

C E N T R E O F P L A S M A P H Y S I C S
Nazirakhat, Tepesia, P.O. Sonapur, District - Kamrup, Assam (India).
Pin Code - 782402

Phone : 0361-2160616, 09435552042 ; Fax : 0361-2365064 ; Email: cppmail@rediffmail.com

TENDER DOCUMENT
CPP/277/IPP-IPR/DPD/2007-08/15, Dtd. 25.01.2008

NAME OF WORK
SUPPLY OF AUTOMATED LANGMUIR PROBE PLASMA DIAGNOSTIC SYSTEM TO
CENTRE OF PLASMA PHYSICS, SONAPUR, KAMRUP, ASSAM

C E N T R E O F P L A S M A P H Y S I C S
Nazirakhat, Tepesia, P.O. Sonapur, District - Kamrup, Assam (India).
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Phone : 0361-2160616, 09435552042 ; Fax : 0361-2365064 ; Email: cppmail@rediffmail.com

Ref: No.CPP/277/CPP-IPR/DPD/2007-08/15

Date : 25.01.2008

Detailed NOTICE INVITING TENDER for the work “SUPPLY OF **AUTOMATED LANGMUIR PROBE PLASMA DIAGNOSTIC SYSTEM** TO CPP, TEPESIA, SONAPUR, KAMRUP, ASSAM”, vide No. : CPP/277/CPP-IPR/DPD/2007-08/15, Dtd. 25.01.2008 issued to:

Shri/Smt./M/s

Address:

.....

.....

Chairman
Purchasing Committee.

CENTRE OF PLASMA PHYSICS
Nazirakhat, Tepesia, P.O. Sonapur, District - Kamrup, Assam (India).
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NOTICE INVITING TENDER

No.CPP/277/PPP-IPR/DPD/2007-08/15 Dtd. 25.01.2008

1. Director, Centre of Plasma Physics (CPP), Sonapur, Assam, PIN – 782402 invites tender from reputed original manufacturers or their authorized dealers for the **SUPPLY OF AUTOMATED LANGMUIR PROBE PLASMA DIAGNOSTIC SYSTEM** along with other accessories. Tender papers can be obtained from the office or through e-mail request to <cppmail@rediffmail.com>. The tender can be also downloaded from our website: <www.geocities.com/centre_plasma>. Completed quotation is to reach the office of the undersigned within 12.30 hrs on 19/02/2008.

Issue of Tender Document:	Up to 16:00 hours of 12.02.2008
Last Date and Time of Submission of Tender:	12:30 hrs. of 19.02.2008
Date of Opening of the Bid :	14:30 hrs. of 19.02.2008
Time of completion of the supply:	8 Weeks

Issue of Tender Document:

Tender documents will be issued on any working day during office hour within the last date of issue of Tender on payment of (non-refundable) Demand Draft / Banker's Cheque of Rs. 250.00 in favour of Director, Centre of Plasma Physics, payable at Guwahati, towards the cost of tender document. Tender papers may also be provided through e-mail on request made to the e-mail id <cppmail@rediffmail.com>. **In such case the cost of tender document should be submitted along with the tender.**

The issue of tender papers to a tenderer does not automatically mean that the tenderer is considered qualified for the price bid.

NOTE:

1. Full details and specifications of the items and general instructions to be followed regarding submission of tenders are indicated in the tender documents.
2. **Proof for fulfillment of eligibility criteria mentioned hereunder should be submitted along with the tender. If the tender is submitted without valid documents, CPP shall not consider your offer. Tenders received without proof of eligibility criteria are liable to be rejected.**
3. DD should not be prior dated to the date of advertisement.
4. **Those who have not obtained the tender document from institute's office may submit the prescribed tender fee keeping it in a separate envelope along with the tender.**
4. Tenders received without the prescribed tender fee will be rejected.
5. No request for the extension of due date will be considered.
6. Late/Delayed offers will not be accepted.
7. Tenders in a sealed envelope superscribing the envelope with the above tender no., date, due date and brief description of tendered item along with EMD for Rs.24,000/- by way of

Demand Draft from a nationalized/scheduled bank drawn in favor of Director, Centre of Plasma Physics and payable at Guwahati should be submitted to the office of the Director, CPP at the above address by 12:30 Hrs on 19th Feb., 2008. Tenders received upto 12.30 Hrs on 19-02-2008 will be opened on the same day at 2.30 p.m. in the presence of attending tenderers.

