# CENTRAL UNIVERSITY OF KARNATAKA

(Established by an Act of the Parliament in 2009)



Karnataka State

Phone (08477)-226776

Fax: (08477)-226703

Website: www.cuk.ac.in

Email: <a href="mailto:purchases@cuk.ac.in">purchases@cuk.ac.in</a>

No: CUK/Tender/2016-17/AFM/31

Date: 07 – 02 – 2017

## TENDER NOTICE FOR SUPPLY AND INSTALLATION OF ATOMIC FORCE

## MICROSCOPE - FIRST RETENDER

## (THROUGH E-PROCUREMENT MODE)

Online electronic bids are hereby invited for and on behalf of Central University of Karnataka, for supply, delivery, installation, and testing of **Atomic Force Microscope** for Central University of Karnataka (as per Annexure-1) as briefly described hereunder:

1.	Name of the Equipment	Supply and installation of Atomic Force Microscope (as per Annexure-1).
2.	Quantity	01 (One)
4.	Bid submission mode	Through e-Procurement mode on Central Public Procurement Portal (www.eprocure.gov.in/eprocure/app) Two packet system: Packet 1 -Techno-Commercial Bid and Packet 2 -Price Bid.
5.	Tender processing Fees Rs. 500/-  Earnest Money Deposit Rs. 75,000/-	Payable through Demand Draft drawn on any nationalized bank in favour of "Central University of Karnataka" payable at Kalaburagi. The DDs should be sent to "The Registrar, Central University of Karnataka, Kadaganchi -585367, Kalaburagi District" in sealed envelope by super scribing as "DDs for Atomic Force Microscope Tender". The DDs shall reach on or before the date and time of bid opening.  OR  Online payment  Account Number: 5109101000001  Bank: Canara Bank  IFSC: CNRB0005109  Bank Address:  Canara Bank,  Central University of Karnataka,  Kadaganchi – 585367  Kalaburagi district, Karnataka, INDIA  N.B.: Please send the details of online transaction towards payment of tender processing fee and EMD to the Email: purchases@cuk.ac.in
6.	Date and time of availability of bid document in the portal.	From 10.00 Hrs. of 10.02.2017 to 17.00 Hrs. of 02.03.2017
7.	Last date and time for submission of bids through portal.	17.00 Hrs. of 02.03.2017
8.	Date and time of opening technical bids	15.00 Hrs. of 06.03.2017

#### A. <u>Instructions to Bidders</u>

- 1. Bids are to be submitted online through e-Procurement portal of the Central Public Procurement Portal (CPP portal; https://eprocure.gov.in/eprocure/app).
- 2. Bids submitted offline will not be considered.
- 3. Bidders are instructed to read and understand the eligibility criteria and terms and conditions.
- 4. Tender processing fee and EMD is Payable through Demand Draft drawn on any nationalized bank in favour of "Central University of Karnataka" payable at Kalaburagi. The DDs should be sent to "The Registrar, Central University of Karnataka, Kadaganchi -585367, Kalaburagi District" in sealed envelope by super scribing as "DDs for Atomic Force Microscope Tender". The DDs shall reach on or before the date and time of bid opening.

**OR** throughOnline payment

Account Number: 5109101000001

Bank: Canara Bank
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Bank Address: Canara Bank,

Central University of Karnataka,

Kadaganchi – 585367, Kalaburagi district, Karnataka, INDIA

N. B.: Please send the details of online transaction towards payment of tender processing fee and EMD to the Email: purchases@cuk.ac.in

- 5. EMD of the unsuccessful bidders will be refunded / returned after opening the price bids and EMD of the successful bidder will be refunded after successful installation and testing.
- 6. To avail the concessions available to Micro and Small enterprises, bidders are instructed to upload, the registration certificate issued by NSIC.
- 7. Bidders are advised to submit the tender strictly based on the terms and conditions and specification contained in the Tender Document. Conditional bids will be summarily rejected.
- 8. Price bids of the only responsive bidders will be opened.

