NATIONAL INSTITUTE OF TECHNOLOGY, DURGAPUR

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BID REFERENCE: NITD/CHEMISTRY/SSP/TCSPC/2016-17/01 date: 010.04.2017

To
_____
_____

SUB: Invitation for quotations for supply and installation of Fluorescence Lifetime Measuring System (TCSPC) under DST-SERB Grant

Dear Sir,

1. You are invited to submit your most competitive quotation for the item as per technical specification given in **Annexure–II**. Superscribe the cover envelope as "**DST-CHM-SSP-TCSPC**". Price bid form as per Annexure-I must be filled with complete numerical values. Please note that each item will include sub-items.

2. **Bid Price (Annexure-I)**
a) The contract shall be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialing, dating and re-writing.
b) Price bid would be evaluated as per CIP/CIF Kolkata value.
c) Relevant charges for Customs clearance, clearing/forwarding, transportation at Dept. Of Chemistry, NIT Durgapur and installation charge will have to be born by the supplier at their own cost.
c) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
d) The bid price may be quoted in **Indian Rupees or in foreign currency.**
3. Each bidder shall submit only one quotation for each item. Manufacturer/authorized dealers of reputed brands of high technical quality with adequate after-sales support facilities are eligible to apply. The bidder must have supplied similar good to reputed organizations (like IIT , NIT, IISER, CSIR labs or Institute of National importance) to their full satisfaction and furnish a list of the same.

4. **The bid submitted by the bidder must comprise of the following:**

Part – I (Techno-commercial Bid)
(a) Detailed technical specifications, conforming to the given specifications (vide Annexure – I), and literature /drawings /manuals of the goods/services to be supplied.
(b) Authorized dealership certificate from the original manufacturer
(c) Credentials and list of organizations where the bidder supplied similar items
(d) At least two satisfaction certificates (in original letterhead) of users of same instrument working in IIT/ NIT/IISER/CSIR Labs/ Central Universities/ Universities of West Bengal/ IACS/ Bose Institute/IIEST
(e) Warranty period (36 months comprehensive on-site).
(f) Valid sales-tax / VAT clearance certificate

Part – I (Price Bid)
a) Price bid as per Annexure-II

5. **Validity of Quotation**

Quotation shall remain valid for a period not less than **60 days** after the last date of submission.

6. **Evaluation of Quotations**
The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e.
(a) which are properly signed and

(b) Conform to the terms and conditions, and specifications.
(c) The quotations will be evaluated considering the cost of all mandatory / essential items including tax thereon. Price of each optional accessory needs to be quoted for separately and the additional price for extra 24 month warranty must also be indicated.

7. **Award of contract**

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive, technologically acceptable and who has offered the lowest evaluated quotation price.
7.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

7.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiry of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

8. Delivery shall be made at **Department of Chemistry, NIT Durgapur, Durgapur.**

9. Payment would be made through **Letter of Credit** or wire transfer only.

10. Payment shall be made immediately within 30 days after satisfactory installation, commissioning and successful demonstration of the good.

11. Comprehensive onsite warranty of **36 months** from the date of installation.

12. The Institute is **exempted from payment of custom and excise duty** on items mentioned below:
a) Scientific and technical instruments, apparatus, equipment (including computers)
b) Accessories, spare parts and consumables thereof
c) Computer software, CD-ROM, recorded magnetic tapes, microfilms, and microchips.

13. The successful bidder must submit a valid bank guarantee on any nationalized bank of **10%** of the order value towards **Performance Security** during the warranty period before the release of payment.

14. **Liquidated Damage** will be applicable at the rate of **0.5%** per week. The purchaser has the right to cancel the purchase order when LD accumulates to 10 %.

15. A bank draft of **Rs 200** towards the bid document price payable to "**DST SSP 2017**" at Durgapur will be enclosed with the bid by the bidder.

16. A bank draft or bank guarantee worth of **4% of quoted price** payable to "**DST SSP 2017**" as EMD which shall remain valid for a period of 45 days beyond the final bid validity date.

17. Quotations are to be submitted **in two separate sealed covers** marked PART-**I** (Techno-commercial bid) and **PART-II** (Price bid) containing relevant documents, superscripting "**Bid No.** NITD/CHEMISTRY/SSP/TCSPC/2016-17/01". These two sealed covers are to be placed in a separately sealed larger cover. It should be superscribed **DST-CHM-SSP-TCSPC and Not to be opened before 15.30 hours on 04.05.2017** on these envelopes.

18. Settlement of any dispute will be made under the jurisdiction of Durgapur Court.

19. You are requested to submit your offer latest by 15.00 hours on **04.05.2017**.

20. The purchaser will open the bids at 15.30 hours on **04.05.2017** in the HOD office of Chemistry Department, NIT Durgapur.

21. The bid document must be signed and sealed and enclosed with the bid as a token of acceptance of all terms and conditions in the bid document by the bidder.

22. The items must be delivered at the respective department within **60 days** from the date of placement of purchase order.

