

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

2A & 2B , Raja S.C. Mullick Road, Jadavpur, Kolkata-700032

NIT No. : IACS/SAIS/SS/2018-19/75

Date: 06/12/2018

Sealed tender in two bids system (technical bid and price bid) is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/vendors for **“Plate Reader with Imaging system”**

Part-I (Technical Bid) of the tender should contain technical specifications in detail as well as commercial terms and conditions. Part-II (Price Bid) should clearly indicate group-wise price, if needed, as mentioned in the technical bid. The Technical Bid and Price Bid are to be submitted in separately sealed envelopes, distinctly marked accordingly and both to be put inside another envelop, that should be sealed and superscribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads.

Completed tender bids should reach the office of the **Registrar, Indian Association for the Cultivation of Science (IACS), 2A & 2B Raja S. C. Mullick Road, Jadavpur, Kolkata-700032** on or before the scheduled date and time specified below:

Tender Notice No.	NIT No. IACS/SAIS/SS/2018-19/75 Date: 06-12-18
Last date and time of submitting tender	3rd January, 2019 at 11.30 am
Pre-bid meeting(date, time & place) to discuss technical specification	20th December, 2018 at 3 pm, Prof. S. Sinha's office
Date and time of opening tender (Technical Bids)	3rd January, 2019 at 3 pm
Place of opening tender	Prof. S. Sinha's office
Date and time of opening of Price Bid	The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.
Contact	Email: Tel.+91 33 2473 4971 [Ext 1400]

The technical bids will be opened first to judge/evaluate the technical specifications of the said instrument and thereafter the price bids of only technically qualified bidders will be opened.

Technical Bid Evaluation: The Technical Bids will be evaluated in the presence of the representatives of intending bidders who will be able to clarify technical aspects of their bids, if any, required by the Technical Evaluation Team.

Opening of price-bid: The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.

Please note that IACS will not provide any accommodation or reimburse any expenses to any of the bidders for attending opening of technical bid.

Quotations received incomplete or beyond the stipulated time will be summarily rejected.

Bidders should submit their past experience for supplying and successful installation of similar units to other research Institutes/Universities/other organizations in India and abroad. Please provide documentary proofs of such successful installation and supportive documents that the instruments are running successfully.

1. TECHNICAL BID

The technical bid should contain technical specifications and should be kept in a separate sealed envelope duly superscribed as 'TECHNICAL BID' on the outer cover of the envelope as already detailed above. **It should be clearly mentioned on the envelope as "Technical Specification for "Plate Reader with Imaging system".**

Technical Specification for "Plate Reader with Imaging system":

Application:

The primary application would be measures spectral-based Absorbance, Fluorescence, and Luminescence with the added functionality of modular upgrades for Western Blot, Imaging.

It is for this purpose, the following set of specifications is required.

System:

Microplate Reader with Imaging System :

1. System with true 16 bit CCD (not A/D) camera; pixel density of 65,536 gray levels.
2. Individual pixel size should be at least 4.54 x 4.54 μm or bigger.
3. Camera resolution should be more than 6 megapixels.
4. The system should have dynamic flat fielding technology.
5. The instrument should provide excellent quantitative data from a single blot having very intense and weak signals in a single image; to facilitate the same instrument's dynamic range should be at least 4 orders of magnitude for all applications (please support with relevant technical data)
6. Instrument should provide highest level for sensitivity and hence must have minimal dark current with maximum limit of 0.002 e/p/s and low read noise of not more than 6e-.
7. The system should be supplied with a 10% strain free solution.
8. The camera should have peltier based cooling.
9. Quantum efficiency at 425 nm should be 70% or more, this will ensure that the instrument is highly sensitive to very faint signals from chemiluminescent blots.
10. Motorized zoom fast lens with f/0.95 or better should be provided.
11. Light sources/excitation should include – Trans-UV (302 nm), Epi White, trans-white (requires White sample tray).
12. Instrument should have provision for protective UV shield for use during band excision with safety interlocks to avoid un-intentional UV exposure to the user.
13. Minimum imaging area for white light and chemiluminescence application should be 20.5 cm x 16.5 cm.
14. Sample drawers with fixed stage.
15. Should provide image acquisition with automatic zoom, focus, and iris adjustment without the need for users to focus or adjust aperture settings.
16. The instrument should have onboard attached touchscreen of 12" or bigger with multi-touch capability (2 points) enabling users to easily interact with the touchscreen to acquire, assess and export images. Touchscreen actions should include – tap, double tap, pan, scroll to zoom.
17. Instrument should have multiple input/output ports with minimum 3 USB ports allowing users to connect USB devices (like keyboard, mouse, data storage, and printer). One USB port should be provided on the front panel for easy export to USB. Also, system should have one Ethernet port so that users can transfer image files via Ethernet to networked computers.
18. Factory calibrated flat fielding for ensuring uniform data for all applications. System should be calibrated for image area, focus, and flat field correction at the factory and files stored in the integrated PC.
19. Users should be able to lock the system to prevent others from interrupting/changing the settings
20. The system should have the below illumination sources :
 - Trans-UV, 302 nm (standard)
 - Epi-white (standard)
 - Trans-white (standard)

Trans-blue, 450-490 nm ((standard)

Epi-blue, 460-490 nm excitation (standard)

Epi-green, 520-545 nm excitation (standard)

Epi-red, 625-650 nm excitation (standard)

Epi-far red, 650-675 nm excitation (standard)

Epi-near IR, 755-777 nm excitation (standard)

21. System should be supplied with a stain-free acrylamide solution kit to enable stain-free imaging of gels and blots.

22. The system should have a fixed sample stage.

23. The system should provide flexibility in selecting the pixel binning options, should be possible to select minimally 2x2, 4x4 and 8x8 binning.

