

TENDER
FOR
SUPPLY & INSTALLATION OF
INSTRUMENTS FOR CHARACTERIZATION LAB
SCHOOL OF BASIC SCIENCES, IIT MANDI



Tender No.: IITMANDI/SBS/TEN/2011-12/CHRLAB/7

Tender date: December 9th, 2011

Last Date of submission: January 6th, 2012

Indian Institute of Technology, Mandi

Transit Campus: Mandav Hotel, 2nd Floor (Near Bus Stand), Mandi – 175001 (H.P)

Tel.: 01905-237933/237917 **email:** sbs_office@iitmandi.ac.in

Indian Institute of Technology Mandi, Mandi invites tender for supply, erection, installation and commissioning, testing, demonstration and training of a number of instruments, as per specifications given in the Schedule attached to the Tender form annexed hereto. All offers should be made in English and should be written in both figures and words. Tender forms can be downloaded from the website (<http://iitmandi.ac.in/administration/tenderseoi.html>) of the Institute.

The bidders are requested to read the tender document carefully and ensure compliance with all specifications/instructions herein. Non-compliance with specifications/instructions in this document may disqualify the bidders from the tender exercise.

The Director, IIT Mandi, reserves the right to select the item (in single or multiple units) or to reject any quotation wholly or partly without assigning any reason.

Incomplete tenders, amendments and additions to tender after opening or late tenders are liable to be ignored and rejected.

Terms and Conditions:

1. The technical and financial bids should be quoted separately and put in different sealed envelopes marked "**Technical bid**" or "**Financial bid**" as applicable. These separate bids envelopes are to be put in an outer envelope which should also be sealed.
2. The technical and financial bids should be submitted in original. The financial bid should include the cost of main equipment/item and its accessories. If there is any separate cost for installation etc. that should be quoted separately.
3. Each individual sealed envelope as well as the outer envelope should be marked with the following reference on the top left hand corner:
"IITMANDI/SBS/TEN/2011-12/CHRLAB/7/item no. /name of the item"
4. The printed literature and catalogue/brochure giving full technical details should be included with the technical bid to verify the specifications quoted in the tender. The bidders should submit copies of suitable documents in support of their reputation, credentials and past performance.
5. The rates should be quoted in figures (typed or printed) and cutting should be avoided. The final amount should be in figures as well as in words. If there are cuttings, they should be duly initialled, failing which the bids are liable to be rejected.
6. The technical and financial bids should be addressed to "The Director, Indian Institute of Technology Mandi, Mandi-175001 (H.P)"
7. Any bids received after **4.00 p.m. on 6th January, 2012** shall not be considered.
8. While sending rates, the firm shall give an undertaking to the effect that "*the terms/conditions mentioned in the enquiry letter/Tender Notice against which the rates are being given are acceptable to the firm.*" In case the firms do not give this undertaking, their rates will not be considered.
9. If the supplier/firm is original equipment manufacturer (OEM)/authorized dealer/sole distributor of any item, the certificate to this effect should be attached.

11. The quantity shown against the item is approximate and may vary as per demand of the Institute at the time of placing order.

12. All tender documents should have to be sent through courier, speed post or registered post only. All tender documents received after this specified date and time shall not be considered. The postal address is:

**“The Head, School of Basic Sciences”
Indian Institute of Technology Mandi (IIT Mandi),
Academic Block (Vallabh Degree College Campus),
Mandi – 175001 (H.P)”**

13. In the event of any dispute or difference(s) between the vendee Institute (IIT Mandi) and the vendor(s) arising out of non-supply of material or supplies not found according to specifications or any other cause whatsoever relating to the supply or purchase order before or after the supply has been executed, shall be referred to “The Director, IIT Mandi”, Mandi who may decide the matter himself or may appoint arbitrator(s) under the arbitration and conciliation Act 1996. The decision of the arbitrator shall be final and binding on both the parties.

