

(राष्ट्रीय पशु जैव प्रोद्योगिकी संस्थान)

National Institute of Animal Biotechnology

Corrigendum -- Change of Date, Tender Value & Specifications

Please refer NIAB Tender Details as follows.

Tender ID : 2019_DBTEC_440304_1

Tender Reference Number : NIAB/SP/2018-19/98

Tender Title : In-Vivo animal Imaging System

The following changes may please be noted before submission of bids with respect to the tender details mentioned above.

In place of old dates mentioned in Tender , please consider following dates.

Document Download End Date :- in place of Existing old date --- Read As :- 05/03/2019

Bid Submission End date : in place of Existing old date --- Read As :- 05/03/2019

Bid Opening Date in place of Existing old date --- Read As :- 06/03/2019

Revised /New changes in Tender Value

Tender Value is increased from Rs. 1,90,00,000/- to Rs. 2,50,00,000/-

Revised /New changes in specifications

Specification in place of Existing old specifications --- **Read As** : - Annexure -1 (as attached below)

The specification mentioned below should be treated as revised specification with and bid must be submitted accordingly with revised quantity .

Rest of the tender conditions remains same.

Manager (S&P)
NIAB-Hyderabad
Date:- 25/02/2019

specifications for *in vivo* imaging system

1. The *in-vivo* optical imaging system for small animals should be suitable for imaging such as Bioluminescence, Bioluminescence tomography, Fluorescence, Fluorescence tomography, Cerenkov radio-isotopic imaging, Chemiluminescence and Multispectral Fluorescence Imaging studies for *in-vivo* (mice and rats), *ex-vivo* (organs) and *in-vitro* use.
2. It must be a complete system inclusive of a light-tight cabinet, a CCD camera, with excitation and emission filters, a sample stage and an accompanying computer workstation.
3. The system should provide true 3D surface tomography for both fluorescent (fluorescent tomography) and bioluminescent (Bioluminescent Tomography) reporters that can be analyzed in anatomical context against a Digital Mouse Atlas or registered with other tomographic technologies such as MR, CT or PET.
4. The system should be able to create 3D images using optical light for accurate reconstruction of light sources in deep tissues. The system should quantify the depth, geometry and brightness of a fluorescent or bioluminescent source in 3- dimensional space using 3D tomography.
5. The system should be able to simultaneously image at least 5 mice or 2 rats. The system should be sensitive enough to image single/ a few cells *in vivo* & *in vitro*. The system should be capable of doing both Epi-Illumination and Trans-illumination for localization and quantification of deep tissue sources.
6. The system should have min of 10 excitation & 18 emissions filters, which should accommodate most of the fluorescent dyes in the green to far red spectrum.
7. The system should have a min Optical Field of View (FOV) ranging from 4 x 4 cm to 22 x 22 cm. Camera should be grade 1, back thinned, back illuminated CCD camera; thermoelectrically cooled to -90 C°(absolute) for better sensitivity. The camera should have a min resolution of 2048 x 2048, with a pixel size of 13.5 microns. Stage movement should be software controlled for different levels of magnifications.
8. The system should come with a heated stage with 20-40°C temperature. The cabinet should be able to accommodate gas anaesthesia manifold and its tubings to anesthetize at-least 3 mice simultaneously.
9. Computer (Minimum specifications): Windows® 7, 4 GB RAM, nVidia Quadro 600, 250 GB and 1 TB HD, 24" widescreen LED Monitor. Licensed software package from the system manufacturer for equipment control, image acquisition and analysis should be supplied. Software should also be able to do absolute calibration, background subtraction and the image math algorithms for producing high-quality, reproducible, quantitative results. Software for spectral library generation, software tools to ensure accurate autofluorescence removal, un-mixing and fluorophore quantitation. Software to build a customized library giving user a flexibility of using at-least 5 optical reporters simultaneously inside the same animal.
10. Suitable laser colour printer and 10 kva UPS should be provided along with instrument.
11. Data generated should be in absolute calibrated data according to the National Institute of Standards and Technology (NIST).
12. The company should provide complete reagent & cell line support for *in vivo* experiments; pre optimized on the instrument.
13. The company must have minimum of 5 such installations in India with similar or higher specifications. Supplier must provide performance and maintenance certificates for similar systems from reputed institutes/ government organisation in India. (The support document must be on letter head of the appropriate in-charge faculty of the institute along with PO copy).
14. Supplier should have a good track record of maintaining the *in-vivo* imaging systems in the past (document proof), have qualified application scientists in India (preferably south India, specify experience with documentation) and manufacturer trained service technicians to provide prompt after sales service support.
15. Total 3 yrs comprehensive Warranty and 2 years AMC after warranty period should be provided along with instrument in total cost of item.
16. Application specific training for minimum 1 month at NIAB should be given. online /on site Local support for training should be available as per the requirement of NIAB scientist.