24. At least five prior installation report of the exact same model of the instrument in different universities/ institutes/ companies in India is required (should be provided with proper documentation from corresponding authority).

25. Should be supplied with a suitable Laptop/ Desktop Computer

26. System should be supplied with a transfer system of below specs :

Fast blotting system with four gel simultaneously, 2 different cassettes same protocol at different time in 3 mins.

System should be open for traditional blotting consumables

System should have inbuilt fix electrodes

Input power: 100–240 VAC, 276 VA, 50–60 Hz, 175 W max

USB port: Yes, input only, for firmware updates

System should have Cooling fan

Should have inbuilt Power supply with high current of 2.5 A

User Interface

18 button keypad, 128 x 64 pixel monochrome display

Programmable methods: Up to 25 user-defined

Preprogrammed methods: Standard SD, 1.5 mm gels, High MW, Low MW, MixedMW,

Audible alarm: Yes

User notifications should have following features:

- Power fail during run
- No-load detection
- No cassette detection
- End of run, RTA transfer kit of nitrocellulose for 40 blots should be included

Warranty: Minimum 1 year while 3 years extendable warranty is preferred.

Servicing facility within India is a must while service engineer stationed at Kolkata will be preferred.

A list of other places where the instrument has been installed should also be provided.

A compliance table (see below) must be prepared and submitted along with the technical bid.

Sr. No	Tender specification	Your offered instrument specification	Extent of compliance

Tender will not be accepted if the technical compliance chart is NOT provided following the above format.

2. PRICE BID

The financial bid indicating (item-wise) price for the item(s) mentioned in the technical bid should be kept in a separate sealed envelope duly super scribed as 'PRICE BID' on the outer cover of the envelop as already detailed above. Price bids of only technically qualified bidders will be opened and they will be

intimated the date and time of the opening of price bid at their e-mail ids. Rest of the bidders will stand rejected.

PRICE: Price to be quoted up to the delivery at IACS in any foreign currency or Indian currency.

3. BID SECURITY:

An Account payee Demand Draft of any of the Commercial Banks for Rs. 45,000/- (Rupees forty five thousand only) drawn in favour of “Indian Association for the Cultivation of Science (State Bank of India, Jadavpur University Branch, A/C No. 11079699211, IFSC: SBIN000093, MICR Code: 700002048)” is to be furnished by the bidders alongwith Technical Bid, except Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase Organisation or the concerned Ministry or Department.

Alternatively, the bidder shall have the option to furnish EMD in the form of Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any of the Commercial Banks. The Bid-Security should have at least 90 (ninety) days validity period beyond the final bid validity period.

In case of non-award of the work the Bid Security money would be returned to the unsuccessful Bidders.

4. PERFORMANCE SECURITY:

An Account Payee Demand Draft on any commercial bank of India or Bank Guarantee (BG) of any Commercial Bank preferably located at Kolkata of 10% of the order value in the name of “Indian Association for the Cultivation of Science” is to be furnished by the successful bidder as Performance security. Performance security money should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. Bid security money or EMD will be refunded to successful bidder on receipt of the Performance security money.

5. TERMS OF PAYMENT :

Payment will be made through irrevocable Letter of Credit in two instalments. 90% of the money will be released on submission of shipping of documents. Remaining 10% will be released after successful installation of the instrument.

6. GENERAL INSTRUCTIONS :

1. Validity of tender: Tender submitted should remain valid for at least six months from the date of opening the tender. Validity beyond six months from the date of opening of the tender shall be lapsed by mutual consent.
2. The tender should accompany a compliance chart.
3. Incomplete and conditional tenders as well as tenders received after the due date will be summarily rejected without assigning any reasons thereof.
4. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder during pre-bid meeting, modify the bidding documents. The amendment(s) will be notified on the institute website. Prospective bidders are advised to occasionally to visit the website (www.iacs.res.in/tender) for any amendment.
5. Installation/Demonstration/Application training at site: Installation & user training at IACS, free of cost by the supplier.
6. Service facility: In India, preferably Kolkata, supplier should mention their details of service setup and man powers who are responsible for after sales support. Response time should be within 24 hrs.
7. The model number, make and a printed literature of the product should be submitted positively.
8. Proposed delivery schedule should be mentioned clearly.

9. Manufacturers / exclusive distributors / vendors should have history of supplying this type of instruments to this or other scientific organizations. Availability of a list in this regard would be preferred.
10. Authorized dealership certificate should be provided in case of principal manufacturing company is not quoting directly.
11. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
12. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of the technical bids will be the following working day at the appointed time.
13. In case of any dispute, the decision of IACS authority shall be final and binding on the bidders.
14. In case of any litigation the matter will be dealt within the jurisdiction of the High Court of Calcutta only
15. For any clarification regarding technical specifications, information etc., please send your queries to Prof. Surajit Sinha (ocss5@iacs.res.in).
16. The authority of IACS reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Acting Registrar