

OFFICE OF THE DEAN ADMINISTRATIVE AFFAIRS Indian Institute of Engineering Science and Technology, Shibpur (Formerly Bengal Engineering and Science University, Shibpur) P.O.: Botanical Garden Howrah – 711 103

Date: 13/01/2018

Corrigendum

Tender ID: 2018_IIEST_290682_1

Tender Reference Number: e-Proc/CHEST_09012018/ RMETER _IIEST/164

Name of the work: Supply and Installation of Rheometer.

Kindly note that:

The following changes are to be considered in the above mentioned tender.

Sd/-Dean, Administrative Affairs IIEST, Shibpur

Corrigendum to the e-Proc/CHEST_09012018/ RMETER _IIEST/164; Tender ID 2018_IIEST_290682_1

SPECIFICATIONS FOR THE RHEOMETER SHOULD BE READ AS FOLLOWS: (the changes made to the original specifications are marked in bold.)

- Measurable: AbsoluteStrain,AbsoluteRateofStrain,DirectStrainAmplitude,DirectStress Amplitude,FirstNormalStressDifference,FirstNormalStressCoefficients, ViscousandElastic ResponsesfromOscillatoryForce, All modes of operation – stress control, shear rate control and direct strain controlled oscillation at demand strain amplitude
- Modes: rotational, oscillatory, transient, creep, relaxation
- Peltier temperature range ~-20 to 200 °C
- Torque range Viscometry (rate and stress control) ~20nNm 200mNm
- Torque range Oscillation (strain and stress control) ~10nNm 200mNm
- Torque resolution ~ 0.5 or better nNm
- Position resolution <10nrad
- Frequency range $\sim 10^{-7}$ -600 rads⁻¹ or better
- Normal Force range: ~0.01N 50N or better
- Normal Force resolution: ~0.5mN
- Normal Force response time: ~<10ms
- Gap resolution (over full vertical lift range) $\sim 0.1 \mu m$
- Plate and cone diameters: 25 mm or 20 mm PP, 25mm/2deg CP or 40mm/4deg (01 set mandatory each)
- Comprises 1Pas standard viscosity oil (125ml) and PDMS viscoelastic standard (100ml), Standard Newtonian material (UKAS certified)
- Temperature resolution: ~0.01 degree
- Automatic gap control
- Inset for double gap twin gap measuring plate
- Appropriate Software for all types of rheological measurements with raw data of measurement files.
- Environmental control hood
- Require PC/laptop for operation with suitable configuration (i5), LaserJet Printer (B/W)
- Operating System: Suitable
- Oil free Air compressor, and Dryer with air filter
- Suitable UPS (2 KVA)
- Appropriate stand/table
- Upgradable for variety of applications like magnetorheology, rheomicroscopy, SALS etc.
- Instrument should be capable of attaching to CCD camera for microscope system, TWIN GAP MEASURING SYSTEM, Concentric cylinders, Glass plate with peltier heating/cooling. These attachments can be quoted as option and not mandatory.
- Atleast 20 installations PAN India

