TENDER DOCUMENT FOR

Aerosol Mass Spectrometer (AMS) Upgrade of Aerodyne Research Inc. Make

Reference No.: IITK/NAF/TENDER/2022-23/20

Start Date: 15/2/2023 Closing Date: 28/2/2023



TENDER DOCUMENT

Sealed quotations are invited for Aerosol Mass Spectrometer (AMS) Upgrade of Aerodyne Research Inc. Make

The envelop must be super-scribed by **Name of Tender, Tender Reference number and bid submission end date**. Only bids from dealers authorized by Aerodyne Research Inc. will be entertained.

The detailed specifications and address for bid submission is given below:

Name of Work	Aerosol Mass Spectrometer (AMS) Upgrade of Aerodyne Research Inc. Make	
Date of Publishing	15/2/2023	
Bid Submission Start Date	15/2/2023	
Last Date and time of submitting ,	N/A	
EMD (Earnest money deposit).		
Bid submission End Date	28/2/2023 17:00 hours	
Bid Opening (Date & Time)	01/3/2023 10:00 hours	

1. Scope of work:

The supplier authorized by Aerodyne Research Inc. should upgrade the existing Aerosol Mass Spectrometer per specifications mentioned in table below.

Sl. No.	Description of work
1	TPS1 to TPS 2 upgrade (incl. replacement cabling and installation)
2	Data Acquisition Computer upgrade
	(i) Windows operating system
	(ii) Complete install of all ToF-AMS data acquisition software
	(iii) Includes USB National Instruments device
3	ADQ1600 Analog to Digital Converter
	(i) Requires data acquisition computer
	(ii) 14-bit USB3 Analog to digital converter
	(iii) Event trigger (single particle) firmware
	(iv) block averaging firmware for ePToF system
4	Encoded particle Time of Flight (ePToF) module
	(i) Requires ADQ1600 Analog to Digital Converter
	(ii) Vacuum mounted beam modulation chopper with single and multi-slit patterns
	(iii) Chopper control electronics. PID control of chopper rotation speed.
	(iv) Data analysis routines, including deconvolution algorithms
5	Agilent to Pfeiffer pumping system conversion
	(i) Replace all Agilent pumps with Pfeiffer HiPace 300 and HiPace 80
	(ii) Reconfigure all vacuum plumbing
	(iii) Replace AMS pump control and heater control electronics
6	MCP replacement
7	Recommissioning of AMS
	(i) Installation of all upgraded components
	(ii) Instrument cleaning
	(iii) Complete leak checking of instrument
	(iv) Instrument tuning
	(v) Flow, velocity and ionization efficiency calibration



2. Expected minimum requirement of expertise with the supplier:

- a. The agency should have expertise in executing similar projects for Government and other reputed organizations.
- b. The agency is required to submit a consolidated list and supporting project completion certificates/work orders issued from the Government and other reputed organizations they have worked with on similar assignments.

3. Contact Information:

Prof. S. N. Tripathi Coordinator National Aerosol Facility (NAF) Engineering Science Building 1 (ESB-1) Indian Institute of Technology Kanpur,

Kanpur – 208016, Uttar Pradesh, India

No telephonic queries will be entertained. Only written or email queries will be entertained.

Applicants will submit their bids with all relevant enclosures in sealed cover clearly marked "Aerosol Mass Spectrometer (AMS) Upgrade of Aerodyne Research Inc. Make", so as to reach Prof. S. N. Tripathi, National Aerosol Facility, IIT Kanpur, UP – 208016, on or before 28/02/2023, 17:00 hours. Any delay on account of courier/post etc. shall not be entertained by the Institute.

4. HOW TO APPLY

The documents as listed below (but not limited to) should be submitted in sealed envelope.

Enclosures

- a) Covering letter
- b) Authorization letter from Aerodyne Research Inc. to execute this work
- c) Affidavit for registration of firm/company
- d) An undertaking of not being black listed
- e) Organization structure
- f) Details of In-house services
- g) The copies of valid registration/incorporation certificate of the firm(s) along with the copies of relevant documents.
- h) The supplier should attach a consolidated list and work experience certificates/work orders as per the requirement of minimum qualification criteria.
- i) Copy of the audited balance sheets for the last three financial years.
- j) Income tax returns of last three financial years certified by a charted accountant.
- k) Declaration for Made in India products per Special Terms under sl.no.9 (9) in this tender (if applicable).