8. In the event of any date indicated above is a declared holiday, the next working day shall become operative for the respective purpose mentioned herein.
9. CPP will not be responsible for any delay/loss of documents in transit.
10. Tenders received without the details asked for including proof of eligibility for participating in the tender may not be considered.
11. Tenderers should furnish/enclose full technical details/literature, delivery period and confirm the terms and conditions attached with the tender.
12. The Director, CPP reserves the right to accept or reject any offer in full or part thereof without assigning any reason thereof.

Qualifying criteria:

- i. Tenderer must be manufacturer of reputed brands or their authorized dealer.
- ii. In case of manufacturers other than the ones mentioned above, and in case of all dealers irrespective of the brand, they
 - a. Must be based in India with full fledged office set-up with adequate technical staff for atleast the last 5 years.
 - b. Must have supplied similar type of systems to reputed organizations in India or abroad (attach copy of purchase order).
 - c. Dealers must enclose valid dealership certificate with the tender.

NOTE: Issue of tender documents does not mean that a tenderer is qualified to submit tenders. CPP's decision to consider as to whether a tenderer has met with the eligibility criteria will be final.

C E N T R E O F P L A S M A P H Y S I C S

Nazirakhat, Tepesia, P.O. Sonapur, District - Kamrup, Assam (India).

Pin Code - 782402

Phone : 0361-2160616, 09435552042 ; Fax : 0361-2365064 ; Email: cppmail@rediffmail.com

SPECIAL CONDITIONS OF CONTRACT

SECTION – I
SPECIAL CONDITIONS OF CONTRACT

1. The quotation and any order resulting from this tender/enquiry shall be governed by our conditions of contract and supplier quoting this tender shall be deemed to have read and understood the same in toto.
2. Where counter terms and conditions have been offered by the supplier, the same shall not be deemed to have been accepted by us, unless our specific written acceptance thereof is obtained.
3. **Tender Fee:** Tenders received without the prescribed tender fee will be rejected.
4. **Clarifications:** Any technical and commercial questions, information, clarifications, etc. that may be required pertaining to this tender/enquiry may be obtained from the purchaser before submitting the tender.
 - 4.1 Bids shall be complete in all respects and shall include properly filled in prices, other specifications, schedules, relevant drawings and catalogues as necessary alongwith the bid covering letter, all in duplicate.
5. **Quotation:** Your quotation superscribing our tender/enquiry No., date, due date and short description of item should be submitted to the office of the Director, CPP in sealed envelopes on or before the due date. The quotation should be included in two inner covers, as detailed below:
 - A. The first envelope, inscribed “Price Bid”, to contain the price-bid in a sealed cover.
 - B. The second cover, inscribed “Technical Bid” to contain the following:
 - i. Signed copy of terms and conditions.
 - ii. Proof for fulfillment of eligibility criteria & copy of previous purchase orders (if necessary).
 - iii. Printed (or electronic) brochure / multimedia presentations detailing the product features, preferably in colored graphics/animation/video.

Late and delayed quotations will not be considered. CPP will not be responsible for postal delays or any other delays in receipt of quotation. Envelopes received without tender number, date, due date and short description of item may be rejected. The quoted prices should be firm for a period of 90 (Ninety) days from due date for placing order. **CPP is not bound to accept the lowest rate(s).** CPP reserves the right to place order to one or more parties irrespective of whether the party is lowest or not. The scope of supply includes insurance and subsequent warranty by the Tenderer/Supplier.

