Dear Sir/s,

The Director, Indian Institute of Astrophysics, Bangalore, invites Sealed Tenders for the Import of “Automatic Weather Station and all its Accessories - 02 units” detailed in the Tender form hereto annexed. The terms and conditions may be noted carefully and if you are in a position to quote for the supply in accordance with the requirements, please submit your quotation. The Tender documents and other details are available on IIA web site www.iiap.res.in/tenders.htm

The Tender bids must be in foreign currency only. Your completed Tender bids must reach our office on or before 10/02/2011 by 15 00 hrs. The bids with sealed envelopes duly superscribed with the name of the supply and the Due Date must reach our office within the due Date and Time. The bids will be opened in presence of the bidders or authorized representative of the company by 15.30 hrs on 10/02/2011. Incomplete Bids are liable for rejection.

Thanking you,

Yours faithfully,

Y.K.Raja Iyengar
Asst/Admin/Officer
GLOBAL TENDER DOCUMENT No : PUR/IMP/BCB/14/10-11.
DT : 10/01/2011.

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 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.

<table>
<thead>
<tr>
<th>S No.</th>
<th>Description of the item(s)</th>
<th>Qty.</th>
<th>Unit</th>
<th>Rate</th>
<th>Dely. Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Automatic Weather Station and all its accessories as per the</strong></td>
<td>02</td>
<td>units”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>specifications.</strong></td>
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<td>Annexure B enclosed</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( Tender bids should be in foreign currency only )</td>
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<td></td>
</tr>
</tbody>
</table>

Place at which the Delivery is required : Indian Institute of Astrophysics
Bangalore - 560 034.

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 - A

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 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 according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the Tender from, relationship between the two sets of units must be furnished.

5. 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.

4. Final performance should be guaranteed.
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:

   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 for 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 air / Sea to withstand transit hazards 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 Purchase 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 before dispatch of the items.

6. **ACCEPTANCE OF ITEMS / EQUIPMENT:**

   a) It is expressly agreed that the acceptance of Items/Equipment, is subject to final approval by the Purchase, whose decision shall be final.

7. **DELIVERY PERIOD:**

   Delivery is the essence of the contract. The supplier should adhere 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 charge 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 Purchase towards any payments before supply of items/equipment. In case of payment through Letter of Credit the Banking charges outside India and inside India will be on suppliers account.

11. IIA reserves the right to reject any or all Tenders without assigning any reason.

    Asst. Admin. Officer
    IIA, Bangalore - 34.
Annexure - B.

Each Automatic Weather Station (AWS) will have following components:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Item Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>For automatic recording of AWS data, for data storage and data transfer:</td>
<td></td>
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<tr>
<td></td>
<td>a) DATALOGGER- Measurement and control module with 4MB RAM Memory with wiring panel</td>
<td>One</td>
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<td></td>
<td>b) Compact Flash Memory Module</td>
<td>One</td>
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<td></td>
<td>c) Compact Flash Memory Card/1GB</td>
<td>One</td>
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<td></td>
<td>d) Scandisk Flash writer/reader (USB )</td>
<td>One</td>
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<tr>
<td>2.</td>
<td>Sensors for</td>
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<td></td>
<td>a) Temperature &amp;</td>
<td>One</td>
</tr>
<tr>
<td></td>
<td>b) Relative Humidity including sufficient cables length as per tower height)</td>
<td>One</td>
</tr>
<tr>
<td></td>
<td>c) Radiation Shield 10 Plate Threaded with mounting etc. complete with mounting rod, clamp etc.</td>
<td>One</td>
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<tr>
<td>3.</td>
<td>Atmospheric Pressure Sensor: Digital Barometer- with complete mounting/cable etc.</td>
<td>One</td>
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<td></td>
<td>Calibrated for high altitude of 4500MSL with mounting rod, clamp etc.</td>
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<tr>
<td>4.</td>
<td>Wind Speed and Direction Sensors with multi-conductor wire with sufficient cables length as per tower height) with mounting rod, clamp etc.</td>
<td>One</td>
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<tr>
<td>5.</td>
<td>Albedometer for Solar radiation: Pyranometer Sensor- with mounting rod, clamp etc.</td>
<td>One</td>
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<tr>
<td>6.</td>
<td>Tipping Bucket Rain-Gauge complete with wire cable, mounting etc.</td>
<td>One</td>
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<td>7.</td>
<td>Power Supply:</td>
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<td></td>
<td>a) Solar Panel-30W, 12V with connecting cables etc.</td>
<td>One</td>
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<td></td>
<td>b) SMF Battery-12V65Ah with Power Supply Charger/Regulator</td>
<td>One</td>
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<td>8.</td>
<td>Tower &amp; Mounting Hardware:</td>
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<td></td>
<td>a) GI Tower: 10 Meter Triangular GI tower complete with guy wares and accessories, Hinged base plate, sensor mounting arms, lightening arrestor etc. (excluding civil works for foundation at site)</td>
<td>One</td>
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<tr>
<td></td>
<td>b) Enclosure Fiber Glass for safe fixing Data Logger etc 12&quot;x14&quot; with installation kit etc.</td>
<td>One</td>
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<tr>
<td></td>
<td>c) Kit for tower and tripod mounting and enclosure for outdoor battery case with lockable Pole mount</td>
<td>One</td>
</tr>
</tbody>
</table>
9. Data acquisition/transfer pre/post analysis software

