



JORHAT INSTITUTE OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF MECHANICAL ENGINEERING  
P.O. CHENIJAN, SOTAL, JORHAT-785010 (ASSAM)

**REQUISITION FORM FOR TEQIP III (COLLABORATIVE RESEARCH PROJECT) PURCHASE**

Sl. No: ASTU/JIST/CRS/MECH-2/MD1

Name: Mr. Mridul Deka

Title of the Project: "To Investigate the Performance and Emission of a CRDI Engine Under Different Fuel Injection Techniques and Different Blends of Bio Diesel and Petroleum Diesel"

Sl. No	Description of Items	Quantity	Specification/Details (Separate Sheet may be attached if needed)	Justification/Purpose	Issue (to be filled by Store)
1	Surface roughness tester	1	<ul style="list-style-type: none"><li>The instrument should be compatible with ISO -4287, ISO 13565-1, DIN, ANSI national standard</li><li>Testing parameters: Ra, Rz, Rq, Rp, Rv, R3z, R3y, RzJIS, Rsk, Rsm, Rmr</li><li>Measuring range(in <math>\mu\text{m}</math>): Ra: 0.005-16.000 Rz: 0.02-160.00</li><li>Sample length(in mm): 0.25, 0.80, 2.50</li><li>Evaluation length : sample length xn(1 to 5)</li></ul>	Surface roughness tester to carry out R&D work for find the different regime of lubricant and biofuel. The R&D work will be carried out at Tribology Research Laboratory, ASTU. Therefore, the material will be deliver at Tribology Research Laboratory, ASTU. The project is sanctioned under collaborative research scheme of TEQIP III project CRSJIST-05	

		<ul style="list-style-type: none"> <li>• Maximum drive stroke: preferable 17.5mm/0.7inch or better</li> <li>• Indication accuracy: 0.001</li> <li>• Working temperature: -20°C to 40°C</li> <li>• Specification of sensor: Stylus tip: diamond, 90°C cone angle, radius: 5 μm Stylus force: 4mN or less Traversing speed: 0.135mm/s, 0.5mm/s, 1mm/s or better for sample length (mm) 0.25, 0.8 and 2.5 respectively</li> <li>• The Instrument must be provided with in-built USB port and USB cable to connect to PC</li> <li>• Software to analysis to display surface roughness measuring curves on PC.</li> <li>• Power source must be rechargeable Li-battery</li> <li>• The instrument should be provided with support stand to adjust the height upto 45mm or higher</li> <li>• Compatible extension rod of 100 mm length must be provided</li> </ul> <p>The instrument must be provided with all the accessories</p>	
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Indenter: *Moumit Deka*  
Date: 19/06/2020

  
Signature of Issuing Authority: *19/06/2020*  
Date:

Principal  
Jorhat Institute of Science & Techno  
Jorhat-10

**Terms and Conditions:**

1. The vendor is required to bid for the said item
2. In the quotation, the vendor has to supply the certificate of the roughness tester with the name of the manufacturer.
3. Delivery: Within 3 weeks after receiving purchase order
4. Payment: 100% against delivery
5. Validity of the quotation: 55 days
6. Warranty: At least 12 months from the date of delivery
7. Address to send quotation:

**To,  
Mridul Deka  
Assistant professor, Dept. of M.E.  
Jorhat Institute of Science and Technology,  
Sotai,  
Pin: 785010, Jorhat, Assam**

8. Address to deliver the item:

**To,  
Nabajt Dev Choudhury  
Assistant Professor  
Department of Energy Engineering  
Assam Science and Technology University  
Pin: 781013, Kamrup(M), Assam**

9. Last date of submission: On or before 03/07/2020, 2.30 pm
10. Date of Quotation opening: On 07/07/2020 at 12.30 pm