



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान पुणे

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH PUNE

IISER/PUR/0846/23

PREBID CLARIFICATION

वस्तु विवरण- बहु-उपयोगकर्ता एक्स-रे फोटोइलेक्ट्रॉन स्पेक्ट्रोस्कोपी (एक्सपीएस) सुविधा

ITEM DESCRIPTION- Multi-users X-ray Photoelectron Spectroscopy (XPS) Facility

बहुसुविधा (एक्सपीएस) रे फोटोइलेक्ट्रॉन स्पेक्ट्रोस्कोपी-उपयोगकर्ता एक्स- रे की खरीद के लिए IISER पुणे निविदा संख्या IISER/PUR/0846/23 दिनांक 29/02/2024 देखें।

Refer IISER Pune tender number no. IISER/PUR/0846/23 dated 29/02/2024 for Procurement X-ray Photoelectron Spectroscopy (XPS) Facility.

एक ऑनलाइन प्री-बिड मीटिंग 07/03/2024 को 03.00 बजे आयोजित की गई और बैठक का कार्यवृत्त निम्नानुसार है:

An Online Pre-Bid meeting was held on 07/03/2024 at 03.00 PM and minutes of meeting is as under:

प्रारंभ में, समिति ने सभी सदस्यों और संभावित बोलीदाताओं के प्रतिनिधियों का स्वागत किया और सामान्य तौर पर निविदा के दायरे की जानकारी दी और उसके बाद सहायक कुलसचिव (भंडार एवं क्रय) से बोली लगाने वालों को निविदा की मुख्य विशेषताओं के बारे में जानकारी देने का अनुरोध किया।

At the outset, the Chairman welcomed all the Members and the representative of the Prospective Bidders and briefed in general the scope of the tender and thereafter requested Assistant Registrar (S&P) to brief the bidders on the salient features of the tender.

उपस्थित प्रतिनिधि दिए गए उत्तरों से संतुष्ट थे और यह सूचित किया गया था कि प्री बिड कॉन्फ्रेंस के दौरान की गई चर्चा के अनुसार दिए गए सुधार- / परिवर्धन / स्पष्टीकरण क IISER पुणे की वेबसाइट पर होस्ट किया जाएगा और सभी संभावित बोलीदाताओं को बोली दस्तावेजों में निर्धारित अनुसार अपनी बोली जमा करने से पहले प्री-बिड सम्मेलन की कार्यवाही का संज्ञान लेना आवश्यक है।

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.

हमारी आईआईएसईआर वेबसाइट www.iiserpune.ac.in और GeM portal पर जारी नोटिस के अन्य नियम और शर्तें अपरिवर्तित रहेंगी। इस संबंध में और कोई पत्राचार नहीं किया जाएगा।

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

बैठक अध्यक्ष के धन्यवाद प्रस्ताव के साथ समाप्त हुई।

The meeting ended with vote of thanks to the Chair.

11/03/2024

11/03/2024

Sd/-

सहायक कुलसचिव (भंडारण एवं क्रय)

Assistant Registrar (S&P)

TECHNICAL AND COMMERCIAL QUERIES AND CLARIFICATION

PRE-BID CONFERENCE FOR PROCUREMENT OF MULTI-USERS X-RAY PHOTOELECTRON SPECTROSCOPY (XPS) FACILITY

S. No.	Query/Clarification Sought	Clarification / Amendment
1	Analysis chamber: • Request the LEED optics to be on a 3rd chamber as this has been asked under option. • We request to change the number of port to 18. • Please change the bake out temperature to 100 C to 120C. We can achieve the desired vacuum with 100C baking for 48 hours. • Please remove the ion pump: As we can achieve the desire vacuum using the TMP and Titanium sublimation pump. • Please remove LN2 shield. • Please add Cold cathode gauge along with Bayard-Alpert gauge. We use cold cathode gauge in analysis chamber and BA gauge in load lock. • We request you to adjust the manipulator stage motions: 50 mm in X, 20 mm in Y and 12 mm in Z, with 1 µm resolution • Heating: Request you to change the heating up to 725C (1000K) • Cooling: Request you to change the cooling temperature up to -148C (125K) • Requesting to change the sample mounting plates to Steel • Requesting the sample bias up to 30V instead of 500V • We offer sample current measurement 20nA to 20µA maximum. • Request to change the UV source spec as follows: High-intensity UV lamp with automated two-stage differential pumping - Automated differential pumping shut-off valves - Two separate high-precision gas admission valves for Helium I/Helium II - UV lamp power supply - Advantage software control interface.	The tendered specifications remain unchanged. However, the modifications requested for the Analysis Chamber will also be considered.