6. **Specifications** Material should be offered strictly conforming to our specifications. Deviation, if any, should be clearly indicated by the supplier in their quotation. The supplier should also indicate the Make/Type number of the materials offered and catalogues, technical literature and samples, wherever necessary should accompany the quotation.
7. **Terms of prices:** Quotation should be submitted on do or delivery basis without extra charge wherever possible. The material is to be delivered at the institute. Break-up of price should be furnished. The quoted price should not be subject to price escalation for whatsoever reasons. The quoted price shall be firm, fixed and non-revisable during the validity/extended validity of purchase order/contract.
 - 7.1 Prices are required to be quoted according to the units indicated in the tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.
 - 7.2 Wherever options are specified in the tender documents, CPP reserves the right to accept any option/s irrespective of whether all the vendors have quoted for all the options or not. The decision of CPP in this regard will be final.

8. Tender should be free from correction and erasures. Corrections, if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amounts quoted in words and figures, amount quoted in words shall prevail.
9. **CPP shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portion of the quantity offered and the tenderers shall supply the same at the rates quoted.**
10. **Sales Tax etc.:** The percentage of Sales Tax/VAT, surcharge, if applicable, and other levies legally leviable and intended to be claimed should be clearly indicated in the tender. Where this is not done, no claim on these accounts would be admissible later. VAT, if applicable, will be paid by the institute.
- 10.1 **VAT Registration:** You may submit a copy of VAT Registration certificate along with your quotation (if applicable).
- 10.2. **Service Tax:** Wherever Service tax is applicable, it should be mentioned clearly. You may indicate percentage of service tax in your quotation.
- 10.3 **Excise Duty:** As per Govt. Notification No.10/97-Central Excise dated 1-3-1997, the purchaser is entitled for availing Excise Duty exemption at present. Excise Duty Exemption Certificate, wherever applicable, and as per rules will be issued at the appropriate time. Hence Excise Duty should not be included in the BID. However, prevailing percentage of Excise Duty may be indicated.
- 10.4 **Customs duty:** As per Govt. Notification No.51/96-Customs dated 23rd July, 1996, the purchaser is entitled for availing customs duty exemption. Customs duty exemption certificate, wherever applicable, and as per rules will be issued at the appropriate time. Hence customs duty should not be included in the BID. However, prevailing percentage of Customs duty may be indicated.
- 10.5 **Octroi:** CPP is situated in Kamrup District (Assam) and **hence Octroi is not applicable at present.**
11. **Delivery and Delivery Date: Delivery must be upto the institute at Nazirakhat, Sonapur, and all necessary clearance formalities such as customs clearance etc. (for imported items) should be taken care of by the supplier/vendor. Any expenses related to the clearance formalities must be clearly mentioned in the quotation and all necessary documents and money receipts/bill for the same must be provided at the time of delivery of the equipment for making payment on these expenses.** The supplier must indicate the firm delivery date by which the materials will be delivered & installed in the institute in working condition by them from the date of our order. In case of failure of the supplier to deliver the items within the stated delivery period, the contract will be cancelled wholly or in part and the earnest money will be forfeited.
12. **Earnest Money Deposit (EMD):** Tenderer should furnish EMD for Rs.24,000/- by way of Demand Draft from a nationalized/scheduled bank drawn in favour of Director, Centre of Plasma Physics payable at Guwahati along with the quotation. **Tender received without EMD will not be accepted.**
- 12.1 EMD of unsuccessful Bidder will be returned after finalizing the contract/placing purchase order.**
13. **Payment:** By Letter of Credit for suppliers from abroad and their representatives/agents in India and within 30 days by Bank Draft from the date of acceptance of items for suppliers from India.
14. For suppliers within India, no correspondence will be entertained within 30 days from the

