

**TENDER DOCUMENT FOR PURCHASE OF REAL TIME PCR & CD SPECTROPOLARIMETER:**

TENDER NOTICE NO.	621/PU/DBT/2011
ISSUE OF TENDER	02.05.2011
DUE DATE	20.05.2011 by 1:00 P.M
DATE AND TIME OF OPENING	20.05.2011 (3:00 P.M & 4:00 P.M)
NAME AND ADDRESS OF THE PERSON TENDER	The Chairperson Department of Biotechnology, Panjab University, Chandigarh 160014

**TENDER PURCHASE DETAILS:**

- i. Rs. 500/- (if the Tender is downloaded from internet) Demand Draft No. \_\_\_\_\_ date \_\_\_\_\_ in favor of the Chairperson, Department of Biotechnology, Panjab University, Chandigarh.
  
- ii. Rs. 600/- by Demand Draft No. \_\_\_\_\_ dt. \_\_\_\_\_  
Name of Bank:  
Amount \_\_\_\_\_ (if required by post) in favor of The Chairperson, Department of Biotechnology, Panjab university, Chandigarh.

**EARNEST MONEY DETAILS:**

- (i) Rs. 20,000/- By Demand Draft\* No. \_\_\_\_\_ dated \_\_\_\_\_  
  
Name of Bank \_\_\_\_\_

\*In favor of The Chairperson, Department of Biotechnology, Panjab University, Chandigarh.

**Tender Document for Purchase of a Real Time PCR & Cd Spectropolarimeter by  
Panjab University, Chandigarh.**

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## SECTION – I

### **1. Invitation for Bids**

- 1.1 The University proposes to procure Real time PCR & CD Spectropolarimeter to be used by the Department of Biotechnology, Panjab University, and Chandigarh from the year 2011 onwards. The Panjab University is looking for vendors who have experience in supplying the above instrument.
- 1.2 Tenderers are advised to study all technical and commercial aspects, instructions, forms, terms and specifications carefully in the tender document. Failure to furnish all information required in the Tender document in every respect will be at the tenderer's risk and may result in the rejection of the bid.
- 1.3 Sealed offers prepared in accordance with the procedure enumerated in Clause 1 of Section II should be submitted to The Chairperson, Department of Biotechnology, Panjab University, Chandigarh. Not later than the date and time laid down, at his address given in the schedule for invitation to Tender under Clause 1.26 of Section I.
- 1.4 All bids must be accompanied by a bid security of Rs. 20,000/- in the form of Bank Draft/Bankers Cheque drawn from a scheduled bank in favor of The Chairperson, Department of Biotechnology, Panjab University, Chandigarh, Payable at Chandigarh.
- 1.5 This tender document is not transferable.
- 1.6 The categories of items and quantity will be as per requirements. Panjab University reserves the right to increase or decrease the quantity or delete some or all of the items depending on the needs of the Department/University without assigning any reasons.

- 1.7 The tenderer should indicate specifically the Basic Price, Taxes/Excise duty, other duties (if any), and levies chargeable quantitatively against each item. No additional information will be entertained after due date.
- 1.8 The bids should indicate clearly that the rates are F.O.R. destination, P.U. Chandigarh.
- 1.9 The tender should be submitted in Two cover system i.e. a and b. There should be proper indication of the contents on each envelope as indicated in clause 1.1 of section II.
- 1.10 A photocopy of the receipt of Earnest Money. The draft must be in a separate sealed envelope indicating the amount, tender Notice Number and due date and enclosed with the bid.
- 1.11 The tenderer should clearly indicate the delivery period and validity period of tender.
- 1.12 The tenderer should clearly indicate the availability of service and maintenance facilities at Chandigarh for the items quoted.
- 1.13 The above mentioned details particularly the Sales Taxes/excise duty, any other duty, if not quoted properly, the bid can be cancelled.
- 1.14 The tenderers are required to quote for each item (Real Time PCR & CD Spectropolarimeter) separately in terms of basic price and all other charges.**
- 1.15 The Tender should be submitted along with refundable Earnest Money of Rs. 20,000/- in the shape of Term Demand Draft/Deposit/Call Deposit Receipt valid for a period of 6 months in favour of The Chairperson, Department of Biotechnology, Panjab University, Chandigarh. Tenders not accompanied by Earnest Money or incomplete in any respect will be rejected outright.
- 1.16 The Tender must be submitted along with the copies of:

