapour and oxygen. Once the cycle is complete, the door automatically unlocks. When hydrogen peroxide decontamination is employed, all the incubator's interior components, such as shelves, shelf brackets and the humidity tray, are decontaminated in situ. This eliminates the need to remove and replace them for any additional cleaning. In addition, critical parts such as the CO2 sensor do not need to be removed during the process nor recalibrated afterwards, contributing to the reliable operation of the system. The unique design of PHCbi incubators ensures the use of the decontamination system with no impact on adjacent equipment or the environment.

# SPECIFICATIONS:

External Dimensions (W x D x H)	620 x 730 x 905 mm	
Internal Dimensions (W x D x H)	490 x 523 x 665 mm	
Volume	165 litres	
Net Weight	80 kg	
Temperature Control Range & Fluctuation	AT+5~+50, ±0.1 °C	
Temperature Uniformity	±0.25 °C	
CO2 Control Range & Fluctuation	0 - 20, ±0.15 %	
Humidity Level & Fluctuation	95, ±5 %RH	
Sterilisation Method	H2O2 Decontamination	
Temperature Sensor	Thermistor	
CO2 Sensor	Dual IR	
Exterior Material	Painted Steel (rear cover not painted)	
Interior Material	Stainless Steel Copper-Enriched Alloy	
Insulation Material	Extruded polystyrene	
Heating Method	Direct Heat & Air Jacket System	
Outer Doors	1	
Outer Door Lock	Standard	
Field Reversible Door	Included	
Inner Doors	1 gastight - made of tempered glass	
Shelf Dimensions (W x D x H)	470 x 450 x 12 mm	
Max. Load Per Shelf	7 kg	
Max. Shelf Capacity	10	
Access Port	1	
Access Port Position	Rear Upper Left	
Access Port Diameter	30	
Power Failure	R	
Out of Temperature Setting	V-B-R	



# Empirical Scientific

High Temperature	V-B-R
Out of CO2 Setting	V-B-R
Door Open	V-B
Power Supply	Local -
Frequency	Local
Noise Level	29 dB

# Optional Accessories:

Standard
Standard
Standard
MCO-HP-PW
MCO-H2O2-PE
MCO-170PS-PW
MCO-170SB-PW
MCO-100L-PW
MCO-21GC-PW
MCO-SG-PW
MCO-170ST-PW
MCO-25ST-PW
MCO-170RB-PW

# Optional Communication System:

Ethernet interface (LAN)	MTR-L03-PW	
Digital interface (RS232C/RS485)	MTR-480-PW	
Analogue interface (4-20mA)	MCO-420MA-PW	



# 25 **Empirical Scientific**

Total Price(INR)	Unit Price(INR)	Qty	Description	Model No.	S. No
Rs.5,30,000.00	Rs.5,30,000.00	1.	CO2-Incubator Make: PHCbi, Japan	MCO- 170AICUVH	1
Rs. 5,30,000.00	Unit Price :				_
Rs.26,500.00	GST@5%:			-	_
Rs.5,56,500.00	AHMS, New Delhi):	ice (FOR-	Total Unit Pri		
	Fifty Six Thousand				

Rupees Five Lacs Fifty Six Thousand Five Hundre
Note: Above mentioned FOR prices are valid only if the institute provides a valid CDEC &
DSIR along with necessary authorizations to get the shipment cleared from customs.

S. No	Description	Qty	Unit Price(INR)	Total Price(INR)
1	H2O2 Generator Kit	1	Rs.30,000.00	Rs.30,000.00
			Unit Price :	Rs. 30,000.00
			GST@5%:	Rs.1,500.00
_			Total Unit Price:	Rs.31,500.00
4		Rupees T	Thirty One Thousan	d Five Hundred Only

For Terms and Conditions please refer next page:



# S **Empirical Scientific**

Terms & Conditions:

VALIDITY

180 Days

WARRANTY

3-Years warranty after installation. 2-Years after warranty. 8-10 Weeks

CMC DELIVERY PERIOD

PAYMENT

Through Cheque/DD/NEFT/RTGS Transfer in favour of

M/s.Empirical Scientific, New Delhi

BANK DETAILS

Beneficiary : Empirical Scientific
Account No : 662905600353 Bank Name : 1CICI Bank Ltd

Branch : Delhi Janakpuri, New Delhi IFSC Code : ICIC0006629

Account Type : Current

OUR PAN:

AAFFE9836M

GSTIN:

