

### **NOTICE INVITING TENDER (N.I.T)**

#### TENDER NOTICE NO.NIAB/PUR/GLT/01/2012

29.02.2012

Sealed Tenders are invited on behalf of the Officer-on-Special Duty, NIAB in **TWO BID SYSTEM** for procurement of **ANALYTICAL & PREPARATIVE HPLC** 

Scope of work: Supply, Installation, Testing and Commissioning of the above Equipment.

#### **Details of Tender:**

- 1. Earnest Money Deposit (EMD): Rs.1,20,000/-
- 2. Tender documents consisting of Techno Commercial Bid document and Financial Bid documents can be downloaded from the website.
- 3. The above tender will be dealt with under "TWO BID SYSTEM". Techno Commercial Bid (Part I) and Financial Bid (Part II).
- 4. Both Part I and Part II duly sealed and then be placed in a bigger cover Bearing the Tender Notice Number on the top, date and time of opening the tender.
- 5. The Techno Commercial bid shall contain the following:
  - (i) Technical bid document comprising N.I.T instruction to tenderers, letter of submitting the tender, general conditions of the Tender with detailed specifications.
  - (ii) Tender Document each page duly signed by the Bidder as token of acceptance. If any deviation is proposed by the Bidder, the same must be clearly indicated and enclosed as deviation list as Annexure but Tenders with significant deviations list may be liable for rejection.
  - (iii) EMD in the form of demand draft drawn in favour of NIAB, Hyderabad.
  - (iv) Other Information / documents/literature/catalogues as indicated in Instructions to Tenderers.
  - (v) All necessary catalogues/ technical literature, data as are considered essential for full and correct evaluation of bids.

- (vi) Availability of number of trained support personnel, both application and service support.
- (vii) Compliance statement indicating yes/ no as per the specifications
- (viii) Copy of the bidders price schedule with out prices mentioned
- (ix) The complete Technical Bid (Part I) to be singed and enclosed.
- 6. The Financial Bid shall contain the following:
  - (i) Duly filled in price bid document.
  - (ii) Tenderers are required to quote individual item rates for each item given in the price bid documents. The rates and amount shall be quoted in figures in the price bid document. The rates and amount shall be quoted in figures as well as in words. In case of difference in quoted rates, the rates in words will be taken as final rates.
  - (iii) The Bidders are to quote both in INR and Foreign currency wherever applicable.
  - (iv) NIAB has applied for exemption of Exise Duty and Custom duty. The Bidders are requested to quote in Customs Bounded Ware House Prices or High Seas Sale prices.
- 7. Sealed tenders signed in each page are to be submitted to the office of **OSD,National Institute of Animal Biotechnology**, Visiting Scholars House, Lake View Guest House, University of Hyderabad Campus, Prof. C.R. Rao Road, Gachibowli, Hyderabad before the prescribed last date.
- 8. NIAB does not bind itself to accept the lowest or any other tender and reserves the authority to reject any or all tenders without assigning any reason. All the tenders, in which any of the prescribed conditions are not fulfilled or incomplete, in any respect, are liable to be summarily rejected.
- 9. This Notice Inviting Tender (N.I.T) shall form part of the Tender Document.
- 10. OSD, NIAB reserves the right to postpone the tender issue date, submission /opening date and to accept or reject any or all tenders without assigning any reasons.
- 11. Tender completed in all respects shall be submitted as per "Instructions to Tenders" forming part of the tender document.
- 12. Any tender received without Earnest Money Deposit in the form as specified shall be summarily rejected.
- 13. The tenderer shall sign all the pages of the tender documents and other documents submitted by him along with the tender.

- 14. The tenderer should ensure that rates / amounts quoted should appear only in the Financial Bid document ( Part II ) and nowhere else, otherwise, the tender is liable to be rejected.
- 15. Techno commercial bid and Financial bid shall be submitted simultaneously on due date as above within the due date. Only Techno Commercial Bids shall be opened on the due date and the Financial Bids shall be kept sealed. Later on, a date shall be fixed and intimated for opening of Financial Bids of only of those Vendors whose Techno Commercial Bids are found technically suitable by NIAB.
- 16. Documents duly completed in all respects shall be submitted in the office of National Institute of Animal Biotechnology, Visiting Scholars House, Lake View Guest House, University of Hyderabad Campus, Prof. C.R. Rao Road, Gachibowli, Hyderabad

I	Last Date for Receipt of Tender	<b>26.03.2012</b> at 3.00 P.M.
II	Opening of Techno Commercial Bid	26.03.2012 at 4.00 P.M.

