



INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH

PUNE

CLARIFICATION ON TENDER NUMBER - IISER-PUR-0306-20

ITEM DESCRIPTION- PROCUREMENT OF LOW TEMPERATURE POWDER X-RAY DIFFRACTOMETER

Refer IISER Pune Global tender notice number IISER/S&P/02/21-22 dated 19/5/2021 for procurement of Low Temperature Powder X-Ray Diffractometer published in Indian Express, Pune, Mumbai and New Delhi editions.

The detailed tender published on Institute website www.iiserpune.ac.in and on CPP Portal on 17th May, 2021.

Pre-Bid meeting was held on May 28th, 2021 at 3.00 PM via video conferencing and minutes of meeting is as under:

At the outset, the Assistant Registrar (S&P) welcomed all the Members and the representative of the Prospective Bidders and briefed in general the scope of the tender. Later on indenting Officer read out the clarification sought by the Prospective Bidders and replied thereto as detailed in Annexure -II

The representatives present were satisfied with the replies given and it was informed that the corrections / additions / clarifications given, as discussed during the Pre-Bid Conference would be hosted on the website of IISER Pune and all the Prospective Bidders are required to take cognizance of the proceedings of the Pre-Bid Conference before submitting their bids as stipulated in the Bidding Documents.

The other terms & conditions of the notice issued on our IISER website www.iiserpune.ac.in will remain unchanged. No more correspondence in this regard will be entertained

The meeting ended with vote of thanks to the Chair

28.5.2021

Sd/-
Assistant Registrar (S&P)



IISER PUNE

**PRE-BID CONFERENCE FOR PROCUREMENT OF LOW TEMPERATURE POWDER X-RAY
DIFFRACTOMETER**

TECHNICAL & COMMERCIAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER/PUR/0306/20

DATE : 28.05.21

S.No	Query/Clarification Sought	Clarification / Amendment
1	XRD system is imported item which we will quote in foreign currency (EUR) however in tender some auxiliary items are also required i.e. UPS, water chiller and printer which are Indian manufactured items and need to quote in INR. In your BOQ only allowed to quote single item package price in either currency, we request you to add one more row for indigenous items and allow to quote in mixed currency i.e. XRD in foreign currency and Indigenous items in INR.	To include optional and auxiliary item bidder may attach the quote in pdf format along with the price schedule of excel BOQ. While determining L1 the total price in excel BOQ and pdf will be taken into consideration.

<p>2</p>	<p>As per Annexure J for calculation of local content please suggest services like installation, calibration, training and warranty support which will be provided by local (Indian) employees can be considered as local content (value added in India) or not?</p>	<p>No,</p> <p>As per Ministry of Commerce and Industry OM No. P-45021/102/2019-BE-II-Part(1) (E-50310) Dated 4th March, 2021.</p> <p>Bidder offering imported products will fall under the category of Non-local suppliers. They can't claim themselves as Class-I/Class-II local suppliers by claiming the services such as transportation, insurance, installation, commissioning, and training and after sales service support like AMC/CMC etc. as a local value addition.</p> <p>Please refer link of OM is appended below.</p> <p>https://dipp.gov.in/sites/default/files/Letter%20to%20All%20Ministries03042021_clarification.pdf</p>
<p>3</p>	<p>Page No - 19, S. N. 3</p> <p>Your tender specification calls for X-ray tube with operating power of 2.0 kW or more. We would like to bring to the kind attention of the committee that we have 2 kind of tube in our product portfolio.</p> <ol style="list-style-type: none"> 1. A Normal conventional Cu Anode/target Metal Ceramic Insulated tube with operating power up to 2.2 kW 2. A Special “High Resolution” Cu Anode/target Metal Ceramic Insulated tube with operating power up to 1.8 kW <p>Our Special High-Resolution tube is a unique tube which offers higher tube output beam focal stability over the conventional x-ray tube due to special construction.</p> <p>The High-Resolution X-ray tube is designed for an enhanced stability of the focal spot for use with X-ray mirrors, X-ray Lens, hybrid and Johansson</p>	<p>Tender Specification Amended</p> <p>X-ray tube with operating power of 1.8 kW or higher is acceptable.</p>

