



दूरभाष Ph : 91-80-25530672-76
फैक्स Fax : 91-80-25534043

भारतीय ताराभौतिकी संस्थान
INDIAN INSTITUTE OF ASTROPHYSICS
कोरमंगला / KORAMANGALA
बेंगलूर / BANGALORE - 560 034.

No.PUR/IMP/PKM/UVIT/IIA/MGKML/14/07.08

June 19, 2007

Dear Sirs,

The Director, Indian Institute of Astrophysics, Bangalore invites Sealed Tenders for the "Import of Ultrasonic cleaners for cleaning components in the UVIT TCF at CREST , IIA Hosakote as per our technical specifications -2Nos of each type" detailed in the Tender Form hereto annexed. The Technical specifications and terms and conditions are also may be noted and if you are in a position to quote for the supply in accordance with the requirement, please submit your offer (both technical and commercial bids) in the attached Tender Form . The Tender documents are available on IIA website www.iiap.res.in/tenders.htm

The Tender bids should be in foreign currency only. Your completed Tender bids (both Technical and commercial) must reach this office in sealed envelope separately duly superscribed with the name of the supply , on or before **15.30 Hrs. latest by 19.7.07.** The sealed covers should be sent to the following address. **The Director, Indian Institute of Astrophysics, II nd Block, Koramangala, Bangalore-34.**

Thanking you,

Yours faithfully,

Encl: as above.

(AJ Raghupathy)
Admn. Officer
For Director



PUBLIC TENDER DOCUMENT NO: PUR/IMP/PKM/UVIT/IIA/MGKML/14

DT: .2007

TENDER FORM

FROM:

TO

THE DIRECTOR,
Indian Institute of Astrophysics.,
Bangalore-560 034.

Sir,

I/We hereby offer to supply the Items/Equipment indicated below at the price hereunder quoted and agree to hold this office open till_____. I/We shall be bound to supply the Items/Equipment hereby offered upon the issue of the Purchase Order communicating to the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of such Items/Equipment. I/We not withstanding that the offer in this tender has not been accepted in whole, shall be bound to supply such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance.

Sl.No.	Description of the item(s)	Quantity	Unit	Rate	Dely. Period
1.	Ultrasonic cleaners for cleaning components in the UVIT TCF at CREST, Indian Institute of Astrophysics Hosakote as per our Technical specification given..	2 Nos of	each type		

(Tender bids should be in Foreign currency only , both Technical and Commercial Bids should be submitted)



Place at which the Delivery is required : Indian Institute of Astrophysics
Bangalore-560034

Date by which the supplies are required : 8 weeks from the date of order

2. I/We have understood the items of the tender annexed to the invitation to the Tender and have thoroughly examined the specifications/drawing and /or pattern quoted or referred to herein and/are fully aware of the nature of the items/Equipment required and my/our offer is to supply the items/Equipment strictly in accordance with the requirements subject to the terms and conditions contained in the Purchase order communicating the acceptance of this tender.

Date:

Signature and Seal of Supplier

TECHNICAL SPECIFICATIONS:-

Details of requirement for ultrasonic cleaners for the Test and Calibration Facility (TCF) of the UltraViolet Imaging Telescope (UVIT) payload on Astrosat at the M.G.K. Menon Laboratory for Space Sciences at the Centre for research and Education in Science and Technology (CREST) campus of the Indian Institute of Astrophysics.

The UltraViolet Imaging Telescope (UVIT) being planned on board Astrosat, India's first multiwavelength Astronomical satellite, has very stringent cleanliness requirements.

The UVIT consists of a pair of reflecting telescopes for observation of stellar sources in the UV range.

In addition to rigid requirements on particle contamination, the payload also demands strict control of carbon contamination.

It has been reported in studies conducted elsewhere that even a monomolecular layer of carbon reduces the reflectivity of the optical surfaces substantially.

Thus, the design and construction of all subsystems and test facilities for UVIT requires a very detailed contamination control plan.

As a part of this, the components manufactured by vendors, have to be cleaned to the required level before being taken into the Test and Calibration Facility (TCF) being setup at the CREST campus of IIA, named as the M.G.K. Menon laboratory for Space Sciences.

Based on the dimensions of the components, it is recommended to have two units.

Each unit will have three separate system, one for cleaning with a surfactant, one for cleaning with water and one for drying with ultraclean air.

The dimensions of the room where the systems with surfactant as the medium will be located is 2.7mx1.9m

The dimensions of the room where the systems with water as the medium will be located is 1.6mx1.9m.

The dimensions of the room where the systems using ultraclean air for drying the components will be located is 1.44mx1.9m.

The system for drying the components using ultraclean air will draw air from the atmosphere in the laboratory (class 3 lakh) and pass it through a bank of HEPA filters.

S.NO	DESCRIPTION
1)	Ultrasonic Cleaning Tank
2)	Power Supply
3)	Adaptor
4)	Mesh Basket
5)	I/O Kit
6)	Timer
7)	Computer interface with appropriate software.

Components to be cleaned have been segregated as per the dimensions as follows:

1. Diameter 400mm x 600mm length.
2. Components of dimension about 100mm x 100mm x 100mm including fasteners.

Peripherals for provision such as filling and draining surfactants, power supply, immersible transducer, cable, heater and digital temperature controller, pump and filter, timer for controlling time of exposure, hot air dryer with HEPA filter etc.

