Tender Notification for the Procurement of a

"Particle Size Analyzer"

(Last Date for Submission: 22 nd December 2017)

Kindly send your best quotation for a "Particle size analyzer" with the technical specifications given below on C.I.P. Bangalore basis. Your quotation should clearly indicate the terms of delivery, delivery schedule, and payment terms. The tenderer should submit Technical and Financial Bid separately in sealed envelopes superscribing the envelope as 'Technical Bid' and 'Financial Bid'. Both these envelopes should again be put in a single envelope superscribed 'TENDER FOR: "Particle size analyzer" and should reach the Chairman, Department of Mechanical Engineering, Attn: Prof. Jaywant H Arakeri, Indian Institute of Science, Bengaluru 560 012 before 22nd Dec 2017 by 4.30 pm.

A clear compliance statement giving brochures and other details as necessary to show compliance with technical specifications given below is required along with the technical bid.

Technical Specifications for the

Particle size analyzer

Required specifications:

Technical specifications for measurement of particle size distribution

The instrument should perform measurement of particle size distributions in real time. The instrument should use laser diffraction technology for the measurement of particle size. It should be able to monitor particle sizes in sprays & aerosols in laboratory, process or field environments. The following MINIMUM specifications are to be satisfied. If appropriate accessories are required to achieve this specification, please include them in the tendered quotation.

General

- 1. System must have high speed data acquisition with real time droplet/particle size measurement.
- 2. The equipment should be able to handle high concentration droplet or aerosol samples.
- 3. Vendor should supply NIST traceable standards to verify the performance of the analyser.
- 4. Testimonials from users, preferably Indian organizations, for supply and maintenance of such equipment should be provided.

Technical Specifications

- 1. Size measurement should be based on diffraction.
- 2. Size range : 0.2-1000 microns
- 3. Variable distance between emitter and receiver adjustable to at least 500 mm.
- 4. Appropriate lens systems for droplet size range and spacing distance mentioned above.
- 5. 2 sets of additional flow cell windows.
- 6. Vendor should provide interface for alignment
- 7. It should have a feature to prevent build-up of spray droplets on the optics & avoid contamination, preferably using air purge.
- 8. The transmitter and receiver should have protective guard
- 9. Should include calibration capability for checking optical and signal processing components
- 10. Computer interface for data acquisition. High speed data acquisition capability. External triggering capability. Access to size distribution and scattering data at each time instant.
- 11. Appropriate branded computer for data acquisition and processing.

Optionals:

1) Three years of additional warranty and support for all components of the system.

l communications in this regard should be addressed to:

The Chairman Department of Mechanical Engineering Attn: Prof. Jaywant H Arakeri Indian Institute of Science Bangalore 560 012 India

E-mail communications should be sent to:

office@iisc.ac.in and jaywant@iisc.ac.in with a copy to jaywant.arakeri@gmail.com