# **Department of Mechanical Engineering, NIT Calicut**

### RHEOMETER

### **Photo of Instrument:**



Instrument Name	RHEOMETER				
Instrument Model & Serial No.	MCR102 81872459 H-P-PTD200 82674335 MRD170/T 82633240				
Instrument Make	ANTON PAAR				
<b>Category of Instrument</b>	Characterization and Testing				
<b>Description of Instrument</b>	This instrument is used to measure the way in which a viscous fluid flows in response to applied forces.				
<b>Instrument Technical Description and</b>					
<b>Major Specifications (This</b>	Min Torque Rotation 5nNm				
Specifications Limited to Major 5)	Max Torque 200nNm				
	Max Speed 314rad/s				
	Normal Force Range 0.01 to 50N				
Application of Instrument (Limited to Major 4 or 5)	For finding the Dynamic Viscosity of various liquids and semi solids under various conditions.				
1200	Conditions.				

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Type of Sample Required for Analysis /	Liquids (100mL)			
Testing (Quantity, Pre-Preparation,	Semi Solids			
State etc.)				
<b>Guidelines for Sample Submission –</b>				
<b>User Instructions</b>				
Types of Analysis / Testing	1)Determining the Dynamic Viscosity			
	2)Plotting various graphs (Shear rate Vs			
	Shear stress, Viscosity Vs Shear Rate etc.)			
Faculty In-Charge Name / Email /	Dr. Amit Kumar Singh			
	amitsingh@nitc.ac.in			
Contact	8949362395			
<b>Technical Staff Name / Email / Contact</b>	Mr. Eldho P Varghese			
	epv76@nitc.ac.in			
	9447278215			
<b>Location of Instrument</b>	TRIBOLOGY LAB			
Other Details				

### <u>User Charges (per sample):</u>

S.NO.	Type of Analysis / Testing	Internal - within Department of NITC	Internal - Other Departments NITC	External Academic Educational Institutes	National Labs	Industry
1	Determinin g the Dynamic Viscosity	Nil	100	500 + Gst (18%)	500 + Gst (18%)	1000 + Gst (18%)

Note: Consumables and any other expenditure charges will be as per requirement, if any.

#### **Slot Booking and Payment Work Flow:**