



Letter No. IIITDMJ/P&S/2026-27/176
Dated: 08-07-2026

To,

Email:

Phone:

**Sub: Inviting quotation for purchasing “consumable chemicals” for FIG Project
“Rheological and Tribological assessment of shear -mode operated magnetorheological shear
thickening fluid-based actuator”.**

Dear Sir/Madam,

The Institute intends to procure consumable chemicals (as per the specification provided in Annexure-I) for one of its FIG research projects. You are invited to participate in this bidding process and submit your quotation for the “consumable chemicals” with the following terms and conditions.

You may kindly give your lowest offer on the following terms and conditions by 25th July 2026

- 1) Interested Firms / Parties should submit documentary proof (photocopy) of the following:
 - a) Valid Registration Certificate of the firm.
 - b) GSTIN and PAN Number
 - c) Experience of executing / supplying such orders to any other Government / Educational Institution / Reputed Firms.
- 2) The rates quoted should be FOR Destination inclusive of all taxes/statutory levies (excise duty, sales tax, Octroi, Entry tax, GST or any other local/state/central Govt. taxes). No extra charge will be offered by IIITDM Jabalpur.
- 3) The product shall be under warranty for the period specified in the detailed specifications in Annexure-I.
- 4) The supplier must provide service and support for the repair/replacement of any component / module for a minimum of 1 year from the date of supply.
- 5) Delivery should be **within 1 month** of receipt of the work order.
- 6) Sealed quotation should reach on or before **5.00 PM, 25/07/2026**, to the **AR (Purchase), PDPM-IIITDM Jabalpur, Dumna Airport Road, Mehganwan, Jabalpur-482005**. Alternatively, duly signed quotations on the letter head of the firm can be submitted through email also at the following email addresses: arpurchase@iiitdmj.ac.in and manishthakur@iiitdmj.ac.in and 24pmeco4@iiitdmj.ac.in within the same deadline of **3.00 PM, 20/07/2026**.
- 7) The Institute reserves the right to reject any or all bids without specifying any reasons thereof.

- 8) For any technical queries / clarification, please contact the undersigned at the following email address:
1. 24pmeeo4@iiitdmj.ac.in. Mobile number: 9691852822
2. manishthakur@iiitdmj.ac.in Mobile number: 9905297690
- 9) Any loss or damage to the items while handling / transporting, till such time the items are delivered and successfully installed / commissioned in this institute is the responsibility of supplier/dealer.
- 10) The bidder is required to submit a Performance Bank Guarantee (PBG) equivalent to 5% of the Purchase Order (PO) value (excluding GST) as a security deposit for a period of 14 months after the award of the work
- 11) All disputes should be within the jurisdiction of Jabalpur.

Thank you,

Dr. Manish Kumar Thakur
Project In charge

Annexure I

Technical Specifications for Consumable chemicals

General Description: To create a stable magnetic suspension with desired magnetic responsiveness, viscosity, and durability for efficient clutch performance for use on MAGNETORHEOLOGICAL FLUID

Consumables Chemicals				
Sr. No.	Name of chemicals	Product code (sigma Aldrich)	Qty	Specification
1	Carbonyl iron particles	1. C3518 https://www.sigmaaldrich.com/IN/en/product/sigma/c3518 APPEARANCE Grey to Very Dark Grey Powder	1kg	density 7.86 g/mL at 25 °C MP- 1535 °C BP- 2750 °C
2	Fumed silica SiO ₂	S5505 https://www.sigmaaldrich.com/IN/en/product/sigma/s5505 form – powder avg. part. Size - 0.2-0.3 µm	500g	density- 0.0368 g/mL surface area - 200 m ² /g
3	Graphite flakes	282863 https://www.sigmaaldrich.com/IN/en/product/aldrich/282863 form- powder M _w 12.011 g/mol	500g	particle size <20 µm mol wt M _w 12.011 g/mol
4	Silicon oil	50384 https://www.sigmaaldrich.com/IN/en/product/aldrich/50384 Colorless, Liquid or Viscous Liquid	1lit	viscosity ~150 mPa.s,
5	Ethylene glycol	P2139 https://www.sigmaaldrich.com/IN/en/product/aldrich/p2139 average mol wt 8,000 water: soluble (PEG is soluble in water)	500g	Density 1.0845 g/mL
6	Oleic acid	O1008 https://www.sigmaaldrich.com/IN/en/product/sial/o1008	5g	Density 0.89 g/mL
7	Ethanol	Colourless liquid Molecular weight 46.07 g/mol	5kg	Density- 0.789 g/mL pH~7 (10 g/L,