14. The place of arbitration and the language to be used in arbitral proceedings shall be decided by the arbitrator.

15. All disputes shall be subject to Mandi Jurisdiction only.

16. All tenders in which any of the prescribed conditions is not fulfilled or any condition is put forth by the tenderer shall be summarily rejected.

The Technical bid will be opened on **January 9, 2012 at 11.00 A.M** in the Conference Room of the Academic Block. The bidders or their authorized representative may also be present during the opening of the Technical Bid, if they desire so, at their own expenses.

Price bids of only those bidders will be opened whose technical bids are found suitable by the committee appointed for the purpose. Date and time of opening of price bids will be decided after technical bids have been evaluated by the committee. Information in this regard will be posted on Institute’s web site / Notice board. In exceptional situation, an authorized committee may negotiate price with the qualified bidder quoting the lowest price before awarding the contract.

1. Clarifications:

In case the bidder requires any clarification regarding the tender documents, they are requested to contact our office (e-mail: sbs_office@iitmandi.ac.in) on or before 30/12/2011.

2. Tender Cost:

A Demand draft of Rs. 1,000/- (Rupees One Thousand only) towards non-refundable tender fee, for each instrument being quoted, drawn in favour of “The Registrar, IIT Mandi” payable at Mandi should accompany the Technical bid documents. If the same firm is submitting bids for more than one instrument, they should submit the same in separate envelopes along with respective tender cost for each.

3. Earnest Money Deposit (EMD):

If the cost of the equipment/item is more than Rs. 5 lakhs, a refundable amount @ 2% of the quoted price as earnest money deposit (EMD) in the shape of DD drawn in favour of "The Registrar, IITMandi" payable at Mandi should accompany the bid documents. The EMD should be kept in a separate sealed envelope, should be marked clearly and put in the outer envelope that contains the technical and financial bid envelopes.

4. Pre – Qualification Criteria:

a. Bidders should be the manufacturer / authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) on the same and specific to the tender should be enclosed.

b. An undertaking from the OEM is required stating that they would facilitate the bidder on a regular basis with technology/product updates and extend support for the warranty as well.

c. Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between bidder specification and supporting documents etc. may lead to rejection of the bid.

5. Prices:

a) The Prices quoted should be inclusive of all taxes or duties, packing, forwarding, freight, insurance, delivery and commissioning etc. at destination site (IIT Mandi, Mandi). IIT Mandi is registered with DSIR, Govt. of India and is exempted from Custom / Excise Duty. Exemption Certificate to this effect will be issued by IIT Mandi. **Hence, Customs/Excise Duty exempted price should be quoted.** The rates shall be firm and final. Nothing extra shall be paid on any account.

b) In case of imported equipment(s)/item(s), the agency commission, if any, payable in Indian rupees should be mentioned separately. For imported equipment, the Letter of Credit will be opened for the amount excluding agency commission in Indian Rupees. The firm should clearly mention the address of foreign bank in the financial bid. The breakup of price such as ex-works, FOB, FOR should clearly be mentioned.

6. Validity:

The bid should be valid for acceptance up to a period of 180 Days. The Bidders should be ready to extend the validity, if required without any additional financial implications.

7. Delivery:

The Equipment should be delivered and installed within the period as specified in the purchase order and be ready for use within 16 weeks of the issue of purchase order unless otherwise prescribed. If the bidder fails to deliver and place any or all the Equipment or perform the service by the specified date, penalty at the rate of 2 % per week of the total order value subject to the maximum of 10% of total order value will be deducted.

8. Training:

Bidders need to provide adequate training to the nominated persons of IIT Mandi at their cost. IIT Mandi will not bear any training expenditure.

9. Warranty Declaration:

Bidders must give the comprehensive onsite warranty as required from the date of successful installation of Equipment against any manufacturing defects and also give the warranty declaration that *“everything to be supplied by us hereunder shall be free from all defects and faults in material, workmanship and shall be of the highest quality and material of the type ordered, shall be in full conformity with the specification and shall be complete enough to carry out the experiments, as specified in the tender document.”*

Any deviation in the material, and the specifications from the accepted terms may liable to be rejected and the bidders need to supply all the goods in the specified form to the satisfaction / specifications specified in the order / contract and demonstrate at the their own cost.