Sd/-Officer -on-Special Duty

#### **INSTRUCTIONS TO BIDDERS**

#### 1. GENERAL INSTRUCTIONS:

OSD, National Institute of Animal Biotechnology, Hyderabad, will receive Tenders in respect of the items mentioned in the Tender specifications.

- 1.1 Tenders received after the date and time fixed for receipt of Tenders as indicated above are liable to be rejected. NIAB takes no responsibility for delay, loss or non-receipt of Tender documents sent by Post / Courier. Telex / Telegraphic / Fax /Email offers will not be accepted.
- 1.2 NIAB is not bound to accept lowest or any Tender or to assign reasons for non-acceptance of any Tender.
- 1.3The bidder shall not be entitled to claim any costs, charges, expenses incidental to or incurred by him through or in connection with his submission of Tender, even if the OSD, **NIAB** decides to withdraw or cancel the Tender.
- 1.4 Unsealed Tenders, unsigned Tenders, incomplete Tenders, or Tenders otherwise considered defective are liable to be rejected.
- 1.5 OSD, **NIAB** reserves the right to accept the Tender either in whole or in part and the prices quoted by the bidder shall be deemed to hold good even if the Tender is accepted in part by the OSD, **NIAB**.

#### 2. CAPACITY OF THE BIDDER:

- 2.1Any person signing a Tender shall submit documentary evidence that his Signature on the Tender, submitted by him, is legally binding upon himself, his firm.
- 2.2 If it is detected that the person so signing the Tender has no authority to do so, the OSD, NIAB may, without prejudice to other civil and criminal remedies, not consider the Tender and hold the signatory liable for all costs and damages.
- 2.3 The bidder shall produce a certificate from the Manufacturer of the offered product that they are the authorised exclusive dealers in India.

#### 3. BIDDER TO INFORM HIMSELF FULLY:

3.1 The bidder is required to carefully examine the documents contained in this Tender document and fully inform himself as to all conditions and matters which may in any way affect the works or the cost therefore, before submitting his offer If the bidder finds discrepancies, omissions, or contradiction in the documents or in doubt as to true meaning of any part, he shall at once frequent in writing for clarification to NIAB. NIAB will issue such clarification in writing. The bidder however shall not be entitled to any extension of time for submission of his Tender on such account.

#### 4. EARNEST MONEY:

- 4.1 The Tender must be accompanied by Earnest Money Deposit (EMD) in the form of a Demand Draft drawn on the State Bank of India or any Nationalised Bank in favour of National Institute of Animal Biotechnology, for an amount of Rs.1,20,000/- (Rupees One lakh twenty thousand only), payable at Hyderabad. If the bidder after submitting his Tender revises his offer or modifies the terms and conditions thereof in a manner not acceptable to the OSD, NIAB, the earnest money shall be liable to be forfeited.
- 4.2 EMD should be kept along with the Technical bid in one envelope.

  Tenders not accompanied by EMD shall be liable for rejection at the sole discretion of the OSD, NIAB.
- 4.3 The Earnest Money will be returned without any interest to the unsuccessful bidders after the finalisation of the order with the successful bidder.
- 4.4 The earnest money shall be returned to the successful bidder after the security deposit equivalent to 10% of the total Purchase Order value in Indian rupees in the form of bank guarantee has been furnished in favour of the OSD, **NIAB.**

#### 5.0 MANNER, METHOD AND PLACE FOR SUBMISSION OF TENDERS:

5.1 Tenders shall be made in favour of:

National Institute of Animal Biotechnology, Visiting Scholars House, Lake View Guest House, University of Hyderabad Campus, Prof. C.R. Rao Road, Gachibowli, Hyderabad 500 046 (A.P.), INDIA.