- date of receipt of items and bills, whichever is later.
15. **Quotation should be valid for at least for 90 (Ninety) days from the date of opening of the tender.**
 17. **Guarantee/ Warranty:** The system must be under complete cover (parts + labor) for at least two years. The repair calls must be addressed the same day/ next business day. **For defects noticed during the guarantee/warranty period, replacement/ rectification must be arranged free of cost within a reasonable period of such notification.**
 18. **Liquidated Damages:** Liquidated Damages for the delay shall be 1/2% (half percent) of the total order value for the delay of each week in the scheduled time of supply or the scheduled date of final completion for the work as the case may be, subject to a maximum of 5% (five percent) of total order value. Liquidated Damages will be recovered from the payment due to the supplier.
 19. **Performance Bank Guarantee:** The tenderer/supplier will have to furnish to the purchaser (CPP) an interest free performance bank guarantee for 10% (Ten percent) of the order value/ contract value by demand draft or by way of providing a bank guarantee from a nationalised/scheduled bank valid for a period of 24 months/guarantee (warranty) period mentioned in the order from the date of installation/acceptance for satisfactory performance of the items supplied by the tenderer.
 20. The tenderer shall at all times indemnify the purchaser against all claims which may be made in respect of the stores/material/goods/equipment for infringement of any right protected by patent registration of design or Trade Mark and shall take all risk of accidents or damage, which may cause failure of supply from whatever cause arising and the entire responsibility for sufficiency of all means used by him for the fulfillment of the contract.
 21. **Jurisdiction:** The contract/purchase order shall be governed by the Laws of India for the time being in force. The Courts of Guwahati only shall have jurisdiction to deal with and decide any legal or dispute arising out of this contract.
 22. **Settlement of disputes:** Any disputes or difference arising out of or in connection with the contract/purchase order shall be to the extent possible settled amicably between the parties. If amicable settlement cannot be reached then all disputed issues shall be settled by arbitration.
 23. **Arbitration:** In the event of any dispute or difference arising under this contract, the matter shall be referred to the arbitrators one each nominated by the purchaser and tenderer from their respective organizations. In case the said arbitrators are not able to settle the dispute by themselves, the matter shall be referred to the arbitrator mutually nominated by the purchaser and the tenderer and whose decision will be final and binding on both the parties. The venue of arbitration will be CPP subject to as aforesaid the Arbitration Act, 1940 and the rules thereunder and any statutory modification thereof for the time being in force shall be deemed to apply to the arbitration proceedings under this contract.
 24. **Permits and Licences:** The Tenderer shall secure and pay for all permits and license which he may require to comply with in respect of all laws, ordinances and regulations of the Government or Public Authorities in connection with the performance of his obligations under the contract. The successful tenderer shall be responsible for all damages and shall indemnify and save the purchaser harmless from and against all claims for damages and liability which may arise due to his failure to comply with what is stated above.
 25. **Operation/Instruction Manual:** Where operation/instruction manual is essential to enable the purchaser to put the system to proper use, the successful tenderer shall furnish such operation/instruction manual along with the supply.
 26. **Test Certificate:** Wherever required, test certificates should be sent along with the despatch documents.

27. **Secrecy:**
27.1 All information, drawings, designs and specifications imparted to the bidder/successful tenderer shall, at all times, remain the absolute property of the purchaser, the bidder/successful tenderer shall not use them for purposes other than for which they are provided for and shall treat all these documents as confidential. These shall not be reproduced in whole or in part for any other purpose.
27.2 The tenderer shall use his best endeavors to ensure that such information are not divulged to third parties except where needed for the performance of the contract by the successful bidder with the prior consent of the purchaser. In such cases, the successful tenderer shall ensure and obtain similar obligation of confidence, from third parties in question.
28. **Indemnity:** The tenderer shall warrant and be deemed to have warranted that all stores supplied against this contract are free and clean of infringement of any patent, copy right or trade mark and shall at all times indemnify the purchaser against all claims which may be made in respect of the stores for infringement of any right protected by patent, registration of design or Trade Mark and shall all risk of accidents of damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfilment of the contract.
29. **Counter terms and conditions of Suppliers:** Where counter terms and conditions printed or cyclostyled conditions have been offered by the supplier, the same shall not be deemed to have been accepted by the purchaser unless specific written acceptance thereof is obtained.
30. **Installation/commissioning/site works:** Wherever these activities are part of scope of work/specifications, tenderer is to carry out the same **without any extra cost to CPP.**
31. Late/delayed tenders will not be accepted. Incomplete tenders may be rejected at the discretion of CPP.
32. **CPP is not bound to accept the lowest tender. CPP reserves the right to select any tenderer at its sole discretion, or to reject all the tenders.**
33. **Result of the tenders:** Unsuccessful tenderers will not be informed of the result of their tenders.
34. The Director, CPP reserves the right to accept or reject any quotation/tenders fully or partly without assigning any reason.

