

File Ref. No. 3081/281019/5713/EQPT

Dt. 19.12.2019

Minutes of Pre-Bid Conference (PBC) held on 19.12.2019 for proposed procurement of (Chemiluminescence & Fluorescence Imaging Systems) "- 03 Nos.

As scheduled (PBC) has been conducted on 19.12.2019 for proposed procurement of "(Chemiluminescence & Fluorescence Imaging Systems)". – 03 Nos.

Chairpersons / Members of the Technical Sub Committee (TSC) present during PBC including domain experts present during PBC -

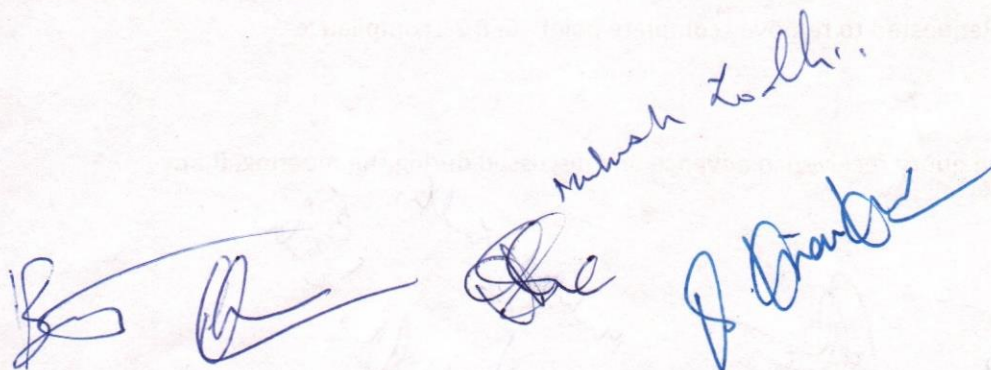
1. Dr. R. Sankarnarayan, Chairperson
2. Dr K Thangraj, Member
3. Dr Anant B Patel, Member
4. Smt. Asha Ramesh, Member
5. Dr B Raman, Member
6. IO: Dr. Mukesh Lodha
7. IO/PL: Dr. P Chandra Shekar
8. IO: Dr. B. Kiran Kumar
9. Domain Expert – Mr. U S T R B Bapi Raju

Members of TSC who could not attend

1. Domain Expert- Dr. Hitendra K Patel

Representatives of the following seven firms attended the PBC :

Sl. No.	Name of the Firm (M/s.)	Name of Representative
1. M/s.	Biorad Laboratories India Pvt.Ltd.	M. Muniappan
2. M/s.	Medispec India Ltd.	B.Murali Krishna
3. M/s..	Thermo Fisher Scientific	Rudra Sarkar
4. M/s.	Wipro GE Healthcare	A.Venu Madhav
5. M/s.	Azure Biosystems	Vikram Singh
6. M/s.	Tec Pharma Systems	Venkatesh Kulkarni
7. M/s.	Eppendorf India Pvt.Ltd.	B. Kiran Kumar

The bottom of the page features several handwritten signatures in blue ink. There are four distinct signatures, some of which are partially overlapping. The signatures appear to be those of the representatives listed in the table above, such as M. Muniappan, B. Murali Krishna, Rudra Sarkar, and others.

The following points were discussed during the PBC:

Query raised by M/s Thermo Fisher Scientific

- 1 **Point No 4. Camera cooling temperature:** Requested to change Camera cooling temperature from -15°C Absolute to -5°C Absolute (or) better regulated cooling
- 2 **Point No.10 & 11a Dark Room Hood & Built-in excitation light sources:** Requested to incorporate Green LED Transilluminator as alternative to UV transilluminator.
3. **Point No.13e:** Requested to remove the word "stain free technology" from the sentence.