	- He1/He2 Ratio: Requesting to remove this spec. - Photon Flux: 1.5×10^{12} photons/second. - Beam divergence: The beam size is roughly 1.5-2mm dia. - Cooling: Air cooled - Differential pumping: One with rotary pump, one with the TMP (260L/min) of the load lock, one - gases: Helium,	
2	Electron Energy Analyser: • Requesting to change the MPC-CCD detector. We offer two sets of detectors, One 6 channeltron set. Another 256x256 microchannel plate detector. • Requesting you to remove ARPES. We offer Angle angle-dependent XPS technique for ultra-thin film analysis. • Requesting to remove 11 slits as we have motorized continuously variable irises. We have pre-defined several lens modes saved for different application types. • Please change the bake temperature 100-120C. • Electronics Characteristic: Requesting to remove. • Software: We have our Avantage software. Requesting you to remove Tango controls. Please remove the name CASA XPS as this is a different developer of the XPS software. • We request you to remove ARPES and Fermi Mapping. • Bake up to 100-120C • Please remove the laser pointer, as we have camera optics to locate sample features. • Requesting to remove Tango-Control Technology Requesting to remove the term “two mu-metal plates” as we can guarantee adequate analysis conditions with suitable thickness of Mu-metal shielding.	The tendered specifications remain unchanged. However, the modifications requested for the Electron Energy Analyser will also be considered.
3	X-ray Source: Dual Anode Monochromatic X-ray Source: Requesting to change the X-Ray spec as below: - Requesting to change the monocrystal to ellipsoidal or toroidal. We request you to change the surface area. We use two toroidal crystals side by side, each of 90mm diameter. - Baking up to 120C - Requesting you remove non-focusing mode and power 450W for Al and 600W for Ag	The tendered specifications remain unchanged. However, the modifications requested for the X-ray Source: Dual Anode Monochromatic X-ray Source will also be considered.

	- Communication through optical fiber	
4	Load Lock Chamber: - Requesting you to change the Pressure to be better than 7×10^{-9} mbar with 120C baking. - Please remove the name nXDSi5i. We offer Dry pumps of different models or made by reputed manufacturers. - Please remove Plexiglas storage as we provide parking slots. Requesting you to remove the halogen heating for the load lock.	The tendered specifications remain unchanged. However, the modifications requested for the Load Lock Chamber will also be considered.
5	Important Notes: We offer a standard system with limited customizable options for the pumping system. Our valve control and vacuum control are integrated through PLC. We request you to remove the line: “If necessary TMPS can be moved around and shared between Main analysis chamber, Load lock and differential and suitable vacuum lines and bypasses can be created as per technical instrument requirement.”	The tendered notes remain unchanged. However, the modifications requested for the Important changes will also be considered.
6	Optional Items: Low-Energy Electron Diffraction (LEED): LEED is a non-standard for us. We do not have a specification in hand.	It is an optional item and similar specifications will serve the purpose.
7	Optional Items: Ion Source: Requesting to change the beam energy to be 4000eV. Requesting you to remove the reactive gases: O ₂ , H ₂ , hydrocarbons. Requesting to remove SIMS.	It is an optional item and the changes are acceptable.
8	We request you to accept EMD and PBG by bank guarantee. Many institutes now do not ask for EMD instead they ask for just declaration in place of EMD.	EMD in the form of Bank Guarantee is acceptable.
9	PBG asked 5% ,we request you kindly reduce it to 3% and this will be given at the time of claiming final 10% not just after PO.	Within fifteen (15) days of the award of contract, the vendor shall furnish a Security Deposit amounting to 3% of the purchase order value in the form of Demand Draft/Bank Guarantee (from scheduled Bank only) favoring the Director, Indian Institute of Science Education and Research, Pune.

Note: ““To evaluate the temperature-dependent XPS spectral quality, vendor need to submit XPS data at 150 K, 300 K, and 450 K for one sample. Sample will be kept in Purchase Office, IISER Pune along with the details of XPS measurements and raw data files (xy files) of XPS have to be submitted before 29-March-2024”.