If the cost of equipment is above Rs. 25 lakhs, a performance bank guarantee for an amount equal to the price for the duration of the warranty period will be taken from the supplier or Indian agent.

10. **Terms of Payment:** Payment will generally be made only after delivery and satisfactory installation, testing, commissioning etc. This must be specified in the tender/quotation.

- In case of imported supplies, payment (excluding Indian agency commission, if any) will be made through Letter of Credit.

11. **Tender expenses and documents:** All costs incurred by the bidder in the preparation of the tender shall be at the entire expense of the bidder.

12. **Tender Evaluation Criteria:** The technical bids will be opened and evaluated by a duly constituted committee. After evaluation of the technical bid, the financial bid for only those offers which have qualified in the evaluation of technical bid will be opened.

13. Return of EMD:

- The earnest money of the successful bidder will be returned to them without any interest after completing the successful contract.

- The earnest money of unsuccessful bidders will be returned to them without any interest within fifteen working days after awarding the contact.

13. **Manual and documentation:** All the manuals necessary for operating and servicing the equipment (including details of electronic circuits) will have to be provided along with the instrument.

14. Bidders should go through the tender terms, conditions and specifications carefully and fill in the attached compliance statement accurately and unambiguously. They should ensure that all the required documents are furnished along with the bid.

(Head, School of Basic Sciences)

BID PARTICULARS

1. Name of the Supplier :

2. Address of the Supplier :

3. Availability of demonstration of equipment : Yes / No

4. Tender cost enclosed: : Yes/No if yes

D.D. No. _____ Bank _____ Amount _____

5. EMD enclosed : Yes / No if Yes

D.D. No. _____ Bank _____

6. Name and address of the Officer/contact person to whom all references shall be made regarding this tender enquiry.

Name :

Address :

Telephone No. :

Fax No. :

Mobile No :

e-Mail :

Web :

Annexure A Specifications

Ref:-ENQUIRY NO:- IITMandi/SBS/TEN/2011-12/CHRLAB/7/ITEM No.1 / Fluorescence Lifetime Measuring System

The system should come with Spectrophotometer (main optical unit), Sample Compartment, Emission Polarizer, Emission Monochromator, Detector, Data Acquisition System, Software for data analysis and Excitation Sources. Basic detection technique must be Time Correlated Single Photon Counting (TCSPC). The system should be capable of measuring fluorescence lifetime down to 70 picosecond or less with lasers as excitation sources and fluorescence lifetime down to 100 picosecond or less with LEDs (Light emitting diodes) as excitation sources.

Detailed Specifications

Spectrophotometer:

Detection Technique: Time-correlated Single Photon Counting (TCSPC)

Light Sources: Both LED and Laser Diode options

Lifetime Range: < 10 ps to 2 μ s or more (with suitable source and detector)

Sample Compartment:

Geometry: Both T & L-Geometry should quote separately

- i) Circulating Bath Thermostatable 1×1 cm cuvette holder with magnetic stirrer
- ii) Front face sample holder for solid samples
- iii) One pair of quartz cuvettes

Emission Polarizer:

Wavelength range 250-850 nm

Emission Monochromator:

Motorized

Focal length: between 100-300 mm

Stray light rejection: 1×10^{-4} or better

Grating: 1200 grooves/mm or better

Resolution: 4 nm or better

Wavelength accuracy: 1 nm or better

Detector:

Photomultiplier Tube (PMT) including power supply

Wavelength range: 250-800 nm or more

Transit Time Spread (TTS): ≤ 250 ps

Dark counts: < 900 per second

Data Acquisition System:

TCSPC electronics including data acquisition software for windows

Computer with window OS:

32 bit, 2.2 GHz dual core, 2GB RAM, one CD-RW/DVD combo driver and a high resolution 20" colour flat panel monitor