Query raised by M/s Azure Biosystems

- 1 **Point No 7. Field of view:** Requested to change it to 20cm X 15cm instead of 20cm X 16cm
- 2 **Point No 11 a &b:** Requested to change size of trans UV & Trans white light as 20cm X 15cm instead of 20cm X 16cm
- 3 **Point No 11 g & h:** Requested to incorporate Lasers as alternative to EPI Far Red LED 650nm-675nm & EPI Near IR LED 755nm -777nm
- 4 **Point No 13 d:** Requested to incorporate Signal accumulation mode (SAM) / Equivalent for easy optimization of exposure time for chemiluminescence detection should be available.

Query raised by M/s Biorad Laboratories India Pvt.Ltd

Point no . 11 d,e,f,g &h: Requested to incorporate word "Epi multiplexed LED"

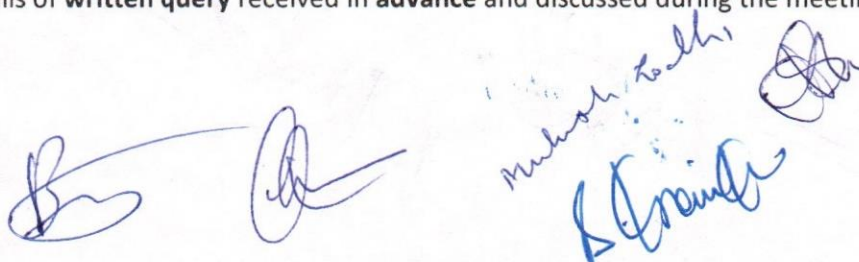
Query raised by M/s Medispec India Ltd

Point no. 12 a, b, c, d, e, f: Emission filters wavelengths: Requested to incorporate word "approximate/ equivalent" for the values mentioned.

Query raised by M/s Wipro GE Healthcare



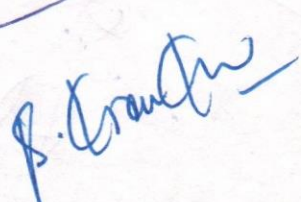
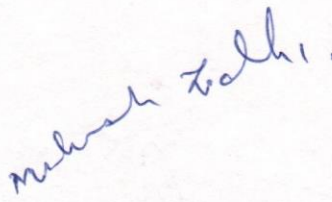
Point no . 13f: Requested to remove "complete point CFR 21 compliance"

Details of written query received in advance and discussed during the meeting, if any-

The bottom of the page features several handwritten signatures in blue ink. On the left, there are two distinct signatures. To the right, there is a larger, more complex signature that appears to be 'Mukesh Kulkarni' with a date '11/11/2018' written above it. Further to the right is another signature.

Query received from M/s Thermo Fisher Scientific**Tender Specification****Query for Consideration**

b) Should be capable of florescence Imaging of whole plant of minimum 6 inches height	The plant to be imaged kept vertically or horizontally on the tray?
10) Dark Room Hood: Light tight cabinet with UV safety switch & pull out drawer type mechanism for UV transilluminator	Instrument is with Automated Drawer and Green LED Transilluminator as an alternate for UV. Hence requesting for consideration
11) Built-in excitation light sources to cover a wide range of applications for Protein and DNA Staining Dyes:	Requesting to consider below filters as majority of the dyes required for Fluorescence applications are comprehensively covered
a) Trans UV (302nm/312nm midrange 20cm X 16cm filter size),	Trans-Green LED Excitation - 490nm - 520nm
c) Epi White LED ,	EPI White LED
d) Epi Red LED625nm-650nm,	608-632nm
e) Epi Green LED 520nm-545nm,	515-545nm
f) Epi Blue LED 460nm-490nm ,	455-485nm
g) Epi Far Red LED 650nm-675nm,	610-660nm
h) Epi Near IR LED 755nm-777nm	745-765nm
a) 590/110nm Ethidium bromide filter,	568-617 filter
b) 675nm-725nm Red fluorescence filter,	675-720nm
c) 577nm-613nm Greenfluorescence filter,	568-617nm
d) 518nm-546nm Bluefluorescence filter,	508-557nm
e) 700nm-730nm Far Red filter,	710-730nm
f) 813nm-860nmNear IR filter	800-850nm
13) Image acquisition and analysis software features:	
f) CFR 21 compliant software with image saving options in proprietary tamper proof format of the manufacturers as per GLP should be available.	iBright instrument throughout the system, the concept of electronic signature and time & date tractability is implemented. A combination of security system and a detailed audit trail is implemented to address the requirements of this regulation related to the electronic records. Data integrity, control and preservation is also of utmost importance, where raw images are maintained in a non-modifiable form, Analysis only utilizes raw image files, and reports are generated in a time and user stamped non-editable format. - Refer Attachment for additional details. Hence requesting for consideration.