5. Please note:

- 10.1 Incorrect, incomplete, inadequate information may lead to rejection of the application. Canvassing in any form may lead to summarily rejection of application.
- 10.2 Applicants shall submit self-attested copies of certificates, work orders, appointment letters, agreements, references etc. as proof of eligibility.



10.3 IIT Kanpur reserves the right to reject any application without disclosing the reasons.

10.4 IIT Kanpur also will not provide any explanation to the applicants related to the short listing and selection process. The decision of IIT Kanpur in this respect shall be final and binding on all applicants.

6. Validity of Bid

The Bid should be valid for 90 days from the date of submission.

7. Opening of Tender

The tender document will be opened on 1/03/2023, 10:00 hours in the presence of the representatives of the applicant, carrying authorization letter for the purpose. A maximum of two representatives will be allowed to attend.

8. ELIGIBILTY CRITERIA

8.1. Technical criteria

- (a) The applicant should be an organization engaged in the related field of work.
- (e) The agency is able to submit project completion certificates issued from the Government and other reputed organizations they have worked with for projects. They must also be able to share references of 2 personnel they worked with.

8.2. Financial criteria

- (a) The Financial Proposal should be inclusive of all applicable taxes, duties, fees, levies, and other charges imposed under the applicable laws.
- **8.3.** The applicant who is barred or black listed by any Central/State Government in India will not be eligible for qualification.
- **8.4.** Even though an applicant may satisfy the above requirements, he/she would be liable to disqualification if he/she has:
- i. Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the prequalification document.
- ii. Record of poor performance such as abandoning work, not properly completing the contract, or financial failures / weaknesses etc.
- 8.5 The institute reserves the right to shortlisting of the agencies, subject to thorough verification of their credential and inspection of similar nature works carried out / in progress by them, through a Technical Committee of experts to be constituted by IIT Kanpur.
- 8.6 Persons who are individually or institutionally, in any manner, involved with the selection/ screening process of the tender and employees of IIT Kanpur, are ineligible for applying.
- 8.7 Joint venture will not be permitted in this tender.

STATE OF LEGISLES

Indian Institute of Technology Kanpur National Aerosol Facility

8.8 In case of partnership firm, the work experience, turn over and solvency shall be in the name of partnership firm only.

9. Special terms & conditions

- **9.1.** For expression of interest, Acceptance letter and Annexures shall be duly filled by the BIDDER(s).
- **9.2.** Bidder should note that this is Techno Commercial Tender to enlist interested parties and prepare them for future tendering process. Bidder should be sure that it is not the tender/request for proposal invitation.
- **9.3.** All the pages of the Documents submitted by bidder shall be signed by the permanent Employee/executives/Directors/managers etc., with name, Designation & seal of the Bidder Company on each page.
- **9.4.** The intending bidder must read the Techno Commercial Tender and conditions carefully.
- **9.5.** Bidders should only submit his expression of interest, if they consider themselves eligible in possession of all the documents required in Techno Commercial Tender.
- **9.6.** Bidder should provide a minimum warranty of 1 year.
- **9.7.** A scoring system for selected parameters will be used for comparative technical evaluation. The bidders will have to achieve a minimum score determined by IIT Kanpur.
- 9.8. Bidder will get all benefits under Rule 153 GFR-2017.
- 9.9. As per the Ministry of Commerce and Industry Order No. P-45021/2/2017-PP(BE-II) dated 04.06.2020 preference shall be given to Make in India products for which it is mandatory for bidders to declare Country of Origin of goods and percentage of Local contents in the product.

Definitions:

"Local Content" means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

"Class-I local supplier" means a supplier or service provider, whose goods, services or works offered for procurement, has local content to or more than 50%, as defined under this order.

"Class-II local supplier" means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined under this order.

