



DEPARTMENT OF PHYSICS
SAVITRIBAI PHULE PUNE UNIVERSITY
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Notice Inviting Tender

Ref. No. Phy/Dept-Gen/23

Date: July 12, 2017

Procurement of "X-ray Photoelectron Spectrometer (XPS) with Ultraviolet Photoelectron Spectroscopy (UPS) attachment"

Savitribai Phule Pune University, Pune - 411007 (Maharashtra), India invites sealed paper tenders in two bid format from reputed principal manufacturers or their authorized distributors (foreign firms or their Indian representative companies) for the procurement of "X-ray Photoelectron Spectrometer (XPS) with Ultraviolet Photoelectron Spectroscopy (UPS) attachment" instrument separately.

Savitribai Phule Pune University, Pune hereinafter is referred as "BUYER" / "purchaser" and Tenderer is referred as "BIDDER" / "supplier."

Interested BIDDERS may submit their sealed bids under two bid system (Technical bid (Part A) and Commercial bid (Part B)) as per Technical Specifications given at ANNEXURE-I, and General Terms & Conditions given at ANNEXURE-II.

The tender should be sent in a sealed packet, containing two separate sealed envelopes (one each for Technical Bid and Financial Bid) along with prescribed Earnest Money Deposit (EMD) of amount ₹ 5,00,000/- duly superscribed with TENDER NOTICE NO. **Phy/Dept-Gen/23 dated 12/07/2017** to "The Head, Department of Physics, Savitribai Phule Pune University, Pune -411007, India" **on or before 14th August 2017** up to 5:00 p.m. (IST).

For any query pertaining to this bid document may be addressed to, The Head, Department of Physics, Savitribai Phule Pune University, Pune -411007, India
[Email: hod@physics.unipune.ac.in, Ph.: +91-020-2569 2678 (302) Fax: 020-2569 1684]

The technical bid will be evaluated first and price bids will be opened only in respect of those Manufacturer/Vendor, who are found technically qualified after evaluation of Technical bids. The date and time for opening the bids will be communicated to all the bidders.



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ANNEXURE-I

X-ray Photoelectron Spectrometer (XPS) with Ultraviolet Photoelectron Spectroscopy (UPS) attachment: System Specifications

1. Analysis Chamber
 - i) Non-magnetic UHV chamber bakeable at least up to 120 °C with multiple ports for x-ray gun, electron energy analyzer, sample manipulator, sample introduction system (along with gate valve for the sample transfer port), flood gun for charge compensation, vacuum pumping system, pressure measurements, view ports and illumination and at least two to three extra ports. Sample viewing facility in the analysis chamber.
 - ii) Appropriate vacuum pumps, vacuum pump controllers, gauges, electronic control units and software.
 - iii) Ultimate vacuum at least 10^{-10} Torr or better in the analysis chamber.
2. Preparation chamber along with sample transfer with viewing facility, compatible to main chamber.
3. Electron energy analyzer (hemispherical deflection analyzer)
 - i) Radius = 100 mm or more with at least 128 channels
 - ii) Entrance and Exit slits with variable width
 - iii) Resolution < 1 eV (FWHM) or better for XPS
4. Multi-Channel Detector System equipped with scanning acquisition mode (please specify the number of channels available)
5. X-ray source with control unit
 - i) Dual anode (Al and Mg K α)
 - ii) Monochromatized x-ray source with required hardware, software, cables, etc. for high resolution XPS and imaging studies.
 - iii) Power 400 Watt or more
 - iv) Variable anode voltage from 0 to at least 10 kV to get suitable power (please specify the power in wattage)
 - v) Necessary water cooling system.
6. Minimum 4-axis UHV manipulator (x, y, z and rotation) with manual and motorized control (please quote the price separately for manual and motorized control).
7. Flood gun for charge compensation with required hardware and control unit.
8. Argon ion gun (with control unit and cables) for surface cleaning and depth profiling.
9. Ultraviolet Photoelectron Spectroscopy (UPS) attachment: Helium (He) gas discharge (He I and He II) ultraviolet lamp with He gas admittance system, differential pumping system, required hardware and software for UPS measurements. Specify the resolution for Ag at room temperature.



