



भारतीय उष्णदेशीय मौसम विज्ञान संस्थान
(एन ऑटोनॉमस इंस्टीट्यूट ऑफ़ द मिनिस्ट्री ऑफ़ आर्थ साइंसेस, गवर्नमेंट ऑफ़ इंडिया)
डॉ. होमि भास्कराभाय पार्क, पुणे - ४११ ००४

INDIAN INSTITUTE OF TROPICAL METEOROLOGY
(An Autonomous Institute of the Ministry of Earth Sciences, Govt. of India)
Dr. Homi Bhabha Road, Pune - 411 004, India



पीएस/125/49/2016/
सेवा में/To,

20th September, 2017

विषय: हाइड्रोस्कोपिक टैंडेम अंतर गतिशीलता विश्लेषक (एचटीडीएमए) की खरीद - 01 सेट

Sub: Purchase of Hygroscopic Tandem Differential Mobility Analyzer (HTDMA) – 01 Set.

प्रिय महोदय / Dear Sir,

यह संस्थान उपर्युक्त विषयानुसार सामग्री की खरीद करना चाहता है। इसलिए, इच्छुक बोलीदाताओं से अनुरोध है कि अपनी तकनीकी तथा कीमत बोली निम्नलिखित निर्देशानुसार प्रस्तुत करें :

This Institute wishes to procure goods as per subject cited above. Therefore, interested bidders are requested to submit their Technical and Price bids as per the instructions given below :-

बोली प्रस्तुत करने की अंतिम तिथि 13 सितंबर 2017 से 04 अक्टूबर 2017 को 1200 बजे तक बढ़ाई जाती है।

The last date of submission of bids is extended from 13th Sept., 2017 to 04th Oct., 2017 up to 1200 hrs.

तकनीकी बोली उसी दिन 1500 बजे ऑनलाइन पद्धति द्वारा खोली जाएगी।

Technical Bids will be opened on the same day at 1500 hrs. by online mode only.

तकनीकी विशिष्टीकरण और अन्य सभी विनियम एवं शर्तें अपरिवर्तित रहेंगी।

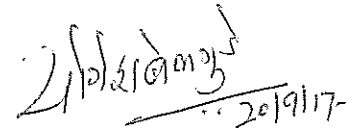
Technical Specifications and all other terms and condition will remain unchanged.

बोलीदाता जो उपर्युक्त निविदा (पीएस/125/49/2016/) में भाग लेना चाहते हैं, उन्हें वेब पोर्टल <http://www.msfccommerce.com/eprochome/iitm> पर उपलब्ध सूचना के अनुसार पंजीकृत करना होगा।

Bidders willing to participate for the above tender (PS/125/49/2016/), has to get registered themselves on web portal <http://www.msfccommerce.com/eprochome/iitm> as per the instruction available at there.

धन्यवाद/Thanking you,

भवदीय/Yours faithfully,



(यो. शं. वेल्गुडे / Y.S. Belgude)

सहायक प्रबंधक / Senior Manager

कृते निदेशक / for Director

ईमेल/E-mail : psu.iitm@tropmet.res.in

Indian Institute of Tropical Meteorology

PS/125/49/2016

20th September 2017

SUB : Minutes of the Pre-bid meeting of " Supply and Installation of HTDMA " Qty - 01 Set (as per the tender document) held on 23rd August at IITM, Pune

In response to our Global Tender Notice No. PS/125/48/2016/, representative of the following prospective bidder / firm / company had attended the meeting:

- 1) M/s MARS Bioanalytical Pvt. Ltd., New Delhi
- 2) M/s TSI Instruments India Pvt. Ltd., Bangalore

M/s Tesscorn-aerofluid Ltd., Bangalore had sent their queries vide their email dated 23rd August 2017.

At the outset Convener of the meeting welcomed the members of the committee & representative of the prospective bidders / firms / companies. He briefed the tender document, scope of supply and technical parameters of the equipment to be procured.