Software for data analysis:

Window based

For multi-exponential decay analysis including numerical deconvolution

Also for anisotropy, global and error analysis

Excitation Sources:

1. Pulsed LED

Peak Wavelength: 560/570 nm \pm 10 nm or less

Spectral Width: < 20 nm

Typical pulse width (FWHM): \leq 1.4 ns

2. Pulsed LED (**Optional**)

i) Peak Wavelength: 460 nm \pm 10 nm or less

Spectral Width: < 25 nm

Typical pulse width (FWHM): \leq 1.4 ns

Band Pass Filter for this LED: if necessary

ii) Peak Wavelength: 405 nm \pm 10 nm or less

Spectral Width: < 25 nm

Typical pulse width (FWHM): \leq 800 ps

Accessories (Optional):

i) Submersible pump for circulating water through the Thermostatable cuvette holder including pump, tubing and fittings

ii) Two-cuvette thermostatable (circulating bath) sample holder

iii) Excitation Polarizer: wavelength range 250-850 nm

Any other necessary components should be included in the quotation.

- The equipment should be certified to carry out fluorescence lifetime measurements of liquid and solid samples.
- We may need to shift the instrument to our new campus in future from the present location. Please quote the shifting charge, if any, as optional.
- **Three years on-site extended warranty on all parts.**
- **Annual Maintenance Contract may be quoted as optional.**

Compliance statement for the tender specifications
INDIAN INSTITUTE OF TECHNOLOGY MANDI
HIMACHAL PRADESH-175001

Ref:-ENQUIRY NO:- IITMandi/SBS/TEN/2011-12/CHRLAB/7/ITEM No.1/ Fluorescence Lifetime Measuring System

Instructions:

1. You have to fill in all columns and ensure that you furnish all the required information accurately and unambiguously.
2. If our specification contains any values, you have to provide your values against the column in the same unit as we have specified.
3. Deviation in values, materials etc. from our specification may be explained in the remarks column

Name of the bidder and address:		
Checklist	Bidder Specification	Remarks
Is Tender fees attached?		
Is EMD attached? (if applicable)		
Is the bidder original equipment manufacturer (OEM)/authorised dealer?		
If authorised dealer, recent dated certificate to this effect from OEM, attached or not?		
Undertaking from OEM regarding technical support & extended warranty present		
Validity of 180 days or not?		
Undertaking from bidder regarding acceptance of tender terms & conditions		
List of reputed users for the past three years specific to the instrument		
The system is capable of measuring fluorescence lifetime down to 70 picosecond or less with lasers as excitation sources and fluorescence lifetime down to 100 picosecond or less with LEDs (Light emitting diodes) as excitation sources		
Technical Specifications		
Spectrophotometer:		
Detection Technique: Time-correlated Single Photon Counting (TCSPC)		
Light Sources: Both LED and Laser Diode options		
Lifetime Range: < 10 ps to 2 μ s or more (with suitable source and detector)		
Sample Compartment:		
Geometry: Both T & L-Geometry should quote separately		