## B. Eligibility of the bidders

- 1. The bidder shall be registered company/firm.
- 2. Bids can be submitted by original equipment manufacturers or authorized dealers of Atomic Force Microscope.
- 3. The bidder shall not be black listed by any Govt./Semi Govt./Private Institution.
- 4. The bidder shall be free from the encumbrance and there shall not be any vigilance case/ CBI case/ Court Case pending againt the bidder.

- 5. The firm should be registered with the Income Tax, Sales Tax and other required statutory registrations.
- 6. The firm should have an experience of at least 3 years in supply of atomic force microscope.
- 7. Annual average turnover during the past three years (2013-14 to 2015-16) should be at least Rs. 1,00,00,000/-.
- 8. The bidder should enclose audited financial statements for the three financial years from 2013-14 to 2015-16 and income tax returns for three assessment years 2014-15 to 2016-17.
- 9. List of clients served highlighting Government organizations along with contact numbers and work order copies to be furnished.
- 10. The bidder should produce the evidence of supplying Atomic Force Microscope or Similar Equipment to any of the Government organization during the last two years 2014-15 and 2015-16.

#### C. Each Bidder shall upload the following digitally signed documents

#### Packet I

- 1. Scanned copy of duly filled Annexures I and II
- 2. Firm registration certificate, OEM / Authorized Dealership Certificate from OEM
- 3. Sales Tax Registration Certificate and PAN Card; and NSIC certificate to claim exemption of Tender fee and EMD
- 4. ITRs for the last three years from the Assessment Year 2014-15 to 2016-17
- 5. Audited Profit and Loss for last 3 financial years from 2013-14 to 2015-16.
- 6. Work orders/purchase orders to meet the eligibility requirements
- 7. Brochure/leaflet of the Atomic Force Microscope

#### Packet II

8. Scanned copy of duly filled Annexure III – Price Bid

#### D. Terms and conditions

- 1. Bids can be submitted directly from Original Equipment Manufacturers (OEM) or authorized sales agent.
- 2. Bidder should provide valid registration numbers pertaining to income tax, sales tax etc.
- 3. Incomplete bids will be summarily rejected.
- 4. Technical literature/brochures of the quoted model explaining all specifications including circuit diagrams should be enclosed with the quotation should be uploaded. Detailed operational manual (both electronic and printed versions) should be provided with the equipment. All the documents should be in English.
- 5. The supplier must provide guarantee that all the specifications being offered shall be demonstrated to conformity with the values in quotation while installation. The supplier must submit a table indicating the compliance of the features of the quoted model with those

- given in quotation (packet 1, Annexure -2). If any feature is not matching, it should be mentioned and explained.
- 6. Minimum **one year warranty** is required on the main equipment and accessories from the date of installation.
- 7. Spare parts should be supplied with the instrument.
- 8. Details of installation, commissioning and training of the equipment must be specified in the brochure or leaflet (could be mentioned in Annexure 1).
- 9. Installation and commissioning should be made by the contractor or its Indian representative. The Indian representative should have well proven service capability on similar systems and should have service engineers trained by manufacturer for after sale support. Details of the service support in terms of service centres with address and telephone number, service engineers with names and experiences, response time during warranty and afterwards should be provided with the offer.
- 10. Proper user training for operation and maintenance of the equipment should be provided at the time of installation.
- 11. Utility and installation requirements (Electrical power, cooling water, compressed air, etc.) should be clearly mentioned in quotation.
- 12. Price quoted should be CIF for delivery at CUK Campus, Kadaganchi, Kalaburagi District, including all taxes, customs duty (if applicable), transportation, installation and on-site training charges.
- 13. Documentary evidences of system performance should be provided along with the submitted technical bid.
- 14. The supplier should provide a list of users from Government institutions in India as well as from abroad. Confirmation of the claim should be supported by at least three users of specified model.
- 15. Quoted price should be valid at least for 90 days.
- 16. Time required for delivery after confirming order, should be provided.
- 17. EMD of the unsuccessful bidders will be refunded after opening the price bids.
- 18. The supplier shall provide security deposit of 10 percent of the total value of the contract either in cash or Bank guaranty for the warranty period.
- 19. The University reserves the right to postpone and/or extend the date of receipt or to withdraw the tender notice or not to place the order or to place order for part or full quantities without assigning any reason thereof at any stage of the tender. In such an event, bidders shall not be entitled to any compensation, in any form whatsoever.
- 20. Canvassing in connection with the tender is strictly prohibited and the bids submitted by such bidders indulging in such practices are liable to be rejected. CUK reserves the right to debar the firm for minimum one year as per the Company policy.
- 21. Any legal action taken or proceeding initiated on any of the terms of the agreement shall be only

