**INDIAN INSTITUTE OF TROPICAL METEOROLOGY**
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PS/125/09/2019 18th September, 2019

**SUB: Minutes of the Pre-bid meeting for Supply, Installation and Commissioning of "Scanning Mobility Particle Sizer (SMPS)" - Qty.01 Set (as per the tender document) held on 18th September, 2019 at IITM, Pune.**

A Pre-bid meeting for Supply, Installation and Commissioning of "Scanning Mobility Particle Sizer (SMPS)" - Qty.01 Set was held at Sikka Conference Hall of IITM on 18th September, 2019 at 11.00 hrs.

In response to our Global Tender Notice No. PS/125/09/2019, the following representatives of the prospective bidders has attended the meeting.

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

Email queries received before and during the meeting from below company were also considered by the Committee.

1) M/s. AlfaTech Services, New Delhi
2) M/s. AMC Instruments, New Delhi / M/s. Leibniz Institute of Tropospheric Research, Germany

At the outset, Indenting Officer welcomed all the members and representatives of the prospective bidders / firms / companies. Indenting Officer briefed the tender document, scope of supply and technical parameters of the equipment to be procured.

Technical and Commercial queries raised by all the representatives of the prospective bidders are generalized and their responses have been discussed, the major change requests, clarifications agreed / recommended by the committee are as given below:

1) Size Range

   **Response:** As per tender

2) AERB certificate

   **Response:** IITM is not registered with AERB, Necessary documentation certificate and process should be done by vendor

3) MSME Certificate: TSI has shared a copy of MSME Certificate, IITM to confirm, if this can be applicable
   **Response:** As per tender clause the bidders are required to submit the valid MSME/NSIC Certificate. It is the sole responsibility of the bidder to verify the items for which they are going to bid are enlisted in their MSME/NSIC Certificate.

4) Hardware (Laptop)
   **Response:** (i) As per tender, with required software. IITM will provide additional Laptop, vender should install same software in Laptop
   (ii) Suitable software to merge SMPS and particle sizer

5) PM inlet/ Dryer
   **Response:** PM10 inlet for outside installation with necessary tubing and connecter/points Nafion type dryer, from well-known/ stander manufacturer (Factory made, model No., Make) with drying efficiency test, and flow test report.

6) Delivery
   **Response:** within 14 weeks

7) Neutralizer (Radioactive)
   **Response:** Radioactive

8) Sheath Flow
   **Response:** more than 10 lpm

9) Impactor
   **Response:** For SMPS suitable impactor or accessory for ready operation

10) Particle concentration Range
    **Response:** $10^4$ particle/ litre without dilution

11) What are the scientific questions of the Measurements? This determines the specifications of the instruments or configurations of the setup, which we are going to supply as a complete solution.
    **Response:** For fog measurement. We have wide range of scientific problem to be addressed

12) Is there still an interest to work with TROPOS as it was discussed with Dr. Thara Prabhakaran few years ago ? (This question raised by Prof.Alfred Wiedensohler who is the head of the Department of Experiemental Aerosol and Cloud Microphysics ?)
    **Response:** This independent project.

13) What is the time frame of the instrument provision and installation?
    **Response:** As per tender.

14) New Specification suggested by M/s. AlfaTech Services, New Delhi

    I. Measurement size range
       **Response:** As per tender

    II. Sheath Flow rate
       **Response:** 10 lpm

    III. Sample flow rate
       **Response:** 0.2- 4 lpm

IV. Number concentration measurement range

**Response:** As per tender

V. CPC Detection efficiency at low particle size

**Response:** As per tender

VI. Response time

**Response:** < 3s

VII. Sampling inlet

**Response:** As per tender

VIII. Aerodynamic Particle Sizer

**Response:** As per tender

IX. Detection Principle

**Response:** As per tender

X. Sample flow rate

**Response:** As per tender

XI. Particle concentration range

**Response:** As per tender

XII. Sampling System with Naffion Dryer

**Response:** As per tender

The specification for SMPS has been formed later by Technical committee taking on view our requirement for the particular experiment. For our experiment we require the particle less than 5nm to be measure. APS is preferred over OPS for its better performance.
Our specification cannot be compromise for achieve better research

The Committee recommended extending the time for submission of bids for three weeks from the date of publication of corrigendum & the technical bids will be opened on the due date of submission of bids at 1530 hrs.

All other terms and condition of the tender document remains unchanged.