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10. Nonmagnetic sample holders and sample holders for heating and cooling the sample. The sample holder should be capable to load multiple powder/flat surface samples.
11. System bake out package facilitated with cover, heaters, fans, back out control unit and timer. Protection during baking against power, water circulation and vacuum failure should be provided.
12. Licensed XPS Software (perpetual) for spectrometer control, data acquisition and analysis
 - i) Computer with latest specifications (minimum Intel core i5, CPU 8 GB RAM, 1 TB hard disk, 24 inch LED monitor, DVD RW) and compatible windows licensed software.
 - ii) The Analysis Software should have XPS database and also need to be installed on at least two other computers.
13. Samples (Au, Ag) should be provided for calibration or inbuilt calibration should be possible.
14. Low noise electronics
15. Installation and Training
16. Optional (quote separately)
 - i) Sample heating and cooling facility (cooling up to 100 K (with liquid nitrogen) and heating up to 800 K or higher) with electronic control and temperature measurement facility. Specify heating and cooling rate.
 - ii) Microfocused x-rays scanning system with required hardware and software
 - iii) Snapshot acquisition mode
 - iv) Quadrupole mass spectrometer with control unit and cables
 - v) Cluster ion gun with control unit and cables
 - vi) Online uninterrupted power supply for the entire system including water chiller with at least 1 hour battery backup.

Terms and Conditions:

1. Standard warranty should be for 1 year. Quote for extended warranty for 2 and 4 years separately. Annual Maintenance Contract (AMC) rates should be quoted after standard and extended warranty period.
2. The consumables including the spare parts/maintenance kit for three years should be quoted separately.
3. **The basis for deciding the commercially lowest price for the bid** will be the total price of dual anode and monochromatized x-ray source and price with standard and extended warranty of periods 2 and 4 years. Depending on the budget provision, the BUYER will decide the options for X-ray source and warranty period.



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ANNEXURE - II

GENERAL TERMS AND CONDITIONS

1. Last Date of Submission of Sealed Bids: 14th August 2017 up to 5:00 p.m.
2. The BIDDER should submit bids into two parts – Part A should include the technical bid and Part B should be financial bid.
3. The technical and financial bids should be quoted separately and put in different sealed envelopes marked “Technical bid” or “Financial bid” as applicable. These separate bids envelopes **MUST BE ENCLOSED IN A SEALED ENVELOPE** super-scribing Tender number/ due date & should reach to **“The Head, Department of Physics, Savitribai Phule Pune University, Pune - 411007, India”** on or before due date mentioned in the tender notice.
4. The Technical Bid shall be opened first to ensure that the bidder has submitted all the requisite documents. If the Technical Bids are found not in order or are deficient in some respect, the commercial bids in respect of such bidders shall not be opened.
5. The date for opening the bids will be communicated to all bidders.
6. Technical specifications of the instrument are as per the **ANNEXURE -I**.
7. The supplier shall pay and bear all other liabilities, taxes and duties not specifically agreed by the Purchaser in the commercial offer.
8. The leaflets catalogue, etc. should be sent invariably so that a proper evaluation of the equipment offered is possible.
9. Pre-installation requirements for the instrument (power specifications, space required, etc.) should be mentioned clearly.
10. All communications are to be addressed to “The Head, Department of Physics, Savitribai Phule Pune University, Pune -411007, India”.
11. The items to be purchased would be at the discretion of BUYER.
12. Accessories and item procured in India should be quoted in Indian rupees.
13. All applicable taxes as per Government of India norms are to be indicated separately. BIDDER should mention GST and PAN Number in the Technical Bid.