- Manufacturers license or authority from the manufacturer
- Latest Income Tax Clearance Certificate

- 1.17 The Panjab University reserves the right to reject any or all tenders without assigning any reason whatsoever.
- 1.18 The tenders will be opened on the date and time indicated in the presence of tenderers if any present on the occasion. If the date of opening is declared to be a holiday the tenders will be opened on the next working day.
- 1.19 **No advance payment or payment against Performa invoice will be made. Payment will be made after receipt, inspection, installation/testing of the equipments.**
- 1.20 All damaged or unapproved goods shall be returned at the Tenderer risk and cost and the incidental expenditure thereupon shall be recovered from the concerned party.
- 1.21 Printed conditions of the firm sent along with the quotation, if any, shall not be binding on us.
- 1.22 Packing list must be put in all packages.
- 1.23 On acceptance of tender, the date of delivery should be strictly adhered to otherwise; PU reserves the right not to accept the delivery in full or in part. In case the order is not executed within the stipulated period, PU will be at liberty to make purchases through other sources, and to forfeit the earnest money of the Tenderer.
- 1.24** No claim on account of payment of Octroi etc. within the limits of the Municipal Corporation, Chandigarh shall be accepted.

1.25 Payment of bill will be made through by crossed account payee Cheque drawn on the State Bank of India or Canara Bank located at Panjab University, Campus, Chandigarh. The decision to purchase each item is take independent of other items quoted by the firm. It is not binding on the department to purchase all the items quoted by any particular firm.

1.26 **Schedule for Invitation to Tender**

a) Address at which tender is to be submitted:

**The Chairperson,  
Department of Biotechnology,  
Panjab University, Chandigarh.**

b) Latest time and date for receipt of Tender:

c) Place, Time and Date of opening of Technical bids:

**Place: Department of Biotechnology,  
Panjab University, Chandigarh.  
Time & Date:**

Date till which the tender is valid:

**Three months after the allotment of tender.**

d) Panjab University shall not be responsible for any postal delay about non-receipt/non – delivery of the documents.

## SECTION-II

### 1. Procedure for submission of Bids

1.1 It is proposed to have a Two Cover System for this tender

- a) Technical Bid (in duplicate) in one cover.
- b) Commercial bid (in duplicate) in one cover.

1.2 Each copy of Technical Bid of the Tender should be covered in a separate sealed cover super scribing the wordings “Technical Bid”. Each copy should be marked as “Original Copy” and “First Copy”. Both should be put in a single sealed cover super scribing the wordings “Technical Bid”.

1.3 Each copy of commercial Bid of the Tender should be covered in a separate sealed cover super scribing the wordings “Commercial Bid”. Each copy should be marked as “Original Copy” and “First Copy”. Both should be put in a single sealed cover super scribing the wordings “Commercial Bid”. Commercial Bid should only indicate prices (Preferable item-wise).

1.4 All the two documents viz. Technical Bid Cover and Commercial Bid Cover prepared as above are to be kept in a single sealed cover super scribed with **“Real Time PCR and or CD Spectropolarimeter”**

1.5 The cover thus prepared should also indicate clearly the name and address of the tenderer to enable the Bid to be returned unopened in case it is declared “late”

1.6 A photocopy of the receipt of Earnest Money, if paid in cash, must be enclosed along with the Tender. In case the Earnest Money is paid by Demand Draft, the draft must be in a separate sealed envelope indicating the amount, tender Notice Number and due date and enclosed with the bid.

2. **Cost of Tender**

The tenderer shall bear all costs associated with the preparation and submission of its Bid, including the cost of presentation for the purpose of clarification of the bid, if so desired by the client and the client will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering Process.