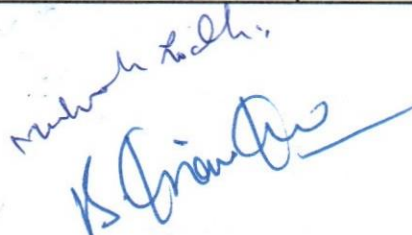
Query received from M/s Azure Biosystems

Tender Specification: S.No. & Details	Amendment sought	Justification
<p>3</p> <p>Cooled CCD Camera:16 bit monochrome peltier cooled CCD Camera with Minimum 6 megapixels of CCD resolution (or) more suitable for scientific imaging</p>	<p>Cooled CCD Camera:16 bit monochrome peltier cooled CCD Camera with Minimum 9 megapixels of CCD resolution (or) more suitable for scientific imaging.</p>	<p>New generation higher resolution cameras of 8-9 MP resolution provide the benefit of better signal pickup compared to 6 MP camera based units. Considering that you would be using these units for the next decade, buying a new generation camera ensures your cameras do not become previous generation models or obsolete or no longer supported to latest OS versions by the OEM manufacturers.</p>
<p>4.</p> <p>Camera Cooling Temperature : minus 15° C Absolute (or) better regulated cooling</p>	<p>Camera Cooling Temperature : minus 25° C Absolute or minus 50° C regulated cooling</p>	<p>Higher cooling temperatures allow longer exposure times which is vital for chemiluminescent imaging</p>







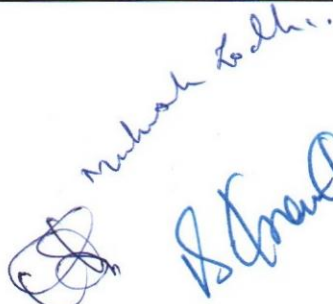


7) Field of View: a) At least 20cm x 16cm (or) More	At least 20cm x 15cm (or) More	A size of 20x15cm is more generic in nature and would allow more even competition and participation from more bidders
11 a) Trans UV (302nm/312nm midrange 20cm X 16cm filter size), b) Trans White (or) White Light Conversion Screen (20cm X 16cm filter size),	a) Trans UV (302nm/312nm midrange 20cm X 15cm filter size), b) Trans White (or) White Light Conversion Screen (20cm X 15cm filter size),	A size of 20x15cm is more generic in nature and would allow more even competition and participation from more bidders
11 g) Epi-Far Red LED 650-675nm	Epi-Far Red LED/Laser	Azure uses lasers for IR imaging since they are monochromatic sources which ensure focused and brighter illumination compared to LED's. We request you to keep both LEDs and Lasers in specification to allow more competition.
11 h) Epi Near IR LED 755nm-777nm	h) Epi Near IR LED /Laser 755nm-785nm	<p>The request is for extending IR range from 777nm to 785nm. The NIR range has been limited to 777nm. We provide illumination at 785nm, which is superior to 777nm limitation of your tender and thereby provides superior excitation and is also in sync with the peak excitation of IR dyes.</p> <p>Azure users lasers for IR imaging since they are monochromatic sources which ensure focused and brighter illumination compared to LED's. We request you to keep both LEDs and Lasers in</p>

		specification to allow more competition.
13) d) Signal accumulation mode (SAM)	SAM is a trade name of a particular company and we request you to kindly remove this.	We call this cumulative imaging wherein signal from multiple images are collected to allow imaging of faint samples.

