



**PONDICHERRY UNIVERSITY
PONDICHERRY 605 014.**

TENDER NOTICE

The Registrar, Pondicherry University, invites Global Tenders in sealed covers in **two bid systems** for the supply and installation of “**High Resolution Electro Spray Ionization – Mass Spectrometer with Q-TOF configuration**”.

The tender schedule containing full details along with terms and conditions can be had from the Information Facilitation Counter, Pondicherry University, Pondicherry – 605 014 on payment of Rs.1000/- (Rupees one thousand only) by Demand Draft payable at Pondicherry in favor of the Finance Officer, Pondicherry University, Pondicherry – 605 014. The form and the schedule can also be downloaded from the website **www.pondiuni.edu.in** and the **DD as said above for tender form fees should be included. For further details visit the University Website.**

The last date for submission of tenders is: **Thursday, 22-03-2012, 3.00 PM and will be opened on the same day at 4.00 PM.**

Pondicherry

23.02.2012

REGISTRAR

PONDICHERY UNIVERSITY
Department of Chemistry
R. Venkataraman Nagar, Kalapet
PONDICHERY 605014, INDIA

SCHEDULE OF TERMS & CONDITIONS

Ref. No.: PU/CH/HOD/TENDER/ESI-MS/2012/

February 23, 2012

Subject: Supply, installation and commissioning, Training etc. of “**High Resolution Electro Spray Ionization – Mass Spectrometer with Q-TOF configuration**” (with specifications given in Annexure I).

01. Global tenders are invited in a sealed cover for supply of “**High Resolution Electro Spray Ionization – Mass Spectrometer with Q-TOF configuration**” having specifications as given in Annexure I.
02. Tender document/quotation must be submitted in sealed cover super-scribing thereon bidder’s name, Tender No., and name of the Item. This is to be dropped in the Tender Box placed at the Reception Counter, Pondicherry University, or sent by the Registered post/ courier service addressed to the Registrar, Pondicherry University, R. V. Nagar, Kalapet, Pondicherry 605 014, India positively before the tender bid closing time.
03. The Tender document must accompany an EMD of 2.5% of the total cost by means of a Demand Draft, drawn in favor of the Finance Officer, Pondicherry University, Payable at Pondicherry. The amount is refundable.
04. **Last date and time for submission of Tender : Thursday, 22-03-2012, 3.00 PM**
05. **Date & Time of opening of Tenders : Thursday, 22-03-2012, 4.00 PM**
06. Only original equipment manufacturers are permitted to quote against the requirement. Original equipment manufactures may, if they so desire, route their tenders/quotations through an authorized Indian agent. In the latter case, the tender must be on the Manufacturer’s letter head and duly signed by authorized personnel (with name and designation) of the original company (Not by the Indian agent).
07. The firm must have the requisite domain expertise with regard to supply, installation and post-sale service of the items they are quoting.
08. The firm should have been in existence for at least six years as on the date of this document and must have executed at least three orders for this kind of equipment during the last five years.

- 09. All equipment must operate at 230V/50 Hz single phase and / or equivalent three phase electrical power.**
10. The offer must be in English. The rates should be indicated both in figures and words against item specified in the given Annexure. It is preferable that the price be quoted in Rupees or in US Dollars.
11. The taxes / duties / discounts, if applicable, are to be explicitly and separately shown in the bid and under no circumstances these components shall be added to the basic price and shown as single price. All the components of taxes, if applicable, should be shown explicitly and separately.
12. **The total cost should be quoted for FOB (ex-port, Chennai, India) as well as CIF-Pondicherry, India.**
13. The prices quoted shall remain firm until equipment is supplied to the Pondicherry University.
14. **The validity of each quotation should be at least 120 days from closing date of the bid.**
15. The offers will not be considered if received after the bid closing date and time.
16. The offers received through telex / telefax / e-mail will not be accepted by the university under any circumstances.
17. The university shall not be responsible for delay / loss or non-receipt of tenders by post / courier service.
18. No unsolicited correspondence shall be entertained after the submission of the offer.
19. If an order is placed with the firm, the purchase shall be governed by an agreement as per the University rules in force.
20. The University has been granted the benefit of part-exemption from the payment of the Central Excise Duty and Customs Duty by the Department of Scientific and Industrial Research (DSIR), India, vide their Notification No. TV/V/RG-CDE/164/2011 dt. 13-10-2011.
- in respect of**
- Scientific and technical instruments, apparatus, equipment including computers.
 - Accessories and spare parts of goods specified in (a) above and consumables.
 - Computer softwares, compact disks, CD ROM, Recording magnetic tapes, microfilms, micro-chips etc.
 - Prototypes.
- Customs duties at Indian port, if any, will be to the account of the University.