in Kalaburagi jurisdiction.

22. If tender opening day happens to be holiday, the next working day will be treated as tender opening.

## E. Payment terms

- 1. For domestic companies, payment will be made after delivery and installation of item through Cheque or online transfer.
- 2. For foreign companies, payment will be made through one of the following options:
  - Irrevocable letter of credit (L/C) for 90 days. Name and address of company on whose L/C will be opened should be clearly mentioned.
  - ii. Electronic transfer after 30 days from the date of installation of item.

Registrar
Central University of Karnataka

#### Annexure I

#### **Technical Specifications for Atomic Force Microscope**

Central University of Karnataka wishes to procure atomic force microscope (AFM) with accessories. Original equipment manufacturers or authorized dealers can submit bids for supply, delivery, installation, testing and commissioning of AFM (as per specifications below) with a list of other accessories required for complete and smooth operation of the equipment. The technical offer should clearly include make and model number of the offered equipment.

## **Technical Specifications:**

#### 1. Operational modes with AFM:

Non-contact and Contact modes for Topography imaging, Phase Imaging, Lateral Force Microscopy (LFM), Electro Static Force Microscopy, Conductive AFM (or current – AFM), force – distance spectroscopy, Current-Voltage spectroscopy and force volume imaging.

**Liquid Imaging setup for Bio Samples:** A suitable liquid imaging setup consisting of liquid cell, sample holder (if required) and cantilever mount (if required) to be offered for imaging samples in liquid media. The liquid cell must be compatible for electrical measurements done by applying small voltage bias between the AFM tip and sample.

Other modes, which come as default modes with the offered instrument should also be mentioned.

The equipment must be compatible with standard universal cantilevers obtained from third party.

#### 2. Scanners and sample holders:

The scanners and sample holders must be for high resolution imaging. The XY (which moves horizontal directions in the XY plane) and Z scanners (which moves AFM tip the vertical direction) should be mechanically driven by piezoelectric materials for dynamic performance and stationary positioning.

Maximum XY scan range: 9-15  $\mu m$  or better for high lateral resolution. The XY scan resolution shall be better than 0.05 nm

Z scan range: 10-12  $\mu$ m. The resolution along the Z axis shall be better than 0.5 nm

**3.** Manual XY Stage: XY travel range of 1 cm X 1 cm or more.

# 4. Cantilever – Sample viewing:

AFM cantilever/probe and sample surface should be viewable on axis in real time via direct on-axis optics with high resolution CCD and video access.

#### 5. Controller electronics:

a) The controller must have high performance processing unit.

- b) Signal access ports must be provided to access AFM input/output signals (to monitor photodiode output (LFM signal not mandatory), to drive tip bias and sample bias and to feed analog signal from external devices).
- c) Auxiliary analog signal input port to feed analog signal from external devices
- d) The system should support high pixel density images up to ~4000 X ~4000 pixels or more
- e) Feedback frequency should be at least 500 kHz or better.

