E-TENDER NOTICE

Tenders are invited for the “Supply, Installation and commissioning of “Wear and Friction monitor” through e-tender only.

Tender notification Date
:: 26/02/2019

Last date of issuing tender document through www.etenders.kerala.gov.in
:: 12/03/2019

Last date of Receiving e-tender through www.etenders.kerala.gov.in
:: 12/03/2019

Date of Opening Technical Bid
:: 15/03/2019

Date of Opening Financial Bid
:: After Technical Evaluation

Earnest money Deposit
:: INR 6,000/-

Tender fee
:: INR 1344/-

Tender Submission: - Two part tender comprising of Technical bid and Financial Bid shall be submitted through e-tender website www.etenders.kerala.gov.in

Tender Inviting authority: Assistant Professor and Head, Department of Chemistry, University of Kerala, Kariavattom Campus, Thiruvananthapuram, Kerala-695581.

Item: Wear and Friction Monitor

<table>
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<tr>
<th>Specifications</th>
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<tr>
<td>Pin diameter</td>
<td>3, 6, 8, 10 and 12 mm diameter</td>
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<tr>
<td>Disc diameter</td>
<td>165 x 8 mm</td>
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<tr>
<td>Top sample material</td>
<td>Brass, Aluminum and Steel</td>
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<tr>
<td>Bottom sample material</td>
<td>EN 31 hardened to 58 to 62 HRC</td>
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<tr>
<td>Ball diameter</td>
<td>10 mm</td>
</tr>
<tr>
<td>Disc rotation Speed</td>
<td>200 – 2000 Rpm</td>
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<tr>
<td>Wear Track dia. Mean</td>
<td>50 – 100 mm</td>
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<tr>
<td>Load range</td>
<td>2 – 200 N</td>
</tr>
<tr>
<td>Sliding velocity</td>
<td>0.5- 10 m/s</td>
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<tr>
<td>Frictional Force</td>
<td>0 – 200N</td>
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<tr>
<td>Wear Measurement</td>
<td>0 – 2000 µM (1 µM LC)</td>
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</table>
Power: 230 V, 50 Hz, S phase
Stroke: Step variable 2 to 12.5 mm
Accessories: Universal bottom sample holder

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<th>Instrument shall have the following capabilities</th>
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<tr>
<td>1. Shall record and display frictional force and compound wear</td>
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<tr>
<td>2. ACACA signal processing</td>
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<td>3. Online data acquisition system</td>
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Warranty: Two years comprehensive Warranty is required wherever applicable. If any component is found to be defective during the warranty period, the vendor has to replace the defective item immediately at their own cost.

Documents to be uploaded

1. **Technical bid**
   1. Signed Compliance Matrix on specifications
   2. Detailed Technical Brochure

2. **Financial bid**
   1. BoQ

**General Conditions:**

1. The Bidder should be a manufacturer or their dealer specifically authorized by the manufacturer to quote on their behalf for this tender as per Manufacturer Authorization Form and Indian agents of foreign principals, if any. Who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the “Technical Specification”. Such equipment must be of the most recent series/models incorporating the latest improvements in design.

2. Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof.

3. The price should be inclusive of all taxes, transportation, installation etc. Nothing extra will be paid in addition to the quoted rate.

4. Payment Terms: 90% payment shall be made through irrevocable L/C on presentation of complete and clear shipping documents and balance 10% of the amount shall be released after the receipt, installation, commissioning and acceptance of the equipment.

5. Validity of tender: Tender submitted shall remain valid at least for 90 days from the date of opening the tender. Validity beyond three months from the date of opening of the tender shall be by mutual consent.

6. Users list of the specified model, preferably from research centres within Kerala, Names of Institutes with contact person and telephone/email shall be mentioned in the bid. Performance Certificate from at least 3 research centres, preferably in Kerala shall be an added advantage.
7. Delivery and installation: Proposed delivery schedule should be mentioned clearly. Delivery and installation and training for a minimum of three people should be made at Department of Chemistry, University of Kerala, Kariavattom campus, Trivandrum- 695581, without any extra cost.

8. Service facility: The supplier should be fully equipped to render after sale service during warranty and thereafter, facility for servicing/maintenance of the equipment after sales should be clearly mentioned in the quotation.

9. The model number, make, and a printed literature of the product shall submit positively.

10. A signed compliance matrix (on specifications and conditions) to be submitted along with the quote.

11. In case of any dispute, the decision of the University authority shall be final and binding on the bidders.

12. The undersigned reserves the right to reject any or all of the tenders received without assigning any reason thereof.

The Head
Department of Chemistry
University of Kerala