	<p>monochromators giving High Data Quality. Because of the special unique construction, the operating power of the tube is limited to 1.8 kW max.</p> <p>We can provide any one of the tube in our XRD. However, we would like to offer IISER our Special High-Resolution x-ray tube as it offers superior performance than standard tube by providing superior data quality. Hence, we request the committee to consider changing the specification from “2.0 kW or higher” to “1.8 kW or higher” for us to offer the special High-resolution tube.</p>	
4	<p>Page No - 19, S. N. 4</p> <p>Goniometer: Our XRD come with a goniometer design where in the standard Goniometer radius is Maximum 240 mm. The Primary advantage obtained by increasing the goniometer radius is improvement in data resolution, however with the increase in the radius there will be significant loss in the data intensity as Intensity (I) $\propto 1/r^2$ where r is the goniometer radius. Keeping this in mind we have achieved the best resolution by improving the detector resolution where in our detector channel resolution is Just 55/70 micron there by proving both better resolution as well as better intensity. Kindly refer attached supporting document with proof of our data resolution for your review.</p> <p>The Catalog / Published data resolution on our XRD is FWHM of 0.026/0.028 deg (with 55/70 micron resolution detector) on NIST SRM LaB6. This is achieved with our goniometer at radius of 240 mm and you can compare this will other XRD's available in the market.</p> <p>Hence we kindly request you to consider change the</p>	<p>Tender Specification Amended</p> <p>Goniometer with radius 240 mm or better is accepted</p>

	<p>above specification from “radius of 250 mm or better” to “240 mm or better”.</p>	
<p>5</p>	<p>Page No - 19, S. N. 5</p> <p>Optics : Since the application requirement for GIXRD, In-plane GIXRD and XRR measurement hence requested polycapillary lens type optics may not be ideal solution for all 3 application, It may be ideal for In-plane GIXRD application but may not be ideal for GIXRD & XRR application instead a curved parabolic multi-graded mirror optics would be ideal solution for all 3 application in a single setup no need for changeover. Hence if possible, we would suggest to amend this specification as below.</p> <p>Optics:</p> <p>Fully automated motorized & computer control Primary/Secondary slits/optics for BB geometry.</p> <p>For IP-GID, XRR & GIXRD Measurements - A multi-graded curved parabolic mirror for parallel X-ray beams should be offered on incident beam side. The beam divergence for parallel beam should be less than 0.03 deg. XRR analysis up to 120 nm thin-films should be possible with quoted parallel mirror else appropriate monochromator needs to be quoted additionally. The changeover of optics should be easy and user friendly.</p> <p>Suitable equatorial soller collimator for GID & IP-GID measurement to be included.</p> <p>Suitable knife-edge collimator and automatic absorber for X-ray reflectivity (XRR) measurements to be included.</p>	<p>Tender Specification Amended</p> <p>Specification No.-5 should be read as under:</p> <p>Fully automated motorized & software controlled Primary, Secondary slits/optics for BB geometry.</p> <p>For GIXRD, IP-GIXRD and XRR measurements, suitable primary optics consisting of ‘only multilayer graded parabolic mirror’ or ‘multilayer graded parabolic mirror along with channel-cut monochromator’ to produce parallel beam with divergence 0.035 deg or less should be offered.</p> <p>Software controlled changeover of optics from divergent beam to parallel beam is preferable.</p> <p>Suitable knife-edge collimator and automatic absorber for X-ray reflectivity (XRR) measurements to be included.</p>

<p>6</p>	<p>Page No - 19, S. N. 5</p> <p>Automatic sample changer: We would like to bring to the kind attention of the committee that we have a 9-position auto sampler which will full fill to the tender requirement. This sample changer can only work for sample load up to 9 sample at a time. We also have another auto sample which is flexible and can be scaled up to 45 position automatic sample analysis from tender requirement of 8 position as the sample load increases. These are two different sample changers and works with different stages. Similar to ours we also strongly believe that the other manufacturers of XRD too have different auto-sampler stage to cater to varying sample load (no of sample that can be done in auto-sampler).</p> <p>Given this condition we would like to understand from the committee the sample load at your end and would like to place a request to consider going for a auto-sampler which is scalable to handle more sample load (more than 8) to be future proof and also from the commercial point of view as upgrading to a higher sample capacity sample changer later may prove to be more expensive later.</p>	<p>Tender Specification prevails.</p> <p>No change in the specification.</p>
<p>7</p>	<p>Page No - 20, S. N. 9</p> <p>In plane GID sample stage: We would like to understand from the committee the kind of sample and the dimensions of the sample that you are intending to analyze with the XRD. We would like to place a request to the committed to review the Z range as we fear that the 2 mm range (± 1mm in toto) may be too less to do any meaning full z adjustment of the sample for sample that are bulky with over all dimension more than 2 mm. Our recommendation is for the committee to consider at least</p>	<p>Tender Specification prevails.</p> <p>No change in the specification.</p>

	10 mm (\pm 5 mm) Z adjustment range of the sample if possible.	
8	Page No - 20, S. N. 12 There was discussion about "ICDD-PDF2 file" vs. "COD database"	Tender Specification prevails. No change in the specification.