

# BIDHAN CHANDRA KRISHI VISWAVIDYALAYA



RKVY-RAFTAAR Project, RKVY-AMEC/2021/1243

Development of Mechanized.....Improved Technologies

Department of Farm Machinery & Power

Faculty of Agricultural Engineering

Mohanpur-741 252, Nadia, West Bengal, India

Prof. S. Karmakar

Principal Investigator

Ref: RKVY/12115/Re-Tender/04/22-23

Date: 28.09.2022

## E-TENDER

The Principal Investigator of RKVY-RAFTAAR project '**Development of a Mechanized Modern Farm for Promotion, Development and Dissemination of Improved Technologies**', under the Department of Farm Machinery & Power, Faculty of Agricultural Engineering, Mohanpur-741252, Nadia, West Bengal, India is inviting quotations from the bona fide suppliers/ vendors for supplying the **Rheometer** as per specifications stated below within **thirty (30) days of publication**. Please mention terms & condition clearly against the item, if any, for supplying **Rheometer**.

i) Price: The price of Rheometer including the imported ones should be quoted in each (including taxes and duties etc). However, quoted rates must be FOR DESTINATION including packing, insurance and delivery charges up to Department of Farm Machinery & Power, Faculty of Agricultural Engineering, and Nadia District West Bengal with satisfactory of good condition.

ii) EMD: Vendors are required to pay the Demand draft amounting **Rs. 5000/- (Scan Copy)** along with their quotations. Demand Draft must be in favour of "Bidhan Chandra KrishiViswavidyalaya" payable at Kalyani (IFSC: SBIN0001082). Supporting document regarding exemption of demand draft must be submitted. Vendors applied against previous Notice may use the earlier Demand Draft.

iii) Supporting Documents:

- Bid papers should accompany Trade license, GST registration, Company Credential, IT Return, PAN etc.
- Photocopy (Self attested) of the original supporting document in favour of the specification – claim for each item must have to be submitted separately.
- User list along with certificate from reputed users also need to be submitted if any.
- Photocopy of supporting document of assured after sale service in Eastern India and availability of spare parts need to be submitted.

Price bid of the vendors will be compared only if technical specificity as appended against each item is fulfilled. The Viswavidyalaya reserves the right to accept or reject any tender without showing reason.

**N.B: Please read carefully the terms and conditions of tender.**

*Please upload the  
Tender Notification  
as per resolution taken in CTC  
meeting on 22/9/22.  
Subm 28/9/22*

*Librarian, BCB*

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### EQUIPMENT WITH SPECIFICATION

Item	Specification	
Rheometer	Measuring head type	Direct current synchronous motor with linear relationship between torque & stator current
	Motor bearing	Air bearing
	Measurement types	Rotational , oscillatory & transient
	Torque range	1 $\mu$ nm to 120 mm or better
	Frequency range	10 <sup>-4</sup> to 600 rad/s or better
	Angular velocity range	10 <sup>-4</sup> to 150 rad/s or better
	Angular delection resolution	614 nrad or better
	Strain sensor	High resolution optical encoder
	Gap setting	Fully automatic and force-limited gap-setting function to guarantee an exact and reproducible gap-setting procedure at any time
	In-built lighting controlled through rheometer software	The rheometer should be fitted with an in-built illumination to make the sample trimming and gap setting procedure easier and safer.
	Plate/plate geometries	50 mm – smooth surface – steel plate-01 no. 25mm – smooth surface – steel plate-01n0.
	Cone /plate geometries	50/1 – smooth surface – steel cone 25/2 – smooth surface – steel cone
	Type	Air cooled peltier temperature control
	Temperature range	-6 to 210 deg c or better
	Testing protocols	<u>Viscometry measurement</u> Viscometry as a function of time, temperature and shear rate. Yield stress measurements. Constant rate measurements. Shear rate sweep. <u>Oscillation measurement</u> : Oscillation measurement with respect to time, temperature, frequency and amplitude ; Oscillation stress sweep. Oscillation strain sweep. Elastic (g'), loss (g''), complex modulus (g*), tan delta as a function of time, temperature, frequency, strain and stress in shear mode <u>Transient measurements</u> Creep/creep recovery measurement Stress relaxation measurements
	Air compressor	100psi, 3.8 cfm ,oil free system
	Computer	I5, 2.67 ghz or higher,8 gb ram or more, ssd with 240 gb or more

Principal Investigator

Validity unknown

Digitally signed by SUMANA ROY  
Date: 2022.09.28 11:27:51 IST  
Location: West Bengal, WB