i) Circulating Bath Thermostatable 1×1 cm cuvette holder with magnetic stirrer		
ii) Front face sample holder for solid samples		
iii) One pair of quartz cuvettes		
Emission Polarizer: Wavelength range 250-850 nm		
Emission Monochromator:		
Motorized		
Focal length: between 100-300 mm		
Stray light rejection: 1×10^{-4} or better		
Grating: 1200 grooves/mm or better		
Resolution: 4 nm or better		
Wavelength accuracy: 1 nm or better		
Detector:		
Photomultiplier Tube (PMT) including power supply		
Wavelength range: 250-800 nm or more		
Transit Time Spread (TTS): ≤ 250 ps		
Dark counts: < 900 per second		
Data Acquisition System:		
TCSPC electronics including data acquisition software for windows		
Computer with window OS: 32 bit, 2.2 GHz dual core, 2GB RAM, one CD-RW/DVD combo driver and a high resolution 20" colour flat panel monitor		
Software for data analysis: Window based For multi-exponential decay analysis including numerical reconvolution Also for anisotropy, global and error analysis		
Excitation Sources:		
1. Pulsed LED Peak Wavelength: 560/570 nm ± 10 nm or less		
Spectral Width: < 20 nm		
Typical pulse width (FWHM): ≤ 1.4 ns		
2. Pulsed LED (Optional)		
i) Peak Wavelength: 460 nm ± 10 nm or less		
Spectral Width: < 25 nm		
Typical pulse width (FWHM): ≤ 1.4 ns		
Band Pass Filter for this LED: if necessary		
Pulsed LED (Optional)		
ii) Peak Wavelength: 405 nm ± 10 nm or less		
Spectral Width: < 25 nm		
Typical pulse width (FWHM): ≤ 800 ps		
Accessories (Optional):		
i) Submersible pump for circulating water through the Thermostatable cuvette holder including pump, tubing and fittings		
ii) Two-cuvette thermostatable (circulating		

bath) sample holder		
iii) Excitation Polarizer: wavelength range 250-850 nm		
Any necessary accessories are included in the quotation?		
Three years on-site extended warranty on all parts.		
The equipment should be certified to carry out fluorescence lifetime measurements of liquid and solid samples.		
We may need to shift the instrument to our new campus in future from the present location. Please quote the shifting charge, if any, as optional.		
Annual Maintenance Contract may be quoted as optional.		

**Annexure B
Specifications**

Ref:-ENQUIRY NO:- IITMandi/SBS/TEN/2011-12/CHRLAB/7/ITEM No.2 / Laser Diode with Driver

It must be compatible with Item 1.

Laser Diode Driver:

CW and Pulsed

Laser Diode Head:

Pulsed

Peak Wavelength: 440/450 nm \pm 10 nm or less

Spectral Width: < 20 nm

Typical pulse width (FWHM): \leq 80 ps

Any other necessary components should be included in the quotation.

- **Three years on-site extended warranty on all parts if possible.**
- **Annual Maintenance Contract may be quoted as optional.**

Compliance statement for the tender specifications
INDIAN INSTITUTE OF TECHNOLOGY MANDI
HIMACHAL PRADESH-175001

Ref:-ENQUIRY NO:- IITMandi/SBS/TEN/2011-12/CHRLAB/7/ITEM No.2/ Laser Diode with Driver

Instructions:

1. You have to fill in all columns and ensure that you furnish all the required information accurately and unambiguously.
2. If our specification contains any values, you have to provide your values against the column in the same unit as we have specified.
3. Deviation in values, materials etc. from our specification may be explained in the remarks column

Name of the bidder and address:		
Checklist	Bidder Specification	Remarks
Is Tender fees attached?		
Is EMD attached? (if applicable)		
Is the bidder original equipment manufacturer (OEM)/authorised dealer?		
If authorised dealer, recent dated certificate to this effect from OEM, attached or not?		
Undertaking from OEM regarding technical support & extended warranty present		
Validity of 180 days or not?		
Undertaking from bidder regarding acceptance of tender terms & conditions		
List of reputed users for the past three years specific to the instrument		
It must be compatible with Item 1.		
Technical Specifications		
Laser Diode Driver:		
CW and Pulsed		
Laser Diode Head:		
Pulsed		
Peak Wavelength: 440/450 nm \pm 10 nm or less		
Spectral Width: < 20 nm		
Typical pulse width (FWHM): \leq 80 ps		
Any necessary accessories are included in the quotation?		
Three years on-site extended warranty on all parts.		
Annual Maintenance Contract may be quoted as optional		

Annexure C Specifications

Ref:-ENQUIRY NO:- IITMandi/SBS/TEN/2011-12/CHRLAB/7/ITEM No.3 / Table Top Programmable Spin Coater

Spin Coater should have the capability to handle polymeric (bio as well as synthetic polymer) solutions in organic solvents.