5.2 Tenders shall be submitted in 2-PARTS.

# TENDER DOCUMENT

**FOR** 

# Supply, Installation, Testing and Commissioning of Analytical & Preparative HPLC

#### TENDER # NIAB/GLT/01/2011



### **National Institute of Animal Biotechnology**

Visiting Scholars House, Lake View Guest House, University of Hyderabad Campus, Prof. C.R. Rao Road, Gachibowli, Hyderabad 500 046 (A.P.) India.

# PART-I TECHNO COMMERCIAL BID PART-II PRICE BID

- 1. PART-I of the Tender must contain the following:
  - i) Tender Document, each page duly signed by the bidder as token of acceptance If any minor deviation is proposed by the bidder the same must be clearly indicated and enclosed as deviation list as Annexure but Tenders with significant deviations list may be liable for rejection.
  - ii) Copy of the bidder's price schedule but without prices.
  - iii) Earnest Money Deposit as indicated above.
  - iv) All necessary catalogues/technical literature, data as are considered essential for full and correct evaluation of offers.
  - v) Details of Installations of similar equipment in India:-
  - vi) Availability of number of trained support personnel, both application & service support.
  - vii) Compliance statement indicating yes/no as per the specifications
  - viii) The complete Technical Bid (Part I) to be signed and enclosed
- All the above documents forming PART I of the Tender shall be kept in one envelope which shall be SEALED and subscribed with as PART- I: TECHNO COMMERCIAL BID TENDER ENQUIRY NO: NIAB/PUR/GLT/01/2012 DUE ON: 26.03.2012 at 3.00pm.
- PART-II of the Tender shall contain only the Price schedule with prices (both in words and figures) (Departure to the price schedule format may render the Tender liable for rejection Price Schedule format in PART-I and PART-II must be identical, except that PART-I should not contain any price figures).
- 4. The price bid forming PART-II of the Tender shall be kept in another envelope which shall also be sealed and superscribed with PART-II: PRICE BID TENDER ENQUIRY NO. NIAB/PUR/GLT/01/2012 DUE ON: 26.03.2012 at 3.00pm.

5. THE ABOVE TWO SEPARATE SEALED COVERS, ONE CONTAINING THE PART-I TECHNO COMMERCIAL BID ALONG WITH THE EMD AND THE OTHER CONTAINING. THE PART-II PRICE BID SHALL BE KEPT TOGETHER IN ANOTHER COVER WHICH SHOULD ALSO BE SEALED AND SUPERSCRIBED WITH FOLLOWING DETAILS:

TENDER ENQUIRY NO: NIAB/PUR/GLT/01/2012

DUE ON: 26.03.2012 at 3.00pm.

THIS ENVELOPE SHOULD BE ADDRESS TO:

Officer-on-Special Duty,
National Institute of Animal Biotechnology,
Visiting Scholars House, Lake View Guest House,
University of Hyderabad Campus, Prof. C.R. Rao Road,
Gachibowli, Hyderabad – 500 046 (A.P.) India.
AND SHOULD BE SUBMITTED ON OR BEFORE 3.00 PM OF 26.03.2012.

#### 6. TENDER OPENING:

- i) THE TECHNO COMMERCIAL BIDS WILL BE OPENED AT **4.00 P.M ON: 26.03.2012** AT NIAB IN THE PRESENCE OF THE BIDDERS OR THEIR REPRESENTATIVE WHO WISH TO BE PRESENT.
- ii) The Techno-commercial evaluation of the bids will be conducted by NIAB at which time the bidders must be prepared to make a presentation on their bids, if asked to do so by **NIAB**.
- iii) The Price bid of the acceptable techno commercial bids will be opened after the technical evaluation by **NIAB**.
- iv) All queries/clarifications prior to submission of Tender shall be addressed to:
  Officer-on-Special Duty,
  National Institute of Animal Biotechnology,
  Visiting Scholars House, Lake View Guest House,
  University of Hyderabad Campus, Prof. C.R. Rao Road,
  Gachibowli, Hyderabad 500 046 (A.P.) India.