07AAFFE9836M1ZU

COUNTRY OF ORIGIN

Japan

COUNTRY OF SHIPMENT

CMC Charges	Per Unit Price (INR)	Total Price (INR)	
1 <sup>ST</sup> Year	Rs. 20,000/	Rs. 20,000/	
2 <sup>nd</sup> Years	Rs. 20,000/	Rs, 20,000/	
	Total Price	Rs. 40,000/	
	GST@18%	Rs. 7,200/	
Grand Total		Rs. 47,200/	



# **PHC Corporation**

8-5 Nishishimbashi, Minato-ku, Tokyo 105-8433, Japan Tel. +81-3-5408-7290 www.phchd.com

# **Proprietary Certificate**

# PROPRIETARY CERTIFICATE FOR PANASONIC CO2 INCUBATOR, MODEL MCO 170AIC (UVH)

We are please to certify that Panasonic's CO2 Incubator model MCO 170AIC (UVH) is a proprietary product of Panasonic, Japan. We incorporate:

- (a) Proprietary Single beam Infra-Red (IR) Sensor with Dual Wavelength measurement. This proprietary technology offers unprecedented control accuracy and stability by simultaneously measuring two wavelengths for continuous auto zero calibration. This gives ultra fast recovery without over-shoot and accurate CO2 averages during periods of frequent incubator access with multiple door openings
- (b) Proprietary UV Sterilization to provide continuous contamination control with zero downtime. This proprietary technology decontaminates conditioned air and humidity reservoir to prevent contamination without affecting cell cultures in-vitro
- (c) Proprietary copper enriched stainless steel interior and inventory components that provide natural germicidal protection without rust or corrosion. This proprietary technology eliminates contamination sources and eliminates the effects of airborne contaminants introduced through normal use
- (d) Vaporized H2O2 Decontamination System for high speed and documented chamber decontamination. This proprietary technology gives full decontamination including all in-situ decontamination of all interior components without the need for time consuming removal and autoclaving. There are no high heat emissions, and thereby no need to remove sensors too

Your Sincerely,

Marketing Manager

Asia business Development Group, Marketing Department

Biomedical Division

PHC Corporation

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# PROPRIETARY ARTICLE JUSTIFICATION

# No other make or model is acceptable for the following reasons:-

- Please provide enough description so that it is comprehensible to the lay reader.

  PHCIM MCO-170AICUVH is designed to accommodate a range of diversified experimental requirements, it uses incu safe copper-enriched stainless steel alloy interior surfaces to eliminate contamination sources and to mitigate the effect of airborne contaminates introduced through normal use.
- SafeCell UV includes a programmable ultraviolet lamp, isolated from cell cultures, that decontaminates conditioned air and humidity reservoir water to prevent contamination with the decontaminates.
- decontaminates conditioned air and humidity reservoir water to prevent contamination without affecting cell cultures.

  The proprietary single beam, dual detector infrared CO2 system offers unprecedented control accuracy and stability by simultaneously measuring two wavelengths for continuous zero calibration, resulting ultra-fast recovery without overshoot and accurate CO2 averages during periods of frequent incubator access with multiple door openings.

  H2O2 high-speed decontamination system utilizing vaporized H2O2 offers time-saving and documented chamber decontamination with complete safety. Full decontamination process takes less than three hours, saving valuable time.

  Unlike a high heat decontamination incubator, Panasonic's H2O2 decontamination cycle does not emit high heat and resulting in consuming very less energy.

- (iii) How are they important for scientific work.
   H2O2 system limits incubator downtime to less than three hours for each total chamber decontamination. Despite this increased speed, the high levels of safety needed to meet regulatory requirements are reliably retained. The quick turnaround of this process means that the equipment is out of action for substantially less time than similar direct heat decontamination systems.
  I/V Lamp Decontamination systems. (iii) How are they important for scientific work.
- econtamination systems.

  UV Lamp Decontaminates conditioned air and humidity reservoir water to prevent contamination.
- Mycoplasma stains doesn't grow inside.
- (iv) What steps have been taken to ascertain that these are not available with other manufacturers?
   Proprietary certificate from original manufacturer
   Verification in catalogs and websites of other manufacturers



### PROPRIETARY ARTICLE JUSTIFICATION

### No other make or model is acceptable for the following reasons:-

- Please provide enough description so that it is comprehensible to the lay reader.
   PHCbi MCO-170AlCUVH is designed to accommodate a range of diversified experimental requirements, it uses inCu saFe copper-enriched stainless steel alloy interior surfaces to eliminate contamination sources and to mitigate the effect of airborne contaminates introduced through normal use.
- SafeCell UV includes a programmable ultraviolet lamp, isolated from cell cultures, that
  decontaminates conditioned air and humidity reservoir water to prevent contamination
  without affecting cell cultures.
- The proprietary single beam, dual detector infrared CO2 system offers unprecedented control accuracy and stability by simultaneously measuring two wavelengths for continuous zero calibration, resulting ultra-fast recovery without overshoot and accurate
- CO2 averages during periods of frequent incubator access with multiple door openings.

