Ref: 6/1/JNARDDC/S&P/2018-19/ L-5 (b) (Vol-II)                     Date: 26.12.2018

As superscribed on the envelope.

विषय :  Invitation of Quotation for “Laser Particle Size Analyser” for JNARDDC- in 2 bid system

Dear Sir,

The Centre is interested in procurement of “Laser Particle Size Analyser” for JNARDDC in Two bid system. As per details specification is given in Annexure-A.

<table>
<thead>
<tr>
<th>अ. क.</th>
<th>विवरण</th>
<th>मात्रा</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>“Laser Particle Size Analyser” for JNARDDC.</td>
<td>One No.</td>
</tr>
<tr>
<td></td>
<td>As per details specification is given in Annexure – A &amp; Terms &amp; Conditions in given Annexure-B</td>
<td></td>
</tr>
</tbody>
</table>

You are therefore requested to send your competitive offer for above in a sealed envelope duly superscribed on top of the envelope as Quotation for “Laser Particle Size Analyser” for JNARDDC with Tender No. & Date, to the undersigned latest by 18th January, 2019 (15 Hrs.).

Refundable EMD : Rs. 2,00,000/- (Two lakhs only) should be paid in favour of JNARDDC by way of D.D.

Tender Fees : 5000/- (Not refundable).
Pre Bid Meeting : 09.01.2019 (11.00 Hrs)
Opening Date : 18.01.2019 (15.00 Hrs)

Bids should contain 3 separate properly labeled envelopes.

1. Technical Bid
2. Price Bid
3. EMD & Tender Fees

Web Site : [www.jnاردdc.gov.in](http://www.jnاردdc.gov.in) }
Email : purchasejnاردdcnagpur@gmailcom } - for complete details


d/5
### SPECIFICATION FOR LASER PARTICLE SIZE ANALYSER

Particle size analyzer should be Laser based and should have high resolution particle size analysis from 0.01 μm to 2000 μm particle diameter. The detailed specifications are given below.

<table>
<thead>
<tr>
<th>Analysis Method</th>
<th>Laser Scattering using Fraunhofer, MIE Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of analysis</td>
<td>Wet measurement of particle size of dry powder/granules and suspensions/slurries</td>
</tr>
<tr>
<td>Particle size measurement</td>
<td>0.01 μm – 2000 μm or better</td>
</tr>
<tr>
<td>Number of size classes</td>
<td>100 or more</td>
</tr>
<tr>
<td>Measurement time:</td>
<td>Less than five minutes, sample to sample</td>
</tr>
<tr>
<td>Dispersing medium</td>
<td>Water/isopropyl alcohol/</td>
</tr>
<tr>
<td>Laser Source</td>
<td>Laser diode type</td>
</tr>
<tr>
<td>Laser class according to IEC 60825-1:2007</td>
<td>Class 1</td>
</tr>
<tr>
<td>Laser beam alignment</td>
<td>Automatic</td>
</tr>
<tr>
<td>Detector (photo diode)</td>
<td>Number of channels: ≥ 32</td>
</tr>
<tr>
<td>Liquid Sample Handling Device consist of</td>
<td>Recirculation pump</td>
</tr>
<tr>
<td></td>
<td>- Sonication probe/Power</td>
</tr>
<tr>
<td></td>
<td>- Agitator</td>
</tr>
<tr>
<td>Analysis time (measuring cycle)</td>
<td>≤ 5 minutes</td>
</tr>
<tr>
<td>Power Supply (Indian Standard)</td>
<td>120 V AC ±10% or 230 V AC ±10%, 50/60 Hz ±1%</td>
</tr>
<tr>
<td>Performance parameters</td>
<td>The instrument should be able to resolve peaks to base line</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>15 to 35°C</td>
</tr>
<tr>
<td>Non Operating temperature</td>
<td>0 to 50 °C</td>
</tr>
<tr>
<td>Software</td>
<td>For controlling, recording and evaluating results</td>
</tr>
</tbody>
</table>
Other important Specifications:

- The instrument should be controlled by software. Controlling software should be able to control instrument, record data and evaluate data in user friendly manner (graphs, tables, comparison etc.)