#### 7. DELIVERY:

 The items as per the purchase order shall be delivered at NIAB laboratory within the mutually agreed delivery schedule from the date of L/C establishment by NIAB issue of Purchase Order

- ii) The supplier shall be required to depute their authorized representative(s) at their expenses to NIAB site in India for installation of the equipment and test performance of the equipment as per the specifications in the Purchase Order.
- iii) Please make appropriate commitments in writing that the instrument model being offered is current and is not likely to be obsolete within the next couple of years and that spare parts will be available for it for at least seven years after the installations.
- iv) The Installation of the equipment is deemed complete only after all the sub units of the main equipment such as the computers/ printers / UPS / Software etc., is installed and tested as per the specifications in the offer/ brocher / purchase order and demonstrated to the satisfaction of the end user.
- v) Timely completion of the supplies as specified in the purchase order shall be the essence of the contract. If the supplier fails to do so, OSD, NIAB may resort to the following steps:
  - a) Levy of liquidated damages @ 1% of the purchase order value per each fortnight beyond the specified date of delivery subject to maximum of 10% of the Purchase Order value. This is subject to the OSD, NIAB accepting the delay in the delivery of stores at his discretion.
  - b) Resort to such risk purchase at the cost and risk of the supplier without notice as the OSD, NIAB may deem fit.
  - c) Cancel the contract partially or wholly, including the forfeiture of Security Deposit.

#### 8. PRICE:

- i) TENDERERS SHOULD FOLLOW THE PRICE SCHEDULE FORMAT as detailed in the price schedule (part-II)
- ii) Instrument operation manual, software manuals and a detailed service manual with all circuit diagrams, parts list and troubleshooting guide should be supplied with the system in case of order.
- iii) The prices quoted must indicate the Ex-works value, FOB value and CIF/CIP value to enable the purchaser to take decision at his discretion.

- iv) The prices shall remain firm and fixed till execution of the contract. The prices quoted must contain the break-up of unit prices and such prices shall include all essential tests for acceptance of the stores as specified in the technical specifications.
- v) The quoted price shall be deemed to include all taxes and duties/fee etc, that will have to be paid in the country of origin/export by the bidder.
- vi) The price details should not appear in any other page except in the PRICE BID ( PART II ).

#### 9. PAYMENT TERMS:

- i) Letter of Credit will be opened for Total cost of the equipment with 85% to be released against the material receipt and the remaining 15% would be released after successful Installation, testing & commissioning acceptable to NIAB against the submission of a bank guarantee for 15% of the Purchase Order value valid for a period of one year against the performance of the machine or the warranty period whichever is later.
- ii) All banking charges outside India to Beneficiary's account

#### **10. VALIDITY OF TENDER:**

The Tenders should be kept valid for acceptance for a period of 90 (three months) calendar days from the Tender due date.

#### 11. DECLARATION:

Th	e bidder should give a declaration in the fo	llowing format
terms and	d conditions of this Tender document and conditions mentioned herein.	have read the entired we are fully agreeable to the
This Te	ender Document # NIAB/PUR/GLT/01/2012	Signature of the Bidde With sea
Issued to:	:	
Date:	Signa	ture of the Issuing Officer,

NIAB

# SPECIFICATIONS FOR ANALYTICAL AND PREPARATIVE HPLC

#### 1 (A). ANALYTICAL HPLC

Quantity 1.No.

#### **Specifications:**

- Solvent system- quaternary gradient
- Flow Rate Range: 0.0001 10.000 ml/min in 0.001ml/min increments or better
- Compressibility compensation should be automatic and continuous
- Vacuum degasser, four chambers and < 500 μl internal volume per chamber
- System delay volume should be <700 µl, independent of backpressure
- 9 to11 gradient curves (including linear, step, concave and convex)
- Flow precision : ≤ 0.075% RSD or better
- Maximum operating pressure : 5000 psi or more
- Flow accuracy: ± 1.0% RSD or better
- Compositional accuracy should be ± 0.5% or less
- Compositional precision should be ≤ 0.15% RSD or ≤0.02 min SD or better
- Automatic system preparation functions (for solvents purging etc).