Scope of item:

This is a detailed, step-by-step description of the work to be performed by the vendor, identifying the major task headings and sub-tasks for performing the work. Describe each task with as much detail as possible. Each task should be described in a separate, numbered paragraph, and there should be a deliverable product or measurable standard for completion for each task.

The vendor has to provide a certificate from the makers of the items that these items can work at rugged climatic conditions at high altitudes of 4500 MSL and above with temperature range varies from +40 to -50 deg C. All sensor probes should possess calibration certificate from manufacturers. Calibration process should have referred to the functioning of the these sensors at high altitude cold deserts as mentioned above.

Once the sensor probes are accepted, vendor has to provide the detail of civil works needed for the erection of the tower. This work will be undertaken by IIA. Vendor has to provide design/drawing of foundation.

Once civil work is complete the with sufficient curing etc., vendor can proceed to the site with is in Hanle region of eastern Ladakh. Logistic help about local transport in Ladakh and lodging/boarding will be provided by the institute.

After installation and commissioning is complete, the vendor will provide training to IIA engineers for one day on the complete AWS system installed including re-fixing of probes, power supply and about Data acquisition/transfer pre/post analysis software, computer programs needed for data acquisition/retrieval transfer etc.

Eligibility criteria of vendor
(Firm's qualification, understanding and approach to the scope of work based on similar work. The firm’s access to necessary infrastructure, professional manpower to carry out design, analysis and detailed engineering using modern design tools, if necessary).

1. Vendor should have sufficient experience dealing with supply of Items specially in climatic research.
2. Vendor should have worked(installed the items at high altitudes.
3. Vendor should have wide network of after sale/service in northern part of India specially in Jammu & Kashmir.
4. Local vendor should have certificate from Company abroad about authorization of it's sale and service in India and training of their Engineers at their locations abroad on AWS.

Expected deliverables
(Fully describe deliverables to be submitted under the proposed contract. Deliverables must support the requirements set as indicated under the Scope of Work).

Vendor has to provide calibration certificate from company/laboratory for each of the sensor probe as described under the climatic conditions as stated.
Safety Requirements
(Schedule of safety measures for the workers/product as a part of project implementation plan. Specify the safety requirements and standards in terms of the product handling and transportation if any).

The system consists of delicate sensors. Secure and safe handling is needed.

Environmental conditions
(Environmental requirements may be specified if any)

All products should work at high altitudes of 4500MSL and above with temp. range +40 to -50 deg C.

Inspection, test and acceptance criteria.
(Prepare and submit for approval an Acceptance Plan describing test procedures and inspections that shall be performed prior to acceptance of the product.

As specified in preceding sections.

Expected Time Schedule
(Include a item schedule indicating when the components of the work will be completed. Item schedule must ensure that any deliverables requested are met).

As site is in Ladakh, we expect installation and commissioning can be finished within 6 months of date of PO.

Conceptual layout/drawings if any.
(Conceptual level drawings/data sheets may be enclosed if any for reference).

Vendors have to provide his plan at the time of submitting quotation.

Contract and General Terms & Conditions
(The apparent successful vendor will be expected to enter into a contract under the standard terms and conditions as given in appendix ‘A’. The administration shall prepare the standard terms and conditions as per the prevailing standard norms)

as applicable.

Any other additional information
(Any other information if the indenter wishes to furnish shall be indicated).