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

No: PUR/IMP/BRP/IIA/86/07-08.

March 7, 2008

M/s .

Dear Sirs,

The Director, Indian Institute of Astrophysics, Bangalore invites Sealed **Tenders (both commercial bid and Technical bid)** for the Import of “Supply of equipment for Laboratory Experiments in General Physics, electricity /magnetism, optics and spectroscopy” detailed in the Tender Form hereto annexed. The terms and conditions are also enclosed may be noted and if you are in a position to quote for the supply in accordance with the requirement, please submit your quotation in the attached Tender Form. The Tender documents are available on IIA web site www.iiap.res.in/tenders.htm

The Tender bids should be in foreign currency only. Your completed Tender bids (both Commercial Bid and Technical bid) must reach this office in sealed separate envelopes duly superscribed with the name of the supply and due date on or before 15.00 Hrs. **latest by 8.4.2008.** The Technical bids will be opened in presence of the bidders or authorized representatives at **15.30 Hrs. on 8.4.2008.** Incomplete Technical Bids are liable for rejection. Commercial/Price bids will be considered only for the qualified Technical Bidders.

Thanking you,

Yours faithfully,

Encl.: as above.

Administrative Officer
For Director



PUBLIC TENDER DOCUMENT NO: PUR/IMP/BRP/IIA/86/07-08.
DT: 7.03.2008

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 notwithstanding 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)	Qty.	Unit	Rate	Dely. Period
1.	Supply of equipment for Laboratory Experiments in General Physics, electricity /magnetism, optics and spectroscopy				

Scope and Specifications as per Annexure I enclosed

(both Commercial and Technical bids must be submitted separately in a separate sealed envelopes)

(Tender bids should be in Foreign currency only)



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

Date by which the supplies are required : 4 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 either in whole or in part.

Date:

Signature and Seal of Supplier

Annexure-I

Scope:

1. All the experimental kits should be supplied in completely knocked down condition. Assembly should be simple and straight forward.
2. Kits should be complete to do specific experiments.
3. Standard: Experiments should be of standards to satisfy Post Graduated Studies (M.Sc) in Physics of Indian universities.
4. Computer interfaces and necessary software may be included where necessary.
5. Operating voltages : 220V, 50Hz
6. Manuals should be supplied for all the equipment.
7. Manufacturer/Supplier should assemble and demonstrate the experiments at IIA.
8. Vendors should give complete technical details including lay-out of the experiments for technical evaluation.
9. Technical bids and commercial bids should be separately enclosed. Commercial bids will be opened only after evaluation of technical bids.

Serial No	Equipment	Quantity
1	e/m Apparatus (JJ Thomson's method) consisting of e/m tube, power supplies, DMM etc.	1 set
2	Earth's Magnetic Field Experiment apparatus consisting of Magnetic Field Sensor, Zero Gauss Chamber, Rotary Motion Sensor, Dip, Large Table Clamp, 45 cm Stainless (non-magnetic) Steel Rod , Adjustable Angle Clamp , variable field magnets etc.	1 set
3	Black Body radiation experiment apparatus consisting of Prism Spectrophotometer Kit, Educational Spectrophotometer Accessory Kit, Aperture Bracket, Broad Spectrum Light Sensor, Rotary Motion Sensor , Voltage Sensor, Power Amplifier II, Replacement Bulbs etc.	1 set
4	Complete interferometer system (Michelson, Fabry-Perot and Twyman-Green) consisting of Machined Base, Three-Point Adjustable Mirror, Mounted Beam-Splitter, Mounted Movable Mirror, Accessory Mounts, Viewing Screen, Diffuser, Double Convex Lens (18 mm), Compensator Lens, Fitted Case, Vacuum Pump with Gauge, Gas Cell, Calibrated Polarizers (2), Glass Plate, Rotating Component Holder , Twyman-Green Lenses (2), Laser with Alignment Bench etc.	1 set

5	Atomic Spectroscopy Kit to determine the spectra of Hydrogen, Helium, Mercury etc. The kit should include laboratory spectrophotometer, sources, power supplies and detectors.	1 set
6	Complete system to measure speed of light using Foucault Method consisting of optics, light sources (laser), rotating mirrors with controller, detector etc.	1 set
7	Complete h/e system to determine h by Einstein's photoelectric effect formula. The set should include necessary photoelectric head, optics and light sources (Visible and UV light) etc.	1 set
8	Gravitational Torsion Balance (Cavendish design) measurement system to determine Universal Gravitational Constant	1 set
9	Coulomb's Law Experiments to verify the Inverse Square Law, Force/Charge relationship and to determine Coulomb's constant. Apparatus consists of Coulomb's Law Apparatus, Kilovolt Power Supply, Basic Electrometer, Faraday Ice Pail, Charge Producers and Proof Plane etc.	1 set
10	Faraday's law of induction experiments (Faraday's Law and Lenz's Law are examined and the energy dissipated in a load resistor is compared to the loss of energy of the coil pendulum) kit. The kit should include Induction Wand, Variable Gap Magnet, Large Rod Base, 45 cm Steel Rod (2), Multi Clamp, Voltage Sensor, Magnetic Field Sensor, Rotary Motion Sensor etc.	1 set
11	Millikan's Oil Drop experiment to determine the charge of an electron. The kit should consist of condenser assembly, high voltage power supplies, viewing system etc.	1 set
12	Basic Optics System to do experiments in ray optics, interference, diffraction and polarization. The kit should consist of necessary optics, mechanical components, light sources, detectors etc.	1 set



Annexure -I I

INSTRUCTIONS TO SUPPLIERS

1. Tenders 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 considered at all.
3. Duties, Taxes where legally leviable and intended to be claimed should be distinctly shown separately in the Tender.
4. 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.
5. Preference will be given to those tenders offering supplies from ready stocks and on the basis of delivery at Site.
6. 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.

b) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should indicated in your offer.

c) Air freight/sea freight charges up to Bangalore Airport may be sent along with the 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 stores 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.

1. 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.
2. The Supplier should supply along with the tender, the Banking information for payment or any other purpose
3. A complete set of instruction and operation manual should be supplied at the time of installation.
4. Final performance should be guaranteed at the site.



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 supply.



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 and Inside India will be on suppliers account.