21. Infra-structural, power and any other requirement for satisfactory installation and commissioning of the whole system, including room preparation, must be provided, at least 30 days in advance of the installation to be commenced. All drawing for electrical connections, electrical safety items piping work etc. must be provided in detail.
22. Complete technical specifications and literature, including process flow, to be included with the quotation. Manufacturers of various major parts/equipment must be mentioned explicitly.
23. A clear statement regarding availability of after-sales service and availability of spare-parts for next 10 years should be included.
24. Please give a recent customer list (within last five years) with contact details including email address.
25. If you have an authorized representative in India, you are requested to inform his technical ability to take care of the problems in the system, if developed later within the warranty and outside the warranty period. The responsibility of the Indian agent must be clearly specified.
26. The bidder from abroad shall obtain, if required, export permission from the appropriate authorities in his country or the country of origin for items to be shipped to India in case of items to be imported. The University shall provide necessary information if required for this purpose.
27. The bidder from within India shall obtain the requisite approval for Imports etc., if required.
28. Additional terms and conditions can be incorporated by the University, if necessary, in the purchase order to safe guard the interests of the University.
29. Tender is not transferable.
30. Pondicherry University reserves the right to accept / reject any offer in full or in part or accept any offer other than the lowest offer without assigning any reason thereof. Any offer containing incorrect and incomplete information shall be liable for rejection.
31.
 - i) Either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself bid for this tender advertisement but both cannot bid simultaneously for the same item/product in the same tender.
 - ii) If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.

32. **Warranty:** The material covered under the purchase order, when installed, shall be warranted for the quality, workmanship, trouble free operation and performance for a period of **at least 36 months from the date of putting the system into operation** at the Pondicherry University, or at least 30 months from the date of receipt of the last lot of the consignment in India.

If any item covered under warranty fails, the same shall be replaced free of cost including all the applicable charges including shipping cost both ways.

33. **Payments terms:** Normally a letter of Credit will be opened for 100% FOB price on receipt of order acknowledgement, however, 90% of the LC amount will be paid on proof of the shipment of the consignment with necessary documents to be detailed at the time of placing of the purchase order.

Balance of 10% of the LC amount shall be made after satisfactory installation and commissioning and against submission of the Installation & Commissioning certificate, duly accepted by the purchaser, and **a performance bond of 10% of the total contract / purchase value in the form of bank guarantee (obtained from Nationalized Bank of India) for the duration of the Warranty period.**

Bank charges in India shall be borne by the purchaser and outside India shall be born by the contractor / supplier.

34. In case of any dispute in respect of the tender, all legal matters shall be instituted within the jurisdiction of Puducherry.
35. No Agency commission will be paid to any authorized agent in India.
36. **Liquidated damages:** Timely supply of the ordered items, installation, commissioning (wherever is applicable) and training etc. is the essence of the contract. In case of failure to supply within the time specified in the Purchase order, a penalty/LD of 0.5% of the total value per week or a part thereof shall be levied subject to a maximum of 7.5% in respect of items which are not supplied. The decision of Pondicherry University shall be final in this regard.
37. For any clarification with respect to technical specifications, please contact the following faculties at Department of Chemistry, Pondicherry University.

Dr. Bidhu Bhusan Das	+91-413-2654413	das_b_b@yahoo.com
Dr. Bala. Manimaran	+91-413-2654414	balamanimaran@gmail.com
Dr. C. R. Ramanathan	+91-413-2654416	crram1@gmail.com

Fax: 0091-413-2656740

Annexure I

**Global Tender Notification No.: Ref. No.: PU/CH/HOD/TENDER/ESI-MS/2012/
Dt: February 23, 2012**

For the Supply of

High Resolution Electro Spray Ionization – Mass Spectrometer with Q-TOF configuration

SPECIFICATIONS WHICH MUST BE MET BY THE INSTRUMENT & ACCESSORIES.

Specifications for “High Resolution Electro Spray Ionization – Mass Spectrometer with Q-TOF configuration”

High Resolution Electro Spray Ionization – Mass Spectrometer with Q-TOF configuration for the analysis and identification of inorganic and organic molecules, organometallics, supra-molecules and polymers with the following capabilities / features is required.

I. Electro Spray Ionization – Mass Spectrometer with Q-TOF configuration

01	Ion Source	1. Dual orthogonal (ESI) Source 2. Cone Cleaning without Breaking the Vacuum
02	Ionization Mode	1. ESI and APCI multimode ion source 2. Atomic Pressure Photo Ionization (Optional) A combined ESI /APCI mode is preferable which permits switching between the two ionization modes. Source must be capable of working in an online manner with the LC as well as through the integrated syringe pump.
03	Mass Accuracy	2 ppm (internal) or better 5 ppm (External) or better
04	Mass Stability	Better than 2mDa over a period of 6 hours and above
05	Mass Range	Low mass 50 m/z or better Quadrupole Isolation 3000 m/z or better (Singly Charged) TOF mass range 20000 m/z or better.
06	Mass Correction	Capable of internal mass correction for MS and MS/MS operation without loss of sensitivity.
07	Acquisition Rate	20 Hz (minimum 2.0 GHz) or better or 30 Spectra/second or better