We agree to the above terms and conditions.

Place:

Signature of Bidder with seal

Date:

Note: A copy of our terms and conditions duly signed should accompany your quotation.

CENTRE OF PLASMA PHYSICS

Tepesia, Sonapur - 782 402, Kamrup, Assam (India)

Phone : 0361-2160616, 09435552042; Fax: 0361-2365064; Email: cppmail@rediffmail.com

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS

Scope: This specification governs the technical details of components used in the Automated Langmuir probe plasma diagnostic system.

Specifications for the Automated Langmuir probe plasma diagnostic system.
<p>Must be able to measure following plasma parameters: Ion & Electron Densities over the range $5 \times 10^8 \text{ cm}^{-3} - 10^{13} \text{ cm}^{-3}$ Electron Temperature over the range 0.05 eV to 10 eV Plasma Potential Floating Potential Debye length EEDF over five orders of magnitude</p> <p>Desirable measurement capabilities: Corrected Ion Flux Uncorrected Ion Flux Ion Current</p>
<p>General requirements: Capability to work atleast upto vacuum – 1×10^{-7} Torr Probe voltage scan range – Atleast -100 V to +100 V and must have provision to adjust the voltage from 0V to +100 V and 0 V to -100 V. Probe current scan range – Atleast 10^{-4} A to 1 A Ability to use in both pulsed (atleast 100 KHz) as well as non pulsed plasmas where the probe must be able to measure the plasma parameters continuously.</p>
<p>Resolution: Probe voltage – 25 mV Probe current – 0.1 μA</p>
<p>The specification for the Acquisition Electronics are: Minimum resolution – 12 bits Fastest sample time – Atleast 15 scans/second Acquisition system bandwidth – Atleast 1 MHz. Atleast two data channels – Probe current & reference voltage Sampling Rate – Atleast 75,000 samples per second Trigger pulse frequency – Atleast 100 KHz System response time – 0.5 microseconds or lower with RF compensated probe and 0.375 microseconds or lower with uncompensated probe.</p>
<p>Langmuir probe: Tip Material – Tungsten Tip Length – Not more than 10 mm Tip Diameter – Within 0.1 mm to 0.3 mm</p>
<p>Langmuir Probe movement system: Complete specifications and cost of two probe movement systems must be quoted as given below.</p> <ol style="list-style-type: none"> 1. Automatic linear movement system having movement capability of minimum 10 centimeters and maximum 30 centimeters of the probe tip within plasma and matching with the above probe system must be provided. Stroke – 300 mm; Speed – Atleast 10 mm/second; Accuracy – +/- 1 mm. 2. Manual linear movement system having movement capability of minimum 10 centimeters and maximum 30 centimeters of the probe tip within plasma and matching with the above probe system must be provided.
<p>NOTE: Out of the above two systems, only the one which meets our budget and specifications will be purchased.</p>

Mounting flange:

The mounting flange of the probe system must match the specifications given in the last page of this tender.

Minimum Personal Computer (PC) specifications with which data can be acquired from probe system:

PC/Laptop – Pentium 166 MHz or higher

Memory – 16 MB RAM

Software – Windows 98 – XP

PC interface – RS 232

Note: It is expected that the Langmuir probe system will respond and function properly with a PC having the latest configuration and with Windows XP. If specific configuration PC, which is not available in common market, is required for the Langmuir probe system operation, then vendor should supply PC. Therefore vendor should quote for the PC with detailed specification. Otherwise PC will be provided by the buyer as per the specifications (provided in advance by the vendor) required for the equipment. In that case vendor should install and commission the probe with the PC.