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14. DELIVERY: The successful BIDDER should deliver the material as per tender document/purchase order within 180 days from the date of acceptance of the purchase order.
15. SUPPLEMENTARY OFFER/MODIFICATION OF ORIGINAL OFFER: Tender submitted against Notice Inviting Tender (NIT) shall not be returned in case the tender opening date is extended/postponed. In case, BIDDER desirous to modify (or asked to modify) their offer/terms may submit their revised/ supplementary offer (s) within the extended Tender Opening Date (TOD) by clearly stating to the extent of updation done to the original offer. The BUYER reserves the right to open the original offer along with the revised offer.
16. CANCELLATION OF TENDER: Notwithstanding anything specified in this tender document, BUYER in its sole discretion, unconditionally and without having to assigned any reasons, reserves the rights:
- To accept OR reject lowest tender or any other tender or all the tenders.
 - To accept any tender in full or in part.
 - To reject the tender offer not confirming and/or following to the tenders terms.
17. In case any BIDDER is silent on any clauses mentioned in this tender documents, BUYER shall construe that the BIDDER had accepted the clauses as per the invitation to tender. No further claim will be entertained.
18. Revision in the terms and conditions quoted in the offer will be discussed in the Technical committee and Purchase Committee.
19. LIQUIDATED DAMAGES: Timely delivery is essence of the contract and hence if any consignment be delayed, liquidated damages at the rate 0.5% of the price of the delayed whole consignment, for each week or part whereof shall be levied and recovered subject to maximum of 5% of total purchase order value.
20. GUARANTEE/WARRANTY: Manufacture/supplier should give onsite comprehensive guarantee/warranty for the warranty period from the date of successful Installation for the performance of the instrument. The firm has to guarantee supply of spares for a minimum of period of 10 years. The Manufacturer/Authorized Distributors and Dealers must attach certificate about their after sales and service facilities, single point of contact, escalation support for on-call service or station engineer, etc.
21. SUPERVISION OF ERECTION & COMMISSIONING: Successful BIDDER shall depute concerned specialist, for supervision of erection & commissioning of the instrument to be carried out. The successful BIDDER shall make necessary arrangement at their own expenses for stay, transport and other expenses of their specialist during their stay in Pune which also includes imparting training to Savitribai Phule Pune University personnel.
22. TRAINING: The BIDDER should train for the operation and maintenance to the personnel of



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Savitribai Phule Pune University. General training session for at least one week for staff and students should be conducted by the BIDDER.

23. LEGAL MATTER: All Domestic and International disputes are subject to Pune Jurisdiction Only.
24. If BIDDER is not quoting directly, name and address of agents and representatives in India should be disclosed.
25. The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.
26. While submitting bid, the BIDDER shall deposit an amount mentioned in the Tender Notice as Earnest Money deposit (EMD), with the BUYER through Bank Guarantee in favor of "**The Finance and Account Officer, Savitribai Phule Pune University, Pune**" payable at Pune. Tender / bids not accompanied by the requisite amount of EMD are liable to be rejected.
27. The EMD shall be valid up to a period of 180 days from the date of issue or the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and the BUYER, whichever is later.
28. In case of successful BIDDER, EMD will be returned within 30 days from the date of submission of Security Deposit (5 % of the Purchase Order (PO) value) and acceptance of the PO. EMD will be refunded to the unsuccessful bidder after finalization of the tender process. No interest shall be payable by the BUYER to the BIDDER on EMD for the period of its currency. Security Deposit shall be forfeited if the selected vendor after award of contract, fails to execute the same.
29. After installation and acceptance of the system by the BUYER, the BIDDER should submit Performance Bank Guaranty (10 % of the PO value) covering entire warranty period. The performance will be decided by the quality (intensity, position and resolution) of the XPS and UPS spectra of the standard sample.
30. TERMS OF PAYMENT are as follows:
- If the bid is quoted in Indian rupees:**
- 90% of the payment will be made on successful installation and commissioning of entire system.
 - Balance 10% payment will be made against submission of Performance Bank Guarantee.
- If the bid is quoted in foreign currency:**
- 90% payment will be made by wire transfer (TT) only after delivery at destination (at site). The payment will be made only in the name of supplier abroad.



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- ii. Balance 10% payment will be made by wire transfer (TT) on successful installation, commissioning and completion of the acceptance criteria against submission of Performance Bank Guarantee.
- iii. The Payment transfer operating charges inside India will be borne by the BUYER. The Payment transfer operating charges outside India will be to BIDDER's account.

31. Pre – Qualification Criteria:

- a) Bidders should be the manufacturer / authorized dealer. Letter of Authorization from manufacturer on the same and specific to the tender should be enclosed.
- b) An undertaking from the manufacturer is required stating that they would facilitate the bidder on regular basis with technology/product updates and extend support for the warranty as well.
- c) Manufacturer should be internationally reputed Branded Company.
- d) Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between bidder specification and supporting documents, etc. may lead to rejection of the bid.
- e) Furnishing of wrong/ambiguous information in the compliance statement may lead to rejection of bid and further black listing of the bidder, if prima-facie it appears that the information in the compliance statement was given with a malafide/fraudulent intent.

32. The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/ Department of the Government of India or Public Sector Unit (PSU) and if it is found at any stage that similar product/system or subsystem was supplied by the BIDDER to any other Ministry/Department of the Government of India or PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the BUYER, if the contract has already been concluded.



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