STATE OF LEGISLES

Indian Institute of Technology Kanpur National Aerosol Facility

"Margin of purchase preference" means the maximum extent to which the price quoted by a Class-I local supplier may be above the L1 for the purpose of purchase preference. (shall be 20%)

10. Purchase Preference:

- (a) Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to 'Class-I local supplier' in procurements undertaken by procuring entities in the manner specified here under.
- (b) In the procurements of goods or works, which are covered by para 3(b) above and which are divisible in nature, the Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:
 - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is Class local supplier', the contract for full quantity will be awarded to L1.
 - ii. If L1 bid is not a 'Class-l local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-l local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-l local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-l local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-l local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-l local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-l local suppliers, then such balance quantity may also be ordered on the L1 bidder.
- (c) In the procurements of goods or works, which are covered by para 3(b) above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-1 local supplier' shall get purchase preference over 'Class-ul local supplier' as well as 'Non-local supplier', as per following procedure:
 - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-1 local supplier', the contract will be awarded to L1.
 - ii. If L1 is not 'Class-1 local supplier', the lowest bidder among the 'Class-1 local supplier', will be invited to match the L1 price subject to Class-1 local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-1 local supplier' subject to matching the L1 price.
 - iii. In case such lowest eligible 'Class-1 local supplier' fails to match the L1 price, the 'Class-1 local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-1 local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.
- (d) "Class-Il local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.



ACCEPTANCE LETTER AND ANNEXURES



TENDER ACCEPTANCE LETTER

(To be submitted on APPLICANT's Letter Head but letter head is not required if applying *as individual.*)

Tender No. Date:			
	acility Technology Kanpur, Uttar Pradesh, India		
Dear Sir,			
Sub: Tender is invior Aerodyne Rese	ted from the parties for A arch Inc. Make	xerosol Mass Spectro	meter (AMS) Upgrade
We, the undersigne	d, express our interest for	the subject tender and	d declare the following:
(a) We are duly a	authorized to represent an (name of the fir		
(b) We have examin	ned and have no reservati	ions to the Tender doc	_
Amendment No(s)	& Clarification No(s)		(if any).
	o your invitation for Ten	der dated	required
	escribed Annexures. ess our willingness to pa	rticinate in DED/forth	coming tander as and
when IIT Kanpur ir		rticipate ili Kr17 lortii	coming tender as and
-	or its authorized represe	ntatives are hereby aut	thorized to conduct any
· ·	<u> </u>	_	information submitted in
	s application and to seek		
· ·	will also serve as authori	<u>-</u>	
•		representative of any	institution referred in the
11 0	nt provided by Bidder. /or its authorized represe	ntativas may contact t	ha fallowing nodal
_	information on any aspec	•	ne following flodar
	miorination on any aspec	ts of the application.	
Name and designation of contact Person	Address for Communication	Telephone No	Email ID
CISUII			
	<u> </u>	1	<u> </u>
(h) This application	is made in the full under	estanding that:	

- (h) This application is made in the full understanding that:
- 1. Through this tender, IIT Kanpur intends to identify interested and capable parties to Installation and maintenance of atmospheric pollutant measurement sensors at various locations of Uttar Pradesh and Bihar, India by IIT Kanpur to support rural AQM'. This tender is not intended for empanelment of BIDDER or pre-qualification of BIDDER.
- 2. Tender process will be subject to verification of all information submitted at the



discretion of IIT Kanpur.

- **3.** IIT Kanpur reserves the right to reject or accept any or all applications, cancel/withdraw the Tender process without assigning any reason whatsoever and in such case, BIDDER shall not have any claim arising out of such action and security deposit shall be refunded.
- (i) We declare that we have read and abide by the provisions of Fraud Prevention Policy of IIT Kanpur and submit the form of Acceptance of Fraud Prevention Policy duly filled as per IIT Kanpur's format.
- (j) The undersigned declare that the statements made and the information provided in the duly completed application are complete, true and correct in every detail.

SIGNATURE (AUTHORISED SIGNATORY) (OFFICE STAMP)



ANNEXURE-1

(FORM FOR ACCEPTANCE OF FRAUD PREVENTION POLICY)

We have read the contents of Fraud Prevention Policy of IIT Kanpur displayed for the Techno Commercial Tender published on website and undertake that we shall strictly abide by the provisions of Fraud Prevention Policy of Indian Institute of Technology Kanpur.

SIGNATURE (A	UTHORISED SIGNATORY)	
(OFFICE STAMI	?)		
DATE:	NAME:	DESIGNATION:	
PLACE_			



ANNEXURE-2 (ANY OTHER INFORMATION)

If BIDDER desires to share any other additional Information relevant to the work / assignment like brochure, future plan or any suggestion, it may be given in this Annexure.