Dear Sir/Madam,

Kindly send your best quotation for the following item on C.I.P. Bangalore basis. Your quotation should clearly indicate the terms of delivery, delivery schedule, E.D., payment terms etc. The tender should be submitted in two separate sealed envelopes - one containing the technical bid and the other containing the commercial bid, both of which should reach us, duly signed on or before 1700 hours 6th May 2019.

Please enclose a compliance certificate along with the technical bid.

Detailed specifications for the Universal Hardness Tester are provided below:

<table>
<thead>
<tr>
<th>Load range</th>
<th>At least 1kg (or lower) – 250 kg</th>
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</thead>
<tbody>
<tr>
<td>Hardness Modes</td>
<td>Vickers, Brinnell, Rockwell, Knoop</td>
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<tr>
<td>Loading System</td>
<td>Close loop control</td>
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<tr>
<td>Test Stage (X,Y, Z control)</td>
<td>Semi-automatic (X-Y translation via software control must be available as an option).</td>
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</table>
| Microscope and camera      | • Turret with at least three objective lenses (5X to 50X).  
                              | • This must be attached to a digital camera with at least 4 megapixel resolution. |
| Measurement of indent      | Computerised.                    |
| Specimen Dimensions        | Capable of accommodating samples of upto2x2x2 inches, and 2 kg (max). |
| Test Standards             | Must be qualified to meet the following hardness testing standards:  
                              | • Vickers (ISO 6507-1, ASTM E92)  
                              | • Brinell (ISO 6506-1, ASTM E10)  
                              | • Rockwell (ISO 6508-1, ASTM E18)  
                              | • Knoop (ISO4545-1, ASTM E384) |
| Installations              | Must have at least five working installations in Govt-funded institutions with similar specifications, unless the equipment manufacturer is a “start-up company, as defined within “www.startupindia.gov.in” |
| Test of calibration sample| Must be capable of reproducing the hardness value of a metallic calibration standard sample (provided by us) in a hardness mode of our choice within 2% error. |
| Indenters (kindly provide these as options) | • Brinnell (1mm, 2.5 mm, 5 mm) carbide balls  
                                    | • Rockwell (1/16”, 1/8”, ¼”) carbide ball  
                                    | • Vickers diamond  
                                    | • Knoop Diamond |

In case of any minor deviation, the committee reserves the right to take the final decision.
Terms & conditions

1. The vendor should also make sure that the price quoted would be valid for a period of 2 years. Reasonable change in the price will be accepted.
2. Two-bid system (separate technical and financial bids) in sealed tenders.
3. The technical bid must clearly specify the prescribed technical specifications without including the prices. Please provide in detail the specifications. Unique characteristics may be highlighted. Vendors who include price information in the technical bids will be automatically disqualified.
4. Technical bids will be opened first. IISc may seek clarifications after opening of technical bids, and may ask them to perform some example experiments on the sample given by IISc to demonstrate the promised technical specifications. Vendors may be required to give presentations. There are several items that require information to be provided by the supplier. If information is not provided against any of these items, this will disqualify the supplier. After technical evaluation by a committee, vendors may be asked to re-quote in a specific format to facilitate comparison of prices. IISc also reserves the right to cancel the tender at any time without assigning any reason whatsoever.
5. Price bids of only technically qualified vendors will be considered.
6. The price bids must offer CIP Bangalore prices.
7. Prices to be quoted separately for baseline system and options. Prices will should be quoted in adequate detail with relation to packing details to cover insurance compensation in case of damage to any specific modules.
8. Indicate price for annual maintenance contract.
9. The payment will be by letter of credit: payable 80% on shipping, 20% after satisfactory installation and acceptance for foreign vendors and “payment against delivery” for Indian vendors.
10. Indicate delivery period.
11. Order will be placed on lowest bid from technically qualified vendor.
12. The tender documents should be addressed to The Chairman, Department of Materials Engineering, Indian Institute of Science, Bangalore 560012, and posted at the following address:
   Prof. Satyam Suwas
   Department of Materials Engineering
   Indian Institute of Science,
   Bangalore 560012
   INDIA