## 6. Computer and software:

- a) Appropriate computer loaded with compatible hardware and operating system for using the equipment (AFM) efficiently
- b) Dual monitors of size 23 inch or more
- c) Appropriate graphic card must be installed in the computer
- d) Software for data acquisition, image processing and data analysis must be provided

#### 7. Accessories:

- a) Acoustic enclosure
- b) Vibration isolation system
- c) 5 Nos. of cantilevers for contact mode (force constant: 0.2 N/m)
- d) 5 Nos. of cantilevers for non-contact mode (resonance frequency: 60-80 kHz)
- e) 5 Nos. of conducting cantilevers to be used in non-contact mode (resonance frequency: 60-80 kHz)

#### 8. Power and cable requirements

All the power and cable requirements and accessories must be suitable for use in India.

#### 9. Warranty:

The system must come with a warranty of one year or more.

# **10. Installation and training:**

The equipment must be installed at Central University of Karnataka and on sight training to use it must be provided.

Signature of authorized person			
Date:	Name:		
Place:	Designation:		
	Seal·		

## **Annexure II**

# Format of Tender Application and Declaration Form

1. Nan		Firm:			
a.	Comple	ete Postal Address:			
b.	Mobile	No.			
c.		one No			
d.	Fax No				
e.	E-mail	Id:			
2. Payı	nent deta	ils:			
	Sl. No.	Items	Tender Fee	EMD	
-	1	D.D. No. / Online transaction reference number			
	2	Amount (Rs.)			
-	3	Date			
_	4	Bank / Branch			
3 Date	of Ectab	olishment of Firm:			
		No. of Firm:			
_		lress of Branch / Sister Concern:			
		inization: (Proprietary / Partnership / HUF / Co			
		participating as Principal Manufacturer or Auth			
•		of any Government contracts executed during t			
	if necessa		ine last twelve inol	nens (acceen separate	
-		ing the compliance of the features of the quote	d model with those	e given in quotation.	
		is not matching, it should be mentioned and			
necess			· · (		
	• .	ed for delivery after confirming order:			
	1	-			
T 41	. 1	UNDERTAKING			
		ed certify on behalf of my / our firm that:	. 4		
a)		gone through the terms and conditions mention			
<b>b</b> )		e with all the terms and conditions mentioned in	the tender docum	ient.	
	b) The price quoted is for the entire period of contract.				
c)					
d)		ithin stipulated period, if I qualify in the tender		ier document/suppry	
۵)		he rights to the Central University of Karnatak		rnast Manay paid by	
6)					
	me if any delay occurs on my part or if I fail to comply to the terms and condition mentioned in the tender document.				
f)		is no vigilance/CBI case or court case pend	ing against my fi	rm nor is my firm	
1)		sted by any agency/department.	ıng agamst my m	iiii iioi is iiiy iiiiii	
	DIACKII	sicu by any agency/ucpartinent.			
		Siona	ture of the authoris	sed person:	
Date:		Name	2:		
Place:		Desig	enation:		
··· •		Seal:	, · · · <u></u>		

Note to the bidder: All the Annexures are to be submitted by the bidder in the letter head and to be signed by the authorised signatory with name and designation and affix the seal of the firm.

# **Annexure III**

# **Format of Price Bid**

Price for supply and installation of the Atomic Force Microscope as specified in Annexure I			
Sl. No	Description	Amount	
1	Price exclusive of taxes		
2	Rate of customs duty		
3	Taxes (including customs duty, if any)		
4	Transportation, installation and training charges (if any)		
	Total Price (inclusive of all taxes, customs duty, transportation, installation and training, etc.)		
6	Total price in words		

Prices quoted in foreign currency will be converted into Indian Rupees at the exchange rate prevailing on the date of opening the price bid to prepare the comparative statement and to determine the lowest quoted bid (L1).

	Signature of authorized person_	
Date:		Name:
Place:		Designation:
		Seal: