

Room No: FF 05, CFD Building Fluid Systems Laboratory Department of Mechanical Engineering, Indian Institute of Technology Madras Chennai – 600 036, INDIA

Form for Inviting Quotations

Reference No. IITM/ME/FSL/AS/SERB/RHM

Date: 29/04/2020

Subject: Supply and Installation of Rheometer for lab use by Indian Institute of Technology Madras

Quotation Due Date: 20-05-2020

Dear Sirs:

Quotations are invited for supply and installation of the equipment as per details in Annexure-I under the following terms and conditions.

Terms and Conditions (Foreign Vendors/Suppliers):

- 1. The total amount indicated is Ex. Works / FOB / CIF. Madras Value.
- 2. The consignment to be addressed to Dr. Ashis Kumar Sen, Associate Professor Room No : FF 05,CFD Building Fluid Systems Laboratory, Department of Mechanical Engineering, I.I.T. Madras, Chennai – 600 036, India.
- 3. The consignment to be dispatched by surface / Air Post Parcel / Ocean Freight / Air Freight.
- 4. Please send three advance copies of Invoice direct to us immediately after dispatch to avoid delay in clearance. DEMURRAGE CHARGES, IF ANY, PAYABLE ON ACCOUNT OF DELAY IN RECEIPT OF ADVANCE COPIES OF INVOICE WILL BE DEBITED TO YOUR ACCOUNT.
- 5. The following set of documents is required in all cases:
- a. Complete set of Clean Bill of Lading / Airway Bill / Air or surface Parcel Receipt, showing that the goods have been shipped and freight prepaid.
- b. Insurance Policies / Certificates in duplicate covering Marine Insurance as per Institute Cargo Clauses (All risks) and perils as per Institute Strikes, Riots and Civil Commotion Clauses, War risks as per Institute, Clauses. Cover for CIF value plus 10 percent.

General Terms and Conditions:

- 1. The Quotations duly sealed and superscribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
- 2. The quotations are invited as two-bid system i.e., technical bid and financial bid.
- 3. The Quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
- 4. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
- 5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier's expense.
- 6. Local Firms: Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.



Room No: FF 05, CFD Building Fluid Systems Laboratory Department of Mechanical Engineering, Indian Institute of Technology Madras Chennai – 600 036, INDIA

- 7. Firms outside Madras: Quotations should be for F.O.R. Madras. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
- 8. The rate of sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to non-Government Educational Institutions run with no profit motive for which a concession. Sales Tax Certificate will be issued at the time of final settlement of the bill.
- 9. Goods should be supplied carriage paid and insured.
- 10. Goods shall not be supplied without an official supply order.
- 11.Payment : Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later

ANNEXURE-I

TECHNICAL SPECIFICATIONS FOR PURCHASE OF RHEOMETER

SI. No.	Name of Equipment	Minimum Requirements	Quantity
01	Computer controlled rheometer	 (1) Computer controlled rheometer with a ball bearing supported electronically commutated synchronous motor drive system to perform rotational and oscillatory tests (amplitude and frequency sweep); direct strain and stress control; allowable strainrate 1000 (1/s) or more. (2) high energy efficiency by using air cooled peltier temperature control systems (3) easy handling and high precision in measuring gap; fully automatic stand for a high precision automatic zero-gap-setting procedure without user action; gap illumination measuring, automatic tool recognition and intelligent configuration system; quick-fitting coupling for measuring geometries 	01

Dr. Ashis Kumar Sen Associate Professor



Room No: FF 05, CFD Building Fluid Systems Laboratory Department of Mechanical Engineering, Indian Institute of Technology Madras Chennal – 600 036. INDIA

Dr. Ashis Kumar Sen

A	Associate Professor		Chennal – 600 036, INDIA	
	02	Temperature control device	 for cone/plate and parallel plate measuring geometries for mounting screw-on measuring plates with integrated fan for counter cooling temperature range: - 10°C to 400 °C horizontal/vertical temperature control 	01
	03	System control and Rheometer Software	single lab software license including one rheometer driver; upgradable to oscillatory mode and should run with Microsoft Windows 7/8/8.1/10	01
	04	Removable/disposable geometries	 (1) Automatic tool recognition and configuration; (2) Shaft for disposable measuring system; (3) PLATE D: 50 mm, stainless steel; (4) PLATE D: 25 mm, stainless steel; (5) CONE D: 50 mm, angle 1°, stainless steel. 	01 (for each geometry)

The vendor should provide a warranty period of at least three years for all the components of computer controlled rheometer unit. Installation to be done by the vendor for free of cost and service and maintenance should be done by the vendor as and when required. Allowable educational concession must be applied while quoting.

Thank you.

Sincerely,

Dr. Ashis Kumar Sen Associate Professor Room No: FF 04, CFD Building Fluid Systems Laboratory Department of Mechanical Engineering, Indian Institute of Technology Madras Chennai 600036, India Phone: +91-44-2257 4716 Fax: +91-44-2257 4652 Mobile: +91-9176651005 E-mail: <u>ashis@iitm.ac.in</u>