Query received from M/s Medispec India Ltd

CCMB tender Specifications	Syngene G Box XX6 Specifications	remarks/Deviations
11: a) Trans UV (302nm/312nm midrange 20cm X 16cm filter size)	Trans UV 302/312nm 20x20cm	Do you need dual trans illuminator with both 302 and 312nm uv tubes?
11. f) Epi Blue LED 460nm-490nm	HILED BLUE- 455-487nm peak 470nm	Minor variation in range , but will not affect the applications.
11 h) Epi Near IR LED 755nm-777nm	HILED IR- 720-763nm peak 740nm	minor Deviation from the specs asked in range , but will not affect the applications.
12 b) 675nm-725nm Red fluorescence filter,	705nm Filter for Multiplexing (range 700-720nm)	Minor variation in range , but will not affect the applications.
12 c) 577nm-613nm Green fluorescence filter,	605nm Filter for Multiplexing (range 594-610nm)	Minor variation in range , but will not affect the applications.
12 d) 518nm-546nm Blue fluorescence filter,	525nm Filter (range 516-539nm)	Minor variation in range , but will not affect the applications.
12 e) 700nm-730nm Far Red filter,	FILT705M- 700-720nm Peak 705nm	Minor variation in range , but will not affect the applications.

Query received from M/s Eppendorf India Pvt. Ltd

- 4.1 **End Use:** Chemiluminescence & Fluorescence Imaging for multiplexed western blots and plants
- 4.2 **Specifications** (including the list of spares)
- I **Specifications:**
- 1) Chemiluminescence & Fluorescence Imaging system for multiplexed western blots and plants comprising of the below:

Amendment request: Please remove the word "Plants", as system is designed for imaging of gels and blots, Plant and/or animal tissue sections. But NOT whole plant.

- 7) **Field of View:**
- a) At least 20cm x 16cm (or) More
- b) Should be capable of fluorescence Imaging of whole plant of minimum 6 inches height.

Amendment request: Please remove Point 7 b. Imaging if whole plant is not possible.

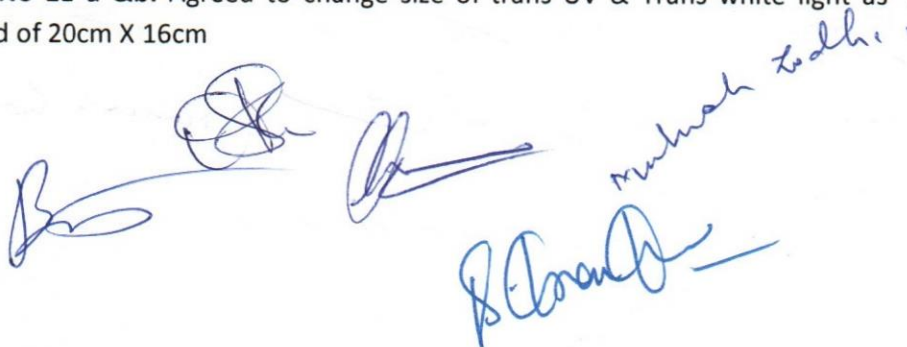
- d) **Signal accumulation mode (SAM)** for easy optimization of exposure time for chemiluminescence detection should be available.

Amendment request Point No.: 13 (d): SAM is proprietary terminology of specific brand, so we request to amend as: "Signal accumulation mode (SAM) or equivalent and better for easy optimization of exposure time for chemiluminescence Detection should be available. Video kinetics with chemiluminescence signal kinetics graph output will be an added advantage."