23. A pre-bid conference may be held in **Dept. of Chemistry, NIT Durgapur** on **02.05.2017** at **3.30 PM**.

24. All other terms and conditions of GFR 2005 of the Government of India will be applicable.

25. **Place of Delivery:** Dept. of Chemistry, NIT Durgapur.

26. **Installation / commissioning / demonstration requirement: Installation, commissioning, complete demonstration and successful running of the instrument must be demonstrated at Dept. of Chemistry, NIT, Durgapur.**

27. **The technical bid and the price bid must be enclosed in separate envelopes properly sealed by the bidder, and submitted inside a cover sealed envelope, failure to do which may lead to cancellation of the bid by the tender committee.**

We look forward to receiving your quotations.

Dr. S. S. Panja

The bid must be addressed to:

Dr. Sujit Sankar Panja
Dept. of Chemistry
NIT, Durgapur -713209, W.B.
India
Telephones: + 91-9434788163
Email: sujit.panja@gmail.com

Annexure – I

PRICE BID

1	2	3	4		5	6	7	8
Sl. No	Name of the good	Quantity & Unit	Price for each unit		Unit Price	Sales tax/ VAT & other taxes payable [admissible only on col. 4(a)]	Total Unit Price	Total Unit Price (in words)
			Ex-factory/ ex-warehouse/ ex-showroom/ off the shelf (a)	Incidental Services (b)	(a)+(b)		(5)+(6)	

Annexure – II

BID REFERENCE:- NITD/CHEMISTRY/SSP/TCSPC/2016-17/01

Time Correlated Single Photon Counting (TCSPC)fluorescence Spectrometer System

■ Fluorescence spectrophotometer for time resolved fluorescence measurement with Time Correlated Single Photon Counting (TCSPC) detection technique.

■ The system should come with Sample Compartment, Emission Monochromator, Detector, Data Acquisition System, and Software for data analysis and Excitation Sources.

■ The system should be compatable to measure the excited state life time in the range of < 70 ps to 10 μs or more (with suitable source and detector) for liquid as well as solid sample.

➢*Sample Chamber:*

- ► Should be large sample compartment (cryostat compatible)
- ► Sample Holder: 1 cm path length (2 nos.) and 2 mm path length (2 nos.) quartz for liquid sample.
- ► Safety shutters interlocked to lid of sample chamber.
- ► Position adjustable Front face sample holder for solid samples

➢ *Temperature controller (Peltier)*

► peltier controlled cell holder with a temperature range of -20 to +100 degree C.

➢ *Polarizers:*

► Anisotropy Measurements: Motorized computer controlled Polarizers in the excitation and emission side: spectral range 200nm to 900 nm.

➢ *Detectors:*

► High speed PMT; spectral range 230-850nm, dark count ~150 cps at 0_oC

➢ *Monochromator:*

- ► Motorized monochromator (Czerny-Turner type or better or similar) in the emission side.
- ► Computer controlled stepper motor-driven diffraction grating position is necessary for automated time-resolved emission spectral (TRES) measurements and choosing the emission wavelength as required for decay measurements.
- ► The grating must be blazed at some suitable wavelength to achieve best sensitivity in the above mentioned spectral range (200-900 nm).
- ► Motorized adjustable slits (1 nm to 30 nm or better) should be available in the emission side.

➢ *Light Sources:*

►**Pulsed laser diode:**
1. 375nm±10 nm with pulse width <100ps
2. 510 nm±10 nm with pulse width <100ps

►**Pulsed LEDs:**
1. 290nm±10 nm with pulse width <1ns
2. 340nm±10 nm with pulse width <1ns
3. 455nm±10 nm with pulse width <1ns

► **Repetition Rate ranges**: ~10KHz-1MHz

➢*Data Acquisition Electronics:*

► Appropriate hardware incorporating all the electronics for Time Correlated Single Photon Counting measurements, including

➢*Data Acquisition and analysis software:*

► *It should support the following measurements and analyses*
► Fluorescence Decay Acquisition, Time Resolved Fluorescence Spectra, Quasi-Steady State Spectra (with spectral correction).
► Multi-exponential fitting of fluorescence decay with standard algorithm(s). Multi-exponential fluorescence anisotropy fits.
► The system should be upgradable to Micro & millisecond LED sources with suitable driver for Phosphorescence Lifetime measurements.
► TCSPC electronics including data acquisition software for windows Computer with window OS: 64 bit, 2.2 GHz dual core, 4GB RAM, 500 GB Hard drive, one CD-RW/DVD combo driver and a high resolution 24" colour flat panel monitor, Laser Printer

► **Warranty:** Comprehensive onsite warranty of **36 months**.

Further requirement: PMT detector should be upgradable to MCP-PMT in future.

Optional Items:

Laser Diode :
1. 470 nm±10 nm with pulse width <100ps
2. 405nm±10 nm with pulse width <100ps

LED:
1. 570 nm±10 nm with pulse width <1ns

Filters: 330 nm, 395nm, 455nm, 495nm , 550m, 590nm and 645nm .