- Besides the regular reports (Graphical as well as Tabular) on Particle Size Distribution of mass, number, or surface area the instrument should generate reports on the following:
  - Statistical reports including conformance to a user-defined reference analysis, or variation within a user-defined tolerance band also statistical process control charts such as regression reports

Note:

A. Kindly indicate
   i. Life of laser
   ii. Life of detector
   iii. Alignment of laser or detector (at instrument breakdown) : at customer site or factory site
   iv. Service support, number of installation in INDIA and list of at least 25 customers references

B. Selection of instrument will be done on basis of following parameters
   i. 40 % -- cost of instrument
   ii. 40 % -- Result submitted by instrument supplier (on the same model to be quoted) for sample submitted by us
   iii. 10 % -- life of laser and detectors
   iv. 10 % Service support and installations in INDIA

xxxxx
ANNEXURE – B (Laser Particle Analyser)

Jawaharlal Nehru Aluminium Research Development & Design Centre
Amravati Road, Ward 23
Nagpur-23

www.jnarrddc.gov.in (07104-220017)

Standard Terms & Conditions of the Tender- 2018

1. Technical bid, Price bid and (EMD & Tender fees) should be submitted in three (3) separate sealed envelopes failing which bid will be rejected. The envelopes should be super-scribed with the Tender number, due date and name of the instrument and content.

2. If the bidder is not a registered vendor of JNARDDC, then the bidder should have following documents while submitting the offer which is compulsory for vendor registration with JNARDDC. (1) Shop & Establishment / Registration of company certificate / MSME-2006 (issuing certificate of registration for Micro / Macro / Small Scale Industries Certificates) / Certificate of Registration (2) PAN & GST No. (3) I.T Returns (4) Account No. of Firm. Registered Vendor need not submit above documents. PI quote vendor number.

3. Basic Price of the tendered item should be quoted in one currency only

4. The Refundable Earnest Money Deposit (EMD) and non-refundable Tender fees should be submitted along with the technical bid in favour of “Jawaharlal Nehru Aluminium Research Development & Design Centre, Nagpur”. Bids without EMD and tender fees (if applicable) will be summarily rejected. However, EMD is exempted for firms registered with Central Purchase Organization or with Ministry of Mines or Micro and Small Enterprises (MSEs). But the registration certificate should clearly include the name of the item/services they are offering which are manufactured by them and not for selling products manufactured by other firms. Foreign suppliers directly quoting and participating in the tender will also be exempted from EMD and Tender Fee. To avail EMD exemption, the bidder has to quote Udyog Aadhar Memorandum (UAM) registration no. issued by MSME. However, Indian agents / representative quoting on behalf of principals shall pay EMD & Tender Fee. One EMD will be accepted against one bid Ref. page-1 for EMD / Tender Fees.

5. The Bid Security / EMD (as applicable) without interest will be returned to the unsuccessful bidder within 30 days of the award of the Contract / Job. The bid security/EMD of successful bidder will be treated as Performance security. The "Performance Security Deposit" will be released without interest after a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations and subject to certification of Indenter / Authorized representative of the Centre.

R. Srinvasan
St. Admin. Officer
Jawaharlal Nehru Aluminium Research Development & Design Centre
Autonomous Body (Ministry of mines) Amravati Road, Ward 23, Nagpur-440023
ANNEXURE – B (Laser Particle Analyser)

6. Payment shall be released within 45 days after receipt of items in complete and good condition and complete installation & commissioning and certification of bill by Indenter / Authorized representative of our Centre for domestic supply. For foreign imports the payment shall be 80% by irrevocable letter of credit (LC) at sight and balance 20% after successful installation and commissioning of the instrument. **For JNARDDC - custom duty will be concessional / NIL based on DSIR certificate.**

7. Deviation table should be enclosed to outline the deviation (if any) from the tendered technical specification in comparison to the bid quoted. **Simply enclosing our spec sheet without providing any details may lead to rejection of the bid.**

8. **Validity of the Tender should be minimum upto to three months.**

9. **LD clause is @ 0.5% of PO value for each week of delay in execution of work as per Work Order.**

10. **Standard warranty terms should be clearly mentioned.**

11. Item should be delivered upto JNARDDC, Nagpur.

12. **Product leaflet of the item should be enclosed.**

13. Cost should be on Door delivery basis **upto JNARDDC, Nagpur.**

14. Disputes and Jurisdiction:- Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Nagpur. Decision of Director will be final in all tenders. **For any further clarification the contact personnel shall be the Incharge (Purchase & Stores), JNARDDC - purchasejnarddcnagpur@gmail.com**

15. The covering letter should clearly contain the details of the contact person’s email id, phone number and name of your firm for communication.

16. **Specific technical specs suitable meeting our Technical requirement are enclosed in Annexure-A.**