Points clarified by CCMB Team during PBC -

CCMB team has discussed and agreed to make following changes in tender specifications:

- *** Point No 4. Camera cooling temperature:** Agreed to change Camera cooling temperature from -15°C Absolute to -5°C Absolute (or) better regulated cooling
- *** Point No.10 & 11a Dark Room Hood & Built-in excitation light sources:** Agreed to incorporate Green LED Transilluminator as alternative to UV transilluminator.
- **Point No.13e:** Agreed to remove the word "stain free technology" from the sentence.
- **Point No 7. Field of view:** Agreed to change it to 20cm X 15cm instead of 20cm X 16cm
- **Point No 11 a & b:** Agreed to change size of trans UV & Trans white light as 20cm X 15cm instead of 20cm X 16cm



- Dr. R. Sankar*
Dr. K. Thangraj
Mukesh Lodha
- * **Point No 11 g & h:** Agreed to incorporate Lasers as alternative to EPI Far Red LED 650nm-675nm & EPI Near IR LED 755nm -777nm
 - **Point No 13 d:** Agreed to incorporate Signal accumulation mode (SAM) / Equivalent for easy optimization of exposure time for chemiluminescence detection should be available.
 - **Point no . 11 d,e,f,g & h:** ~~Agreed~~ to incorporate word "Epi multiplexed LED"
 - **Point no. 12 a, b, c, d, e, f: Emission filters wavelengths:** Agreed to incorporate word "approximate/ equivalent" for the values mentioned.
 - **Point no . 13f:** Agreed to remove "complete point CFR 21 compliance"

*** Subject to demonstration in CCMB and acceptance with our user samples and after verification of satisfactory performance.**

Against written query received in advance from M/s. Eppendorf India Pvt Ltd. the committee has confirmed that the end of use of the system should be same as per tender and the word "plants" cannot be removed.

CHAPTER 6 Qualification Requirements:

Point a) agreed to make it **one year instead of three years.**

Point b) agreed to make it **5Nos. instead of 10Nos.**

All seven participating firms informed that they do not have problem with other points of tendered specifications and requirements. Participating bidders have been informed that points raised by them during PBC will be examined by CCMB's **Technical Sub Committee (TSC)** constituted for the purpose of procurement of said equipment and **post PBC changes** in tendered specifications and requirements to be agreed after due consideration of the same by TSC, if any, will be uploaded in **CPPP** as part of **revised/amended** tendered specifications.

Reply/ changes to the Points discussed during PBC with changes agreed (if any) will be uploaded in due course at **CPPP** for information and reference of prospective bidders on or before **24.12.2019 (17.00 Hrs.)**. All bidders are requested kindly to take a **note of changes** in tendered specifications subsequent to PBC held today i.e. **19.12.2019** before they start submitting their online bids through **CPPP**.

Dr. R. Sankar
(Dr. R Sankarnarayanan)

K. Thangraj
(Dr. K Thangraj)

Anan Patel
(Dr. A B Patel)

Asha Ramesh
(Smt. Asha Ramesh)

Dr. Chandra Shekhar
(Dr Chandra Shekhar)

Dr Raman
(Dr Raman)

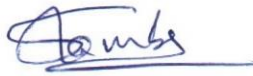
Dr. P Chandra Shekar
Indentor/PL
(Dr. P Chandra Shekar)

Dr. B. Kiran Kumar
Indentor
(Dr. B. Kiran Kumar)

Mukesh Lodha
Indentor
(Mukesh Lodha)



Domain Expert
(Mr. U S T R B Bapi Raju)



Co-opted Member
(Sudatt T. Tambe)

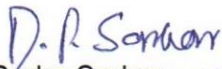
Participating Bidders Representatives (Firm Name and Signature of representative participating in the PBC)-



M. Muralappan
(M/s. Biorad Laboratories India Pvt.Ltd).



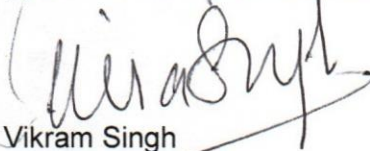
B.Murali Krishna
(M/s. Medispec India Ltd.)



Rudra Sarkar
(M/s. Thermo Fisher Scientific)



A.Venu Madhav
(M/s. Wipro GE Healthcare)



Vikram Singh
(M/s. Azure Biosystems)



Venkatesh Kulkarni
(M/s. Tec Pharma Systems)



B. Kiran Kumar
(M/s. Eppendorf India Pvt.Ltd).