Representative of the prospective bidders / firms / companies were asked about any suggestion, queries or technical advancement regarding tender document & Equipment to be procured. The Queries and Institute's reply to the queries are as given below:

A . Queries raised by M/s.MARS Bioanalytical Pvt. Ltd, New Delhi and Reply by the Institute:

- 1) "Differential Mobility Analyzer"
 - a) DMA Voltage: Please amend this specification to read as: Positive or Negative.
Reply: Please read it as **Positive or Negative or both.**
- 2) "Condensation Particle Counter"
 - a) Working Principal: Please amend this specification to read as: Laminar continuous flow/mixing based condensation particle counter.
Reply: OK, working principle is stated as " Laminar continuous flow or mixing based condensation particle counter "
 - b) Concentration Range: Please change to read as: Max. concentration 0.01-100,000 particles/cm³
Reply: Please read it as: range of concentration 0 to $\geq 100,000$ particles/cm³.

B. Queries raised by M/s.TSI Instruments India Private Ltd., Bangalore and Reply by the Institute:

- 1) Aerosol Charge Neutralizers-(2 No):
 - a) Define which technique of bipolar is required or life of Radioactive source in case of Radioactive Neutralizer
Reply: It can be radioactive or non-radioactive. In case of radioactive neutralizer, life time of radioactive source should be minimum 10 years.
 - b) 10 to 1000 nm, min. 60 Channels/Decade
Response: Please read it as 10 to ≥ 1000 nm

P.T.O

c) Concentrations 0 to 5×10^4 particles/cm³ with continuous, live-time coincidence correction in single particle counting

Response: Please read it as: Range of concentration 0 to $\geq 100,000$ particles/cm³.

d) Altitude Up to 3000 m (10,000 ft)

Response: Remain unchanged

e) RH range 0 to 90%, noncondensing

Response: Please read it as 0 to ≥ 90 %

2) Differential Mobility Analyser-(2 No):

a) Aerosol flow rate: 0.2 to 3 L/min, User selected

Response: Remain unchanged

b) Sheath Air flow rate: 2 to >20 L/min, User selected

Response: OK, amended to 2 to >20 L/min, User selectable

c) Size range: 10 nm to 1000 nm, user selected

Response: Changed to Size range: 10 nm to ≥ 2000 nm, user selectable

3) Aerosol Humidifier(1 No):

a) %RH range 40 to 90% Rh

Reply: Please read it as 2 to ≥ 90 % RH

4) Condensation Particle counter (2 No):

a) Particle Diameter Range: 5 nm to $>3\mu\text{m}$

Reply: Please read it as 5 nm to $\geq 2\mu\text{m}$

b) Concentration Range: 0 to 100000 particles/cm³ with continuous,

Reply: Please read it range of concentration 0 to $\geq 100,000$ particles/cm³. Counting principles and single point counting with coincidence correction may be provided.

c) Working fluid: Butanol or Water

Reply: OK, please read it as Butanol or Water.

5) Additional Specs to be added

a) Scan Time of SMPS

Reply: OK, it may be provided.

b) Flow rate of CPC 1.5 LPM

Reply: OK, flow rate of CPC may be provided.

C. Queries raised by M/s.Tesscorn-aerofluid Ltd, Bangalore and Reply by the Institute:

1) The vendor requested for a more universal specification

Reply: The Committee felt that there are no specific suggestion for any amendment to be made. However, amendments made to the specifications as suggested by other two parties have made the HTDMA specification more general.

Technical Suggestion of Technical Committee for CAIPEEX – HTDMA are given below:

1. TEC suggests OEM working models of HTDMA may be quoted
2. Bidder may provide the list of users in India and abroad and related peer reviewed publications.
3. HTDMA should also be operable in the aircraft measurements up to 30,000 ft, necessary inlets with automatic flow compensation equipment should be provided.
4. The committee also suggested to extend the last date of submission of bids by another three weeks.

The committee ended with vote of thanks to the members.

