

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

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

NIT No. : IACS/CSS/NP/2018-19/51,

Date: 20/09/2018

Sealed tender in two bids system (technical bid and price bid) is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/vendors for a **Time Correlated Single Photon Counting (TCSPC) Spectrometer**.

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/CSS/NP/ 2018-19/51, Date:20-09-2018
Last date and time of submitting tender	23 Oct 2018, upto 12 noon
Date and time of opening tender	23 Oct 2018 at 3.00 PM
Place of opening tender	Room no 123A, IACS
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: camnp@iacs.res.in Tel.+91 33 2473 4971 [Ext 1733]

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 super scribed as 'TECHNICAL BID' on the outer cover of the envelop as already detailed above. It should be clearly mentioned on the envelope as "Technical Specification for **Time Correlated Single Photon Counting (TCSPC) Spectrometer**".

Technical Specification for the TCSPC :

1. The time-resolved fluorescence spectrometer should be with picosecond (~ 70 ps or better) resolution. It should also be capable of measuring longer lifetime (in micro seconds and milliseconds).
2. The system should function on the basis of time correlated single-photon counting (TCSPC) principle.
3. Computer controlled motorized monochromator (Czerny-Turner type or better or similar) in the emission side is required. Spectral range 200 nm to 900 nm.
4. (a) Source: LED 280 nm and 365 nm. Pulsed width must be < 1000 ps. Rep rate 20 MHz or better.
(b) Diode lasers ~ 375 nm, ~ 405 nm, ~ 450 nm and ~ 525 nm. Pulsed width must be < 100 ps. Rep rate 20 MHz.
Automated switching lasers or light source by software would be preferred.
(c) Pulse Laser/light source for Longer Lifetime: Appropriate source capable of exciting ~ 375 nm, ~ 405 nm and ~ 450 nm should be quoted.
(Each Laser/light source should be quoted separately).
5. Detectors:
Photomultiplier tube (PMT in cooled housing)
(a) Specification for Detector MCP PMT Detector
Wavelength range 200-850 nm

Response Time: < 25 ps
Maximum Count Rate: 5M cps
Dark Counts: 200 cps

(b) Second detector: high speed PMT

Wavelength range 230-850 nm

Dark count ~150 cps at 0°C

Time response 180 cps or better.

Other requirements:

Timing resolution down to < 50 ps (FWHM,) would be preferred.

Detection efficiency up to 45 % at the 400-500 nm Region

Active area is equal or greater to 6 mm

No after pulse effect

Or

(c) A single modulated hybrid detector system which could be capable of measuring both together. (Specifications as mentioned above)

6. Automated, computer controlled Polarization Accessories in excitation and emission side (Glan Thomson polarizing prism; spectral range 220 nm- 900 nm may be considered)
7. Data Acquisition Electronics (Required number of constant fraction discriminator; variable tuning delay or better; variable timing delay or better, electronics jitter <25ps)
8. Standard front face sample holder for measuring solid sample.
9. Temperature controlled accessories (LN2 Temp) with facility of variable temperatures from LN2 to 90 °C.
10. Window controlled computer as required and should have the data analysis software with two users.
11. Warranty 3 years

Other Services and Installation

Pre-installation requirements should be mentioned and intimated in advance.

Installation : This would be carried out by the company engineers with no extra cost.

Power supplies must conform to the mains supply: 230 ±10 volts, 50 Hz.

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.

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

Tender will be accepted if the technical compliance 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 on CIF Kolkata and also FOB basis.

3. BID SECURITY:

An Account payee Demand Draft of any of the Commercial Banks for Rs. 1,00,000 (Rupees one lakh 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 installments. 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 bidding 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 Narayan Pradhan (camnp@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