



॥ सा विद्या या विमुक्तये ॥

भारतीय प्रौद्योगिकी संस्थान धारवाड
Indian Institute of Technology Dharwad

EXPRESSION OF INTEREST

No. IITDh/GA/CRF/2018-2019/10

**EXPRESSION OF INTEREST (EoI) FOR PROCUREMENT
of
PROBE STATION**

1. Introduction

IIT Dharwad is an Institute of National Importance created by an Act of Parliament in 2016. IIT Dharwad has been steadily establishing its operations in its transit campus. Simultaneously, the institute is employing bright young and accomplished faculty. A number of unique research and development programs are on the anvil. The institute now needs to raise the levels of the capacity with the best of the facilities and infrastructure. This will provide highly talented and accomplished faculty to pursue not only their research but also think of innovative way of introducing instructional/teaching/learning solutions to practical problem of the students.

2. Objective

The objective of this invitation of Expression of Interest (EoI) is to seek responses from eligible Vendors for **SUPPLY, INSTALLATION, COMMISSIONING, DEMONSTRATION and TRAINING OF PROBE STATION AS PER ANNEXURE-I**

3. Timelines

3.1 Major activities in the procurement process will be as given below: -

SI No	Activity	Remarks
(a)	Pre-Bid Meeting	<ul style="list-style-type: none">To clarify the issues/ queries raised by intrested firms facilitate submission of bids.
(b)	Deadline for submission of EoI	<ul style="list-style-type: none">Till 15.00 Hrs on 12/11/2018
(b)	Issue of Tender Document	<ul style="list-style-type: none">Only to the vendors who submit the response to the EoI. The tender document to such vendors will be sent via e-mail
(c)	Submission of Tender Documents	<ul style="list-style-type: none">Deadline for bid submission: Till 16.30 hrs on 03/12/2018(Tentative). Based on updated specifications and tender document
(d)	Evaluation of Technical Bids	About 3 weeks (Tentative)
(e)	Opening of Commercial Bids	<ul style="list-style-type: none">The shortlisted bidders will be intimated by e-mail the schedule of opening of the commercial bids
(f)	Award of Contract	<ul style="list-style-type: none">The selected vendor will be awarded the contract.

4.0 Material Description: Probe Station as per specifications described below in Annexure-I

4.1

Annexure-I

Specification for Probe Station

The probe station should be capable of handling both DC and RF measurements and should have thermal chuck which can be provisionally used for carrying out measurements at high temperature. The detailed specifications are as follows:

Chuck stage	<ol style="list-style-type: none">1. Capable to hold sample size 10mm x 10mm to 6-inch diameter wafer2. Chuck Stage X-Y 6.5"-6.5"; Resolution: 5 microns or better3. Chuck Theta: 360 degrees4. Wafer pull out stage: ≥90 mm (User friendly, automatic ball bearing lock at the centre)5. Removable front wedge to allow the micro positioners in all angles around the chuck
Platen	<ol style="list-style-type: none">1. Compatible for vacuum and magnetic base of positioners.2. Stage should allow the micro-positioner to be placed at any angle.3. Platen capable to hold 6 numbers micro-positioners (4 DC + 2 RF).4. Platen with 40 mm or more Up/Down movement facility5. Backlash Free Movement: Resolution 1 micron
Stereo Microscope	Microscope Stage: <ol style="list-style-type: none">1. Microscope X-Y Stage Travel: 2"-2" Res. 5 micron2. Microscope tilting mechanism Power Supply: 230V, 50Hz Total Magnification: 10X~150X Fluorescent Light
CMOS Digital Camera	Detachable CMOS digital Camera with imaging kit: Digital CCD 5 MP, CCD Adapter, Calibration software
Micro positioners	Linear X-Y-Z Travel 10mm-10mm-10mm 100Thread/Inch. Resolution: 0.8 micron/ deg ON/OFF Magnetic base (same positioners can be upgraded for RF)
Connectivity	Coaxial BNC For CV measurement: Additional Triaxial cable 1.5-meter-long terminated with triax male and shield terminated with crocodile clip to ground with chuck should be provided.
Shielding Box and Vibration Free Table	Shielding Box for dark light and low-level measurements integrated with appropriate connectors on each side. Pneumatic Isolation Type Natural Frequency (Vertical): 1.5Hz, (Horizontal): ~ 1.2 Hz Including Low noise air compressor Levelling leg and piping.
Vacuum Pump	Dry Vacuum pump - 6 Lit/min, suitable to system with all tubing and vacuum switches should be quoted with the system.
Accessories	<ol style="list-style-type: none">1. 6 DC Probe positioner.2. 2 straight RF Probe positioner.3. 1 right angle RF probe positioner.4. 20 numbers of Tungsten tip of Diameter ~5 microns5. 20 numbers of Tungsten tip of Diameter ~10 microns

	<ol style="list-style-type: none"> 6. 5 SG (10 GHz) RF probe tips. 7. 5 GS (10 GHz) RF Probe tips. 8. Jewellers screw driver set 9. Allen key set 10. Anti ESD and non-magnetic wafer tweezer set 11. Anti ESD and non-magnetic vacuum pick up tool 12. Cleaning wipes
Thermal Chuck	<p>Size: 6"</p> <p>Temperature range RT-300°C with resolution of $\pm 0.5^\circ\text{C}$</p> <p>Heating and Cooling rate: RT to 300°C should not take more than 20 minutes 300°C to RT should not take more than 20 minutes</p> <p>Should be integrated with PID Temperature controller, Temperature sensor, Water/ Air circulation system for cooling the chuck</p>
Warranty and Support	<ol style="list-style-type: none"> 1. 3 years comprehensive warranty (not including the down time) must be included 2. Warranty should start from date of installation 3. One re-shift and re-installation of the instrument should be provided (as the location of instrument might change from present campus to the permanent IIT Dharwad campus)

DETAILS OF PRE-BID MEETING

To clarify the issues/queries raised by interested firms and to facilitate in submission of bids, the pre-bid meeting would be held as follows:

Place	Time	Date
Board Room, Admin Building, IIT Dharwad	15.00 Hrs	12/11/2018

PROCEDURE FOR SUBMISSION OF RESPONSE TO THE EoI

The response to the EoI should reach IIT Dharwad on or before 12/11/2018 by 15.00 hrs on the following address:

The Assistant Registrar
IIT Dharwad
P.B. Road, Near High Court, Dharwad-580011

Or can be forwarded by e-mail at pro@iitdh.ac.in on or before 12/11/2018 by 15.00 hrs.

For any queries, you may reach us at 0836-2212839

Please acknowledge the receipt of this invitation for EoI

Sd/-
Assistant Registrar
IIT Dharwad