Separate systems are to be considered for the above two sets of components.

Frequency of operation of system 1: 40Khz

Frequency of operation of system 2: 25Khz

As the UVIT instrument is extremely sensitive to contamination, specifically free carbon, the details of the surfactants proposed for use with the systems have to be provided by the vendor for IIA to take a decision.

Details of reusability of the surfactant has also to be provided by the vendor.

Cost of the surfactants also have to be provided.

Details of holding / hanging components in the tank, other than using a basket, has to be provided.

The power supply should be independent, rack mounted and should be able to be controlled by a computer.

The working dimensions of the tank for system 1 should be 48" x 48" x 30"
The working dimensions of the tank for system 2 should be 24" x 29" x 24".

The vendor has to provide details of calibration done on the various subsystems like ultrasonic generator for the generated frequency, thermometer and thermostat for the stability of the set temperature.



Annexure - I

INSTRUCTIONS TO SUPPLIERS

1. Tenders (both Technical and commercial bits) should be sent in sealed and superscribed envelopes with mention of Tender No. date and date of opening. Only one Tender should be sent in each envelope.
2. Late and Delayed Tender will not be considered at all.
3. Duties, Taxes where legally leviable and intended to be claimed should be distinctly shown separately in the Tender.
1. a) Your quotation should be valid for 90-120 days from the date of opening of Tender
b) Prices are required to be quoted accordingly to the units indicated in the annexed 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.
2. Preference will be given to those tenders offering supplies on the basis of delivery at Site.
3. a) All available Technical Literature(s), Catalogue(s) and other data in support of the specifications and details of the item(s) should be furnished along with the offer.
c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should be indicated in your offer.

d) SPECIFICATIONS:

Items/Equipment offered should strictly conform to our specifications. Deviation, if any, should be clearly indicated by the Supplier in their quotation. The Supplier should also indicate the Make/type No. of the items offered and provide catalogue(s), Technical literature(s) and sample(s), wherever necessary along with the quotations. Test certificates wherever necessary should be forwarded along with the supplies. Whenever options are called for in our specifications, the Supplier should address all such options. Wherever specifically mentioned by us the Supplier could suggest changes to specifications with appropriate response for the same.



4. 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.
5. The Supplier should supply along with the tender, the Banking information for payment or any other purpose
6. A complete set of instruction and operation manual should be supplied at the time of installation.
7. Final performance should be guaranteed at the site.
8. Incomplete Technical Bids are liable for rejection. Commercial Bids will be considered only for the successful Technical Bidders.



TERMS AND CONDITIONS OF CONTRACT

1. DEFINITIONS:

- a). The terms 'Purchaser' shall mean the Director, Indian Institute of Astrophysics, Bangalore-560 034.
- b). The term 'Supplier' shall mean, the person, firm or company with whom or with which the order for the supply of Items/Equipment is placed.
- c). The terms 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an officer duly authorized intimating the acceptance on behalf the Purchaser on the terms and conditions mentioned or referred to in the said communications accepting the tender or offer of the supplier for supply of Items/Equipment.

2. PRICES:

The price may please be indicated on unit basis only.

Duty Exemption:

Please note that we may issue "Customs duty Exemption Certificate", if acceptable under the Govt. of India notification No. 51/96 valid till 2011.

3. GUARANTEE AND REPLACEMENT:

- a) The Supplier shall guarantee that the Items/Equipment supplied shall comply fully with the specifications laid down, for material workmanship and performance. The Guarantee should be for a period of one year minimum from the date of supp

4. PACKING, FORWARDING AND INSURANCE:

The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by sea or air, to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packing shall be done by and at the expenses of the contractor. The Purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Supplier and the Purchaser shall pay only for such Items/Equipment as are actually received in good condition, in accordance with contract.

5. TEST CERTIFICATE:

Wherever required Test Certificate should be sent along with the relevant dispatch Documents



6. ACCEPTANCE OF ITEMS/EQUIPMENT:

- a) The Items/Equipment shall be tendered by the Supplier for inspection at such places as may be specified by the purchaser at the Suppliers own risk, expenses and cost.
- b) It is expressly agreed that the acceptance of Items/Equipment, for is subject to final approval by the Purchaser, whose decision shall be final.

7. DELIVERY PERIOD:

Delivery is the essence of the contract . The supplier should adhered to delivery Schedule as indicated in the Purchase order.

8. EXTENTION OF DELIVERY TIME:

As soon as it is apparent that Supplier dates cannot be adhered to, an application shall be sent by the Supplier to the Purchaser. If failure, on the part of the Supplier to deliver the Items/Equipment in proper time shall have arisen from any cause which the Purchaser may admit as reasonable ground for an extension of the time (and his decision shall be final he may allow such additional time as he considers it to be justified by the circumstances of the case) . In case of Letter of Credit the banking charges for the LOC amendment will be on suppliers account.

9. PAYMENT:

Preference will be given to the supplier whose payment terms is on Site Draft.

10 SECURITY FOR PAYMENT:

Successful Supplier will have to furnish in the form of a Bank Guarantee or any other form as called for by the Purchaser towards any payments before supply of Items/Equipment. In case of payment through Letter of Credit the banking charges out side India will be on suppliers account.