Speed:

Spin Speed: 100 RPM to 7000 RPM or better

Speed Accuracy: <1% or better error across the full scale

Acceleration/ Deceleration: 1-1200 RPM/sec or better

Time: 1- 999 sec or more with increment of 1 sec or less

Programmability:

Multi-steps (more than five steps)

For each step time, speed and acceleration must be programmable

Recipe storage facility

Stored recipes must be modified and run later

Display:

Touch panel with colour display/Computer

Vacuum Chuck:

Suitable for 3"x 3" square (or equivalent round) or bigger substrate

Vacuum Pump:

Oil free and suitable for the coated instrument

Dimensions:

Should mention

Power Supply:

Indian Standard

Accessories (Optional):

1. Auto liquid dispenser
2. Micro syringe 250 µl

Any other necessary components should be included in the quotation.

Please provide the information regarding the safety features in the quoted model.

The quoted system should be certified as complete for carrying out the following types of experiments:

- To prepare thin films of polymer/fullerene and polymer/inorganic-nanomaterial mixtures on glass or quartz substrates.
- To prepare spin coated fluorophore labeled DNA or protein samples for single molecule FRET study.

- **Three years on-site extended warranty on all parts.**
- **Annual Maintenance Contract may be quoted as optional.**

Compliance statement for the tender specifications
INDIAN INSTITUTE OF TECHNOLOGY MANDI
HIMACHAL PRADESH-175001

Ref:-ENQUIRY NO:- IITMandi/SBS/TEN/2011-12/CHRLAB/7/ITEM No.3/ Table Top Programmable Spin Coater

Instructions:

1. You have to fill in all columns and ensure that you furnish all the required information accurately and unambiguously.
2. If our specification contains any values, you have to provide your values against the column in the same unit as we have specified.
3. Deviation in values, materials etc. from our specification may be explained in the remarks column

Name of the bidder and address:		
Checklist	Bidder Specification	Remarks
Is Tender fees attached?		
Is EMD attached? (if applicable)		
Is the bidder original equipment manufacturer (OEM)/authorised dealer?		
If authorised dealer, recent dated certificate to this effect from OEM, attached or not?		
Undertaking from OEM regarding technical support & extended warranty present		
Validity of 180 days or not?		
Undertaking from bidder regarding acceptance of tender terms & conditions		
List of reputed users for the past three years specific to the instrument		
Spin Coater should have the capability to handle polymeric (bio as well as synthetic polymer) solutions in organic solvents.		
Technical Specifications		
Speed:		
Spin Speed: 100 RPM to 7000 RPM or better		
Speed Accuracy: <1% or better error across the full scale		
Acceleration/ Deceleration: 1-1200 RPM/sec or better		
Time: 1- 999 sec or more with increment of 1 sec or less		
Programmability:		
Multi-steps (more than five steps)		
For each step time, speed and acceleration must be programmable		
Recipe storage facility		
Stored recipes must be modified and run		

later		
Display: Touch panel with colour display/Computer		
Vacuum Chuck: Suitable for 3"x 3" square (or equivalent round) or bigger substrate		
Vacuum Pump: Oil free and suitable for the coated instrument		
Dimensions: Should mention		
Power Supply: Indian Standard		
Accessories (Optional):		
1. Auto liquid dispenser		
2. Micro syringe 250 µl		
Any necessary accessories are included in the quotation?		
Please provide the information regarding the safety features in the quoted model.		
The quoted system should be certified as complete for carrying out the following types of experiments: <ul style="list-style-type: none"> • To prepare thin films of polymer/fullerene and polymer/inorganic-nanomaterial mixtures on glass or quartz substrates. • To prepare spin coated fluorophore labeled DNA or protein samples for single molecule FRET study. 		
Three years on-site extended warranty on all parts.		
We may need to shift the instrument to our new campus in future from the present location. Please quote the shifting charge, if any, as optional.		
Annual Maintenance Contract may be quoted as optional.		