#### **Auto Sampler:**

• No. of sample plates : 2 x 96 or 384 microtiter plates and

2x 48 vials of 2 ml or better configuration

No. of injections
 Injection vol. range
 Sample temp control
 Sample probe
 1 to 99 injections per sample
 0.1 to 50 µL in 0.1 µl increments
 4º to 40°C in 0.1°C increment
 xyz based needle-in-needle design

Sample carryover : <0.005% or less</li>
Safety feature : Leak sensors

- Should be able to accommodate 120 vials, configured in 5 carousels of 24 each or any better configuration
- Should have the temperature range of 4°C to 40°C.
- Should be able to make 1–99 injections per vials or more
- Sample delivery precision should be < 0.5% RSD</li>
- Sample carry over should be less than 0.01% for caffeine.
- Injector needle wash should be integral, active and programmable
- Injector linearity should be > 0.999 coefficient of deviation  $(1 100 \mu l)$
- Should have advanced operations like priority samples, auto additions and auto standards

#### Column Oven:

• Column temp control : 5°C above ambient to 90°C in 0.1°C

increments

• If available, provide column tracking facility.

#### **Photodiode Array (PDA) Detector:**

• Wavelength Range : 190-800nm

Wavelength Accuracy : ±1nmWavelength Repeatability : ±0.1nm

• Photodiodes : Should be 512 or more

• Optical resolution : 1.2 nm or better

• Linearity range : < 5% at 2 AU, propylparaben

at 257 nm

Base line noise : 10x10-6 Au, 10 nm cell at 254 nm
 Drift : <1.0x10-3/Au/hr/°C, dry cell 254 nm</li>

Data acquisition rate : Up to 80Hz.

Flow Cell : Standard and Preparative

• Light source : Deuterium lamp with 2000 hour life

warranty or better

• Lamp optimization software for low noise performance in visible range without lamp change.

Peak purity software.

#### **ELS Detector (Evaporative Light Scattering):**

Nebulizer : Front mounted, snap in design

• Temperature Control : Heater 0-100%, thermally controlled,

nebulizer chamber

• Gas : Nitrogen to be supplied, at least 65 psi

• Temperate Range Drift Tube: 0.1°C increments, feedback accuracy

to 0.1°C

Maximum eluent flow rate : 100% waters at 2 ml/min

• Filter Setting : Hamming, 0 to 5.0 seconds in 0.1 second

increments

Optics : Heated optics bench (constant 50°C)

Light Source : Tungsten Halogen polychromatic, pre

aligned, user installable

• Lamp Calibration : PMT Calibration to compensate for lamp

degradation over time

• Lamp Normalization : On demand and at start up diagnostic

corrects for lamp signal output decrease

• Detector : Photomultiplier Tube (PMT)

PMT Calibration : Based on individual PMT

• Data Range : 0.1 – 2000 light scattering units full scale

• Unattended Operation : Leak Sensors, full diagnostic data

captured through console software

#### Fluorescence Detector

Excitation Wavelength Range: 200 – 890 nm
Emission Wavelength Range: 210 – 900 nm

Bandwidth : 20 nm
 Wavelength Accuracy : ± 3 nm
 Wavelength Repeatability : ± 0.25 nm

• Sensitivity : S/N > 1000 (Raman Spectrum of Water)

• Measurement Range : 0.001 to 10,000 emission units

• Data Acquisition : Up to 80 Hz

• Light Source : Hg/Xenon Arc Lamp with 1000 hr

Warranty/better

• Flow Cell Design : Axially illuminated

• Cell Volume : < 10 μL

• Unattended Operation : Leak Sensors, full diagnostic data

captured through console software

#### **Specification:**

- High pressure gradient binary pump, should operate on both preparative and analytical mode
- Flow rate from 0.5 to 150 ml/min or better
- Flow accuracy should be ±1 %.
- Flow precision should be ≤ 0.1 % RSD.
- Back pressure should be maximum upto 6000 psi.
- Solvent select valve to increase system flexibility
- Auto prime for ease and speed of start-up
- One Additional Pump for dilution. With flow rate from 0.01ml/min to 10 ml/min or better with increments of 0.1ml/min

#### **Auto sampler and Fraction collector:**

Single open bed Injector and fraction collector with separate analytical and prep injector, flexible sample injection and collection tubes

- The system should provide flexibility to mix match sample formats and allow for software customization of desired formats.
- Fraction collector can be operated through the software
- The sample injection carry over should <0.05%
- The analytical injection loop should 5, 20,50 and 100ul
- The prep injection loop 250,500,1000,2500 ul or more
- Preferably should have a recycle valve.
- Sample sandwiching: The sample in strong solvent should be separated from the weak solvent in the sample loop.