  H2O2 high-speed decontamination system utilizing vaporized H2O2 offers time-saving and documented chamber decontamination with complete safety. Full decontamination
- process takes less than three hours, saving valuable time.
  Unlike a high heat decontamination incubator, Panasonic's H2O2 decontamination cycle does not emit high heat and resulting in consuming very less energy.
- (ii) What are the unique functional features of the instrument that make the item proprietary.
- H2O2 Decontamination System
- Single beam, dual detector infrared Sensor
   Safecell UV Lamp
- (iii) How are they important for scientific work.
- H2O2 system limits incubator downtime to less than three hours for each total chamber decontamination. Despite this increased speed, the high levels of safety needed to meet regulatory requirements are reliably retained. The quick turnaround of this process means that the equipment is out of action for substantially less time than similar direct heat decontamination systems.
- . UV Lamp Decontaminates conditioned air and humidity reservoir water to prevent
- . Mycoplasma stains doesn't grow inside.
- (iv) What steps have been taken to ascertain that these are not available with other manufacturers?
- Proprietary certificate from original manufacturer
   Verification in catalogs and websites of other manufacturers
- (v) Add documentation to support above responses, if possible.

   Proprietary certificate from manufacturer





2nd April, 2018

Letter of Authorization

To whom it may concern.

This is to certify that SciMed (Asia) Pts Ltd (harsinafter referred to as "SciMed"), with an office at

196 Pandan Loop #07-11 Singapore 128384

acts as an authorized distributor of PHCbi brand products, which have the same quality  $\frac{1}{2}$ acts as an authorized distributor of PHLOS brand products, which have the same quality and performances as the ones under Pansonic brand manufactured by Pansonic Healthcare, Co. Ltd., the former company came of PHC Corporation, as listed in Annex A (hereinafter referred to as the "Products"), in the territory of Singapore, Malaysia, India, Bangladeah, Brunci, Cambodia, Myanmar, Nepal, Sri Lanka and Viotnam Guerrinafter referred to as the "Territory") for a term of One (1) year from the date of this

SeiMed is bresby authorized, on our behalf, to provide purchasers in the Territory with technical and commercial services on all matters concerning the Products based on the effective agreement that SciMed and we have at the time.

In addition, SciMed is also authorized to conduct price negotiation in the Territory to enhance sales performance

Yours faithfully,

met .

Senior Manager

Asia Business Development Group, Marketing Depart

Biomedical Division

PHC Corporation



PHC Corporation 3:06-5 transminisely, Mnets-ku, Tokyo 105-613, Jepen 18: 461-3-908-7293 www.phchi.zom

Annex A

The Products

The "Products" shall mean the following products

- Ultra-Low Temperature Freezers
  Biomedical -30C+40C Freezers
  Pharmacoutical Refrigerators / Refrigerators with Freezers
  Blood Bank Befrigerators
  CO2 Incubators / Multi-guas Incubators
  Heated Incubators
  Cooled Incubators
  Cooled Incubators
  Piant Growth Chambers
  Pirathle Laboratory Autoclaves
  Vial Filters





December 17, 2018

# Letter of Authorization

The Director
All India Institute of Medical Sciences, New Delhi
Ansari Nagar, New Delhi-110029

# Subject: Authorization for PHCbi (Ex PANASONIC/SANYO) Biomedical Products

Dear Sir/Madam,

This is as per above subject, We SCIMED (ASIA) PTE LTD, A PHCbi (Ex Panasonic/Sanyo Biomedical) Sales Company for Asia hereby authorize M/s Empirical Scientific, New Ocihi having their office as below:

M/s Empirical Scientific, #203, Mohta Building, Bhikaji Cama Place, New Delhi 110066, INDIA

To submit a bid, negotiate supply and service PHCbi Brand products in your institute on our behalf. No company, firm or individual other than M/s Empirical Scientific is authorized to supply PHCbi brand Products in your institute.

Your's faithfully,

For SciMed (Asia) Pte Ltd

Dennis Shim

(Authorized Signatory)

E. A.O.E.
Singspork Office: 198 PANIDAN LOOP 907-11 PANTECH INDUSTRIAL COMPLEX SINGAPORE 123364
Co. Rep. No. 1932003040. www.scimed.com.sg
Delhi Address: B-318 SOUDATT CHAMBERS - 1 5 BRICAL CAMA PLACE. NEW DELHI 11098 INDIA
CIN. 192320734030917003429