# वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्

Council of Scientific & Industrial Research

### राष्ट्रीय वांतरिक्ष प्रयोगशालाएं National Aerospace Laboratories



Dated: 23-Feb-2021

#### INVITATION FOR BIDS/NIT

#### Tender No. NAL/PUR/MSD/472/20-Y (AMC)

CSIR- National Aerospace Laboratories (NAL), Bengaluru, India is one of the premier laboratories under Council of Scientific and Industrial Research (CSIR), an autonomous body under Department of Scientific and Industrial Research, Government of India, New Delhi. CSIR-NAL is a Science and Knowledge based Research, Development and Consulting Organization. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

The Director, CSIR-NAL invites online quotation for procurement of the following item(s) for day to day research work.

SI.No.	Description of Items	Unit	Quantity
1	Annual maintenance contract (AMC) of CAMECA. Make: Electron Probe Micro Analyzer (EPMA). Model: SX 100.  Duration of AMC: 1 Year  Please refer annexure for detailed specification.	Nos	1

Single / Double Bid	Single	Tender Type	Open Tender	
Bid Security (EMD) (in INR)	Bid Security Declaration should be enclosed with quotation	Bid submission end date	15-Mar-2021 10.00 Hrs	
Performance Security	Nil	Bid opening date	16-Mar-2021 11.00 Hrs	

- Tender Documents may be downloaded from Central Public Procurement Portal https://www.etenders.gov.in. Aspiring Bidders who 01. have not enrolled/ registered in e- procurement should enroll/ register before participating through the website https://www.etenders.gov.in. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.
- Tenderers can access tender documents on the website (For searching in the NIC site https://www.etenders.gov.in, kindly go to 02. Tender Search option, select tender type and select 'Council of Scientific and Industrial Research' in organization tab and select NAL-Bengaluru-CSIR in department type Thereafter, Click on "Search" button to view all CSIR-NAL, Bengaluru tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website https://www/etenders.gov.in as per the schedule given in the next page.
- 03 Either the Indian Agent on behalf of the Foreign principal or the Foreign principal can bid directly in a tender but not both. However, the offer of the Indian Agent should also accompany the authorization letter from their principal. To maintain sanctity of tendering system, one Indian Agent cannot represent two different Foreign principals in one tender.
- Unsolicited / conditional / unsigned tenders (Quotations) shall not be considered. Quotations received after the due date and time shall be summarily rejected.
- The Bidder shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection. 05.
- The prospective bidders are requested to refer to the Standard Terms and Conditions available on NAL Internet 06. (www.nal.res.in) under the icon Tender-Purchase before formulating and submitting their bids
- The Director, CSIR- National Aerospace Laboratories, Bengaluru reserves the right to accept any or all the tenders either in part or in full or to split the order without assigning any reasons there for.

Sr. Controller of Stores & Purchase For and on behalf of CSIR

पी बी सं. 1779, एचएएल एयरपोर्ट रोड, कोडिहल्ली, बेंगलुरु - 560 017, भारत, P B No 1779, HAL Airport Road, Kodihalli, Bengaluru - 560 017, INDIA फोन / Phone: (का./ Off): +91 - 80 - 2508 6040 - 45, फैक्स / FAX: +91-80-2526 9611

## Annual maintenance contract (AMC) of Electron Probe Micro Analyser (EPMA) Model SX-100- Specifications

The scope of the work is as given below:

- 1. Two preventive maintenance visits during which the following needs to be carried out
  - (i) General maintenance
    - (a) Routine maintenance operations to be performed on the optics, vacuum, and column cleaning
    - (b) Complete check-up of electron beam and detectors parameters, namely, alignment, astigmatism and beam current regulation, BSE/SE detector quality check-up, optical alignment, and Z-focus mechanism control need to be performed. Corrective actions to be carried out if deviations are found.
  - (ii) Maintenance of vacuum system
    - (a) Changing of oil of the primary rotary vacuum pumps and exchange of alumina pellets
    - (b) Checking of vacuum gauges, valves etc., and corrections to be done if necessary
    - (c) Vacuum check-up after pumping over one night
  - (iii) Maintenance of Spectrometers
    - (a) Cleaning of optical encoders, counter arm, cleaning and lubrication of ball screw
    - (b) Checking of crystals orientation and their adjustment if needed
    - (c) Checking of PHA distribution and correction if needed
    - (d) Checking of Counter windows and replacement if necessary
    - (e) Optical encoders signals control and adjustment if needed
  - (iv) Maintenance of sample stage: cleaning of stage ball screws and its lubrication
  - (v) Cleaning and adjustments of air-lock system
- 2. Breakdown maintenance calls to be attended as and when necessary as per the following
  - (a) All the breakdown calls need to be attended within 4 working days
  - (b) The service engineer(s) need to provide the telephonic as well as email support throughout the period of contract for online trouble shooting
  - (c) Maintenance engineer need to examine the equipment to identify the problem, and undertake the repair. If any parts need replacement, the same has to be completed during the breakdown maintenance visit if the spare parts are available with CSIR-NAL. In case such spares are not readily available with CSIR-NAL, the AMC firm may arrange to supply the same at extra cost. If not,

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CSIR-NAL would procure the parts from OEM/OEM authorized firm. In such a case, the maintenance engineer needs to complete the repair work and make the equipment operational within 4 working days after procurement of spares.

- 3. The firms quoting for the AMC should fulfil the following criteria:
  - The firm should have completed AMC, or currently executing AMC of CAMECA make EPMAs (models SX-100 and/or SX-5) for at least one institute/organization (provide supporting documents such as copy of the AMC order/ letter from competent authority while submission of quotation)
  - The maintenance engineer of the firm should possess a minimum of 5 years of experience in maintenance of CAMECA-make EPMAs (Models SX-100 or SX-5)
  - The maintenance engineer(s) of the firm should have undergone training on maintenance of SX-100 or SX-5 models of EPMA by the OEM (CAMECA) engineers at OEM premises (provide copy of the Certificate of training while submission of quotation)

CSIR-NAL would provide the following support to the service personnel during the maintenance:

- The drawings and the circuit diagrams of the equipment will be made available for reference during the maintenance work
- Oscilloscope for checking of the optical encoders signals
- Basic tools supplied by the OEM with the equipment will be made available

The service personnel shall bring any other tools/measurement instruments required specifically for the maintenance/repair work of the SX-100 EPMA to CSIR-NAL during the maintenance visits.

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### **BID-SECURING DECLARATION FORM**

	Date:			
	Bid No			
To (inse	rt complete name and address of the purchaser)			
/We. Th	e undersigned, declare that:			
/We un	derstand that, according to your conditions, bids must be supported by a Bid Securing Declaration.			
	cept that I/We may be disqualified from bidding for any contract with you for a period of one year date of notification if I am /We are in a breach of any obligation under the bid conditions, because			
(a)	have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or			
(b)	having been notified of the acceptance of our Bid by the purchaser during the period of bid validity			
	(i) fail or refuse to execute the contract, if required, or			
	(ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.			
Bidder, ι	derstand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty er the expiration of the validity of my/our Bid.			
_	(insert signature of person whose name and capacity are shown) apacity of (insert legal capacity of person signing the Bid Securing Declaration).			
Name: (i	insert complete name of person signing he Bid Securing Declaration)			
Duly authorized to sign the bid for an on behalf of: (insert complete name of Bidder)				
Dated or	n day of(insert date of signing)			
Corporat	te Seal (where appropriate)			
Note:	In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the			

- Joint Venture that submits the bid.
- 2. Bid Security declaration must be signed in by the Proprietor/CEO/MD or equivalent level of Officer of the company.