3. **Clarification of Tender Document**

A prospective tenderer requiring any clarification of the Tender Document may notify the client in writing at the Client's mailing address indicated in Clause 1.26 of Section I. The Client will respond in writing to any request for clarification of the Tender Document, received not later than 07 working days prior to the last date for the receipt of bids prescribed by the Client. In case of any further clarification on any of the points in the tender, if required, a meeting can be held.

4. **Amendment of Tender Document**

4.1 At any time prior to the last date for receipt of bids, the client may for any reason, whether at its own initiative or in response to a clarification requested by a prospective Tenderer, modify the Tender Document by an amendment.

4.2 The amendment will be notified in writing or by telex or E-mail to all prospective Tenders who have received the Tender Document and will be binding on them.

4.3 In order to afford prospective Tenderers reasonable time in which to take the amendment into account in preparing their bids, the Client may, at its discretion, extend the last date for the receipt of the Bids.



**5. Language of Bids**

The bids prepared by the Tenderer and all correspondence and documents relating to the bids exchanged by the Tenderer and the Client, shall be written in English language, provided that any printed literature so long as accompanied by an English translation in which case, for purposes of interpretation of the bid, the English translation shall govern.

**6. Document Comprising the Bids**

6.1 The Bids prepared by the Tenderer shall comprise of following components:-

- a) Technical Bid shall consist of the following:-
  - (i) Technical Bid furnished as per the format for technical bid (Section III)
  - (ii) Technical Literature for each product/service, covering full technical specifications.
- b) Commercial Bid consisting of the Following:-
  - (i) Bid prices duly filled, signed and complete as per the format (Clause 3 of Section III)
  - (ii) Maximum educational discount as could be offered should be mentioned.

### **SECTION III**

#### **Specifications for High Speed Realtime PCR system**

1. Should be a fast gradient real time PCR system for Nucleic acid and protein analysis.
2. Should have peltier driven thermal block to accommodate 96 well PCR plate, 0.2ml strips or 0.2ml individual tubes of SBS standard format.
3. System should support fast PCR protocol with ramp rates of 4 °C/sec for heating and 3°C/sec for cooling.
4. Optical Detection Module with minimal mechanical movement to capture sensitive fluorescence emission from reaction volumes as low as 5µl-100µl.
5. System should have the flexibility to adjust ramp rates to run standard protocol without change in hardware.
6. System should have a minimum of 6 peltier elements beneath the block to maintain block homogeneity for improved data reproducibility.
7. The block temperature should be maintained at 20 °C till the start of PCR cycle to minimize non-specific amplification.
8. Should have temperature Gradient range of 20° C in all three steps of PCR to provide additional flexibility while extrapolating established PCR protocols to suit real time chemistries.
9. Particle protection technology to prevent dust accumulation in the optics for reliable fluorescence detection.
10. Excitation Light Source (LED Array) with a life time warranty with the capability to excite dyes like SYBER Green, FAM, VIC, JOE, NED, Tamra and ROX
11. The system should have a minimum of 4 emission filters.
12. Channel photomultiplier as detector to provide a 9 log dynamic range
13. Open system that allows the user to adopt to advanced chemistries like Plexor and Scorpions along with SYBER green, Taqman and Molecular Beacons
14. Software should support performing
  - a. Absolute quantification,
  - b. Relative quantification,

- c. Melting curve analysis,
  - d. Allelic Discrimination,
  - e. Plus/Minus assays,
  - f. End point assays
  - g. Thermofluor assay for Protein Characterization.
15. Software should provide raw data of fluorescence as well as advanced options to export configurations compatible with analysis software like qBASE, geNorm, REST and GenEx
  16. GenEx and Beacon Designer trial version software with a minimum 3 month validity to be supplied along with the instrument.
  17. The system should be calibrated / validated and should be traceable to international standards.
  18. System should be supplied complete with computer intel 5 processor minimum 2 GHz / minimum 2 GB RAM, minimum 500 GB Hard drive and 20' TFT/LED monitor.
  19. It should be possible to use the system for regular PCR applications by switching off they optical module.
  20. Open System to accommodate consumables and reagents from different vendors with documented proof such as user guide.
  21. System should take into consideration the efficiency of PCR while reporting the results.
  22. System should be able to support twin- tec, white and transparent plates for ease of handling and better results.
  23. The Vendor should have a fully functional Application laboratory to support and trouble shoots problems if any in India.
  24. The system should be licensed to perform Real Time PCR.
  25. The system should be RoHS (Restriction of use of Hazardous Substances) Compliant thereby ensuring that the equipment does not contain more than the permissible levels of lead, cadmium, mercury, hexavalent chromium, ploybrominated Diphenyl Ethers (PBDE) flame retardants.
  26. RS 232 and printer interface
  27. Minimum Two years Warranty.