08	Dynamic Range	5 order of magnitude or better
09	Resolution	20000 FWHM or better
10	Vacuum System	A fully protected air cooled vacuum system with minimum maintenance and utility. The vacuum system with low noise using turbo molecular pump and oil free rotary pump possessing automated vent system has to be quoted.
11	Gas cylinders	Gas cylinders with good quality regulators for the function of MS (for MS/MS Operation) equipment have to be quoted
12	Polarity Switching	System should be capable of performing polarity switching during the experiment i.e. Positive and negative ion detection.
13	MSⁿ Capability	≥ 2
14	Other input source options	1. Direct injection mode (Syringe pump) 2. Direct solid infusion mode (capable of analyzing the air/moisture sensitive organometallic samples) – (Solid probe)
15	Gas Generator	A suitable extremely low noise and vibration free imported nitrogen gas generator with built-in air compressor.
16	Software's	System should be supplied with instrument controlling software with which MS & LC can be controlled individually and together. Software should have following capabilities 1. Automated tuning & Calibration. 2. Complete System diagnostic. 3. De-convolution of multiple charge species. 4. Methodology development software will be preferable. 5. And other standard software.
17	Data System	<ul style="list-style-type: none"> • Computer should be supplied with latest configuration data system. • 21 inch flat panel LCD monitor. • Latest laser jet printer should be quoted. <p>Please specify the system configuration, make & model number.</p>
18	Accessories and Spares	All the accessories required for making the system operational. Spares and accessories for the MS System with itemized list for 3 years after warranty should be quoted. (Please provide list)

19	Specification Sheets	Detailed Specification sheets for MS system and gas supply system with substantiation of technical claims should be provided along with the quotation.
20	Compliance Statement	<i>A compliance statement with this technical specification list should necessarily accompany the quotation without which the quotation will be deemed incomplete.</i>
21	Warranty and service details	3 Years complete warranty for the all units and accessories of MS, HPLC, GAS GENERATORS and COMPUTER etc.
		In addition 2 years free service without spares for the MS, HPLC, GAS GENERATORS and COMPUTER etc.
		Service facility in India: Supplier should clearly mention about their service set up in India for prompt service support along with number of service engineers specially trained on the offered system.
22	UPS	Suitable UPS for the MS, HPLC and COMPUTER with >2 hours backup should be quoted. Separate UPS for Nitrogen gas generator must be quoted.
23	Air conditioner	Two 1.5 ton Split Air Conditioners
24	Training	Proper training should be provided on-site to the students, staff and faculty with free of cost.
25	Manual	Entire set of instruction, operation and service manuals should be provided.
26	Annual Service Contract:	Annual service contract should be quoted along with the price bid separately.
27	Pre-Installation requirement: Necessary pre-installation advice should be sent immediately after the placement of the order. Infra-structural, power and any other requirement for satisfactory installation and commissioning of the whole system, including room preparation, should be quoted separately. All drawing with necessary electrical connections, electrical safety items piping work etc. should be included in the quote.	

II. Liquid Chromatography

1. Binary pump (High pressure mixing) with online vacuum degasser, standing pressure 8000 psi or better.
2. Flow rate : 0.01 – 5ml/min
3. Flow precision : ± 0.1% RSD
4. Flow accuracy : < 2%

5. Detectors
 - a. UV –VIS Detector
 - b. Wavelength range - Complete UV-VIS range
 - c. Light source - Deuterium and / or Tungsten
 - d. Noise - $\pm 0.35 \times 10^{-5}$ AU, dry cell 254 nm
 - e. Drift - $< 2 \times 10^{-4}$ AU/hr.
 - f. Linearity - $< 5\%$ at 2.5 AU
 - g. Band width - 5 nm
 - h. Flow cell - 10 :1
 - i. Accuracy - ± 1 nm
 - j. Reproducibility - ± 0.1 nm
6. Additionally the following spares should be included
 - a. HPLC Pump Seal 4 Nos.
 - b. HPLC Pump Inlet AND Outlet check valve 4 nos.
 - c. Solvent filters 0.2 μm (47 mm) – 5 Packets
 - d. Line Filters 2 Nos.
 - e. HPLC column C-18, 3.0 mm x 150 mm, 3 μm , 5 Nos.
 - f. HPLC column C-6-phenyl, 3.0mm x 150mm, 3 μm , 2 Nos.
 - g. Guard Column holder 2 Nos
 - h. Guard Column Cartridge 20 Nos

OPTIONAL ITEMS:

1. Column oven from RT – 80 °C or better.
2. PDA detector.
3. Lamp for PDA 2 Nos.
4. Auto sampler

Detailed Specification as well as price for each item with substantiation of technical claims should be provided along with the quotation.

Tender committee reserves its right to select or reject any or all of the items mentioned above without assigning any reasons. Price must be quoted separately for each individual item listed above, as far as possible.