#### Column Holder:

Should hold both preparative and analytical columns simultaneously

#### **Column Organizer:**

The column organizer should provide unattended switching between analytical and preparative columns and their respective solvent flow rates and should be software controlled, Column selection and switching should be automatic and software controlled.

- Fully automated analytical and preparative flow path
- Automated 6-port valve switches between analytical and preparative flow path of PDA detection.
- Should accommodate 3 analytical and 2 preparative columns in the chamber.

#### PDA Detector:

• Wavelength Range : 190-700 nm or higher

Wavelength Accuracy : ±1nm
 Wavelength Repeatability : ±0.1nm

Photodiodes : Should be 512 or more

• Optical resolution : 1.2 nm or better

• Linearity range : < 5% at 2 AU, propylparaben at

257nm

Base line noise
Drift
10x10-6 Au, 10nm cell at 254nm
<1.0x10-3/Au/hr/°C, dry cell 254nm</li>

Data acquisition rate : Upto 80Hz.

• Flow Cell : Standard and preparative

• Light source : Deuterium lamp with 2000 hour life

warranty

#### Requirements for Analytical and Preparative HPLC

#### Columns:

 C-18 and silica columns for micro analytical, analytical, semi preparative and preparative applications

- Gel filtration, anion exchange and cation exchange columns for analytical and preparative analysis
- Necessary guard columns can be provided

#### Software:

- Original manufacturer's licensed software.
- Compatible to work on Windows XP operating system.
- Should have control on pump, column oven, detector, etc.
- Simultaneous monitoring at eight different wavelengths.
- Interactive control and display of solvent delivery
- All functions and features accessible from a single window-use the command bar to navigate
- Wizards to simplify and automate common system functions
- Methods instrument, processing and reporting parameters in one place
- Easy data collection and processing, data conversion to other formats, data export, report building/presentation.
- Should be able to perform custom calculations
- Diagnostic functions and configuration wizards
- Compliance with GMP/GLP and 21 CFR Part 11.
- Should have security of data, custom reporting.
- Upgradation of the software should be done free of cost.
- Extensive User help.

Computer, Printer and UPS								
HPLC compatible, preferably high end desktop computer systems with colour printers and additional cartridge.								
UPS	Capacity: As per instruments requirement.  Battery: Maintenance free battery with minimum backup of 60 min.							
Other Accessories								
Filtration assembly	Oil free vacuum pump for sample and mobile phase filtration. Complete solvent filtration assembly with 5 packs of 0.4 microns (45 mm dia) membranes.							
Syringes	Appropriate syringes should be included							
Other essential spares	Additional spares such as tubings, ferrules, connectors, wrenchers (2 sets), injector valves, bulbs, etc., should be included							

#### **Other Requirements:**

- Warranty of 5 years is required
- Validation to be done every six months from the date of installation.
- A written contract of good after sales service and technical support should be provided.
- The Vendor should have a good service and application support backup.
- Bidder should give compliance statement point wise showing /highlighting items part number/serial number as quoted in their quotation for comprehensive technical comparison.

**Note**: Models with higher/better specifications can also be quoted.

## TENDER DOCUMENT

**FOR** 

# Supply, Installation, Testing and Commissioning of Analytical & Preparative HPLC

#### **TENDER # NIAB/PUR/GLT/01/2012**



## **National Institute of Animal Biotechnology**

Visiting Scholars House, Lake View Guest House, University of Hyderabad Campus, Prof. C.R. Rao Road, Gachibowli, Hyderabad 500 046 (A.P.) India.

### PRICE SCHEDULE

SI.No	Description	Qty	Unit/Price (both in words and figures)	Total Price
1.	Supply, Installation, Testing and Commissioning of Analytical and Preparative HPLC	1.No.		

Sign. Of Bidder