## Technical Specification of CD-Spectropolarimeter

1.	<b>LIGHT SOURCE</b>	:150W Or More Xe Lamp,
2.	<b>MEASUREMENT WL RANGE</b>	:163 nm to 900 nm
3.	<b>WAVELENGTH ACCURACY</b>	:+/-0.2 nm (at 163 to 180nm)
4.	<b>WAVELENGTH REPEATABILITY</b>	:+/-0.05 nm at 164 to 250nm
5.	<b>SPECTRAL BANDWIDTH</b>	:0.01 to 15 nm (Variable type)
6.	<b>SLIT WIDTH</b>	:1 to 3000 $\mu$ m
7.	<b>RESPONSE</b>	:0.5m sec to 32 sec.
8.	<b>SCANNING</b>	:3 Modes (Auto Response, Continuous scan, step scan)
9.	<b>SCANNING SYSTEM</b>	:1 to 1000 nm/min
10.	<b>CD FULL SCALE</b>	:+/-10 m deg to 2000m deg
11.	<b>CD RESOLUTION</b>	: better then 0.008 mdeg at +/-10mdeg Scale
12.	<b>STRAY LIGHT</b>	: Not more than 0.0003% at 200nm
13.	<b>RMS NOISE</b>	: 0.050 m deg at 185nm
14.	<b>BASELINE STABILITY</b>	$\pm$ 0.03 mdeg/hr.
15.	<b>ACCESSORIES</b>	1) <b>Peltier control single cell holder</b> with Temp probe & stirrer facility. Temp Range:- 10 to 110 C 2) <b>Fluorescence measurement attachment</b> 3) Protein secondary structure analysis program,. 4) <b>N2 GAS Flow Meter</b>
16.	<b>RECTANGULAR CELL</b>	: 1 mm, 2mm, 5mm, 10mm with appropriate spacers.
17.	<b>WARRANTY</b>	: Minimum Two Years.

18. PC with printer & UPS 3KVA.
19. Waterbath with connectors.
20. CD machine should be upgradeable in future for various attachment like Stopped flow, Titrations, ORD, LD etc.
21. CD machine should have computer controlled Shutter.
22. Alarm facility for light source over temperature, water leak in sample compartment, nitrogen purge gas shortage etc.
23. CD machine should have Four channel Data acquisition for simultaneous measurement.
24. Also enclose detail User's List.
25. **POWER REQUIREMTNS** : 220 – 240v, 50/60 Hz

## **SECTION IV**

### **TERMS AND CONDITIONS**

1. The company should adhere with all seriousness to the time schedule provided by the Panjab University.
2. The products asked for should be of very high standard and of reputed company with authorized service provider in Chandigarh. Mutual trust and nature of services provided should motivate the service provider to give more than what is asked for in the agreement.
3. All the rates will be F.O.R. Panjab University, Chandigarh.
4. The Company shall be liable to indemnify the Panjab University in all respects and meet and pay off the litigation expenses and all the liabilities including damages, sums etc. arising out of and as a consequences of the negligence, deficiencies, mistakes, lapses, delays etc. in the execution of the various jobs and the services provided.
5. The company should ensure quick back up response in case of equipment failure which should be replaced if needed within 24 hours of the distress call.
6. There is no provision for making advance payment to the Company as per Panjab University rules. However, the running bills for the jobs completed can be submitted by the company and will be cleared for payment within reasonable period.
7. Send a copy of the profile of the company along with the consumers satisfaction report.