Note: If the product uses components other than specified in this document, then these must be clearly indicated, with a comparative analysis indicating advantages of the used component with the one suggested in this document.

Place:

Signature of Bidder with seal

Date:

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TENDER DOCUMENT

CPP/277/CPP-IPR/DPD/2007-08/15, Dtd. 25.01.2008

PRICE BID

(To be enclosed in a separate sealed cover)

NAME OF WORK:

**“SUPPLY OF AUTOMATED LANGMUIR PROBE PLASMA DIAGNOSTIC SYSTEM
TO CPP, TEPESIA, SONAPUR, KAMRUP, ASSAM”**

SECTION – 1

Instruction to tenderer

1. This document (Price-Bid) shall be duly filled up, signed on every page and submitted within the due date & time prescribed in the notice. The Price Bid shall be submitted in a separate sealed envelope.
2. Price bid should be submitted for the entire system together with optional features. Price bid submitted for a part of the work is liable to be rejected.

SECTION – 2

Proposal Particulars

1. Name & address of the tenderers:

2. Tenderer's proposal no. :

3. Terms of payment sought:

4. Total Amount of the tender:

Rs. _____

(Rupees _____)

Date :

(Signature of the tenderer)

SECTION – 3

Bill for supply of Automated Langmuir probe plasma diagnostic system with linear drive unit.

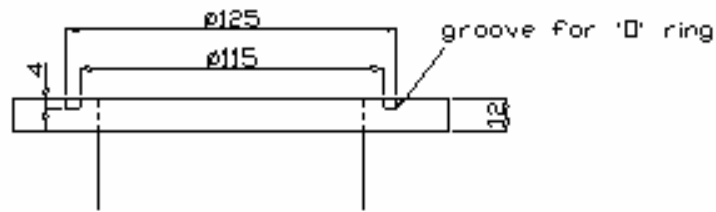
Sl No	Item	Qty	Rate in figure (Rupees)								Total Amount in Words (Rupees)	
			Cost	CST	Excise duty	Customs duty	Frt. Charge & Transit Insurance	Service Tax (if any)	Any other charges	All inclusive		
01	Automated Langmuir probe plasma diagnostic system	02										
02	Automatic linear drive unit	02										
03	Manual linear drive unit	02										
04	Personal Computer (If applicable)	02										

We hereby agree that if any discrepancy exists between the amount quoted in figure and words, the lower price will prevail.

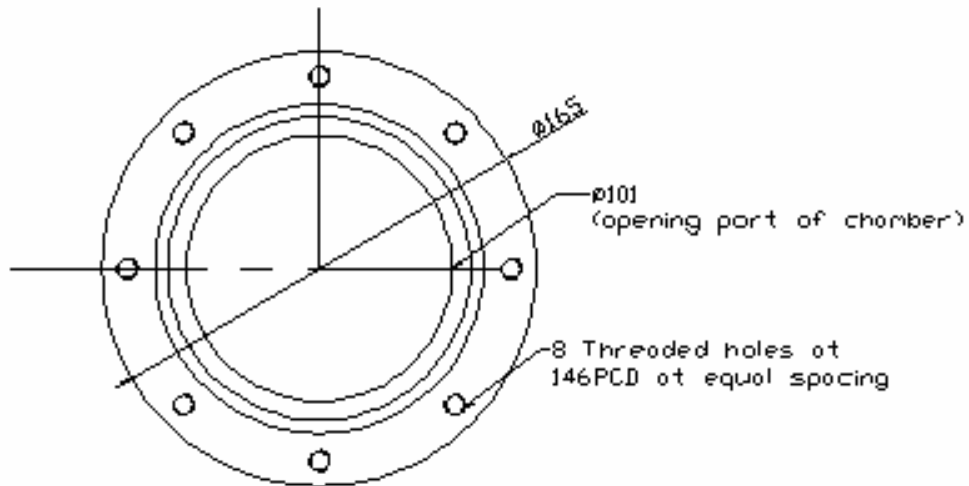
Place:

Date:

Signature of Bidder with seal



Elevation



Plan

Opening of the chamber

All dimensions are in mm