

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
PHYSICAL RESEARCH LABORATORY (PRL)  
AHMEDABAD**

**Tender for Laser ablation sample introduction system: 193 nm  
Excimer ArF laser ablation system for in-situ element and isotopic  
analysis compatible with Thermo HR-ICP-MS**

**Bids to be submitted online**

**Tender No.: PRL/PURCHASE/PR202600013301 dated 24-09-2026**

## A. Tender Details

|                        |                                           |
|------------------------|-------------------------------------------|
| Tender No :            | <b>PRL/PURCHASE/PR202600013301</b>        |
| Tender Date :          | <b>24-09-2026</b>                         |
| Tender Classification: | <b>GOODS</b>                              |
| Purchase Entity :      | <b>PURCHASE</b>                           |
| Centre :               | <b>PHYSICAL RESEARCH LABORATORY (PRL)</b> |

### **Laser ablation sample introduction system: 193 nm Excimer ArF laser ablation system for in-situ element and isotopic analysis compatible with Thermo HR-ICP-MS**

This tender is proposed as a GLOBAL PUBLIC TENDER ENQUIRY for procurement of Qty 1 Laser ablation sample introduction system: 193 nm Excimer ArF laser ablation system for in-situ element and isotopic analysis compatible with Thermo HR-ICP-MS. THE PRICE BIDS CAN BE OFFERED in ANY currency. Class-I Local Supplier/Class-II Local Supplier/ Non-Local Supplier are eligible to bid in terms of Public Procurement (Preference to Make in India), Order 2017 - Revision Dt 19 Jul 24. The prospective bidders are encouraged to offer products meeting technical specifications and qualitative requirement as per tender document. This is a TWO-PART tender i.e. Techno-Commercial Bid (Part-I) and Price Bid (Part-II) shall be submitted separately. All technical and commercial terms and conditions shall be furnished in the Techno-Commercial Bid Purchase preference to eligible vendors are applicable as per extant notifications on MII/MSMEs issued by the Government of India.

Note: Indian/Local/Domestic manufacturers are encouraged to participate and submit competitive bids for technically equivalent items.

#### A.1 Tender Schedule

|                              |                         |
|------------------------------|-------------------------|
| Bid Submission Start Date :  | <b>24-09-2026 17:00</b> |
| Bid Clarification Due Date : | <b>02-10-2026 10:00</b> |
| Bid Submission Due Date :    | <b>22-10-2026 13:00</b> |

Bid Opening Date : **22-10-2026 13:30**

Price Bid Opening Date : **23-10-2026 16:00**

## B. Tender Attachments

NA

### Instructions To Vendors

#### 1. Certificate on compliance fo rule 144(XI) of GFR 2017

1. ( On Sellers letterhead)

EGPS Tender No. \_\_\_\_\_

Country of Origin of quoted items / services : \_\_\_\_\_

Land Border Compliance as per DOE No. F.7/10/2021-PPD(1) dated 23-02-2023:

I HAVE READ THE CLAUSE REGARDING RESTRICTIONS ON PROCUREMENT FROM A BIDDER OF A COUNTRY WHICH SHARES A LAND BORDER WITH INDIA.

1.I CERTIFY THAT THIS BIDDER IS NOT FROM SUCH A COUNTRY.

2.(OR IF FROM SUCH A COUNTRY) BIDDER HAS BEEN  
REGISTERED WITH THE COMPETENT AUTHORITY : \_\_\_\_\_ (YES / NO / NA)

3.I HEREBY CERTIFY THAT THIS BIDDER FULFILLS ALL REQUIREMENTS IN THIS REGARD AND IS ELIGIBLE TO BE CONSIDERED. ( WHERE APPLICABLE , EVIDENCE OF VALID REGISTRATION BY THE COMPETENT AUTHORITY SHALL BE ATTACHED ).

4.I HAVE READ THE CLAUSE REGARDING THE RESTRICTIONS ON PROCUREMENT FROM A BIDDER HAVING TRANSFER OF TECHNOLOGY (TOT) ARRANGEMENT. I CERTIFY THAT THIS BIDDER DOES NOT HAVE ANY TOT ARRANGEMENT REQUIRING REGISTRATION WITH THE COMPETENT AUTHORITY

OR

I HAVE READ THE CLAUSE REGARDING THE RESTRICTIONS ON PROCUREMENT FROM A BIDDER HAVING TRANSFER OF TECHNOLOGY (TOT) ARRANGEMENT. I CERTIFY THAT THIS BIDDER HAS VALID REGISTRATION TO PARTICIPATE IN THIS PROCUREMENT

I HEREBY CERTIFY THAT I FULFILL ALL THE CONDITIONS MENTIONED IN DOE OM No. F.7/10/2021-PPD(1) dated 23-02-2023 AND I ADHERE TO THE OM AND THE AMENDMENTS ISSUED IN THIS REGARD FROM TIME TO TIME.

Date:Seal and Signature of Bidder

Contact number:

## C. Bid Templates

### C.1 Technical Bid - Laser ablation sample introduction system: 193 nm Excimer ArF laser ablation system for in-situ element and isotopic analysis compatible with Thermo HR-ICP-MS

#### 1. Laser ablation sample introduction system

##### Item specifications for Laser ablation sample introduction system

| SI No | Specification                                                                                                                                                                                                            | Value | Compliance | Offered Specification | Remark |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------|-----------------------|--------|
| 1     | 193 nm Excimer Laser compatible with existing Thermo Scientific Element XR HR-ICP-MS for the U-Pb isotopic and trace element analysis of mineral/ rock/ meteorite/ fossil/ archaeological and rock metallurgical samples |       | -          |                       |        |
| 2     | Laser Source: 193nm Excimer Laser source, air cooled, $\approx 5$ ns pulse width, laser repetition rate in the range of 250-500 Hz, energy stability of better than 2%.                                                  |       | -          |                       |        |

[Document : Item Doc Laser ablation sample introduction system\\_1\\_Final Specifications for laser\\_09Feb2026.pdf](#)

[Document : Specification](#)

#### 2. AMC

##### Item specifications for AMC

| SI No | Specification | Value | Compliance | Offered Specification | Remark |
|-------|---------------|-------|------------|-----------------------|--------|
|-------|---------------|-------|------------|-----------------------|--------|

|   |              |                                                                                                |                    |  |  |
|---|--------------|------------------------------------------------------------------------------------------------|--------------------|--|--|
| 1 | Optional AMC | Optional AMC for two years after three years of warranty (4th and 5th year after installation) | Yes / No / Explain |  |  |
|---|--------------|------------------------------------------------------------------------------------------------|--------------------|--|--|

## Document : AMC charges

### Common Specifications (Applicable for all items)

| SI No | Specification                                    | Value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Compliance         | Offered Specification | Remark |
|-------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------|--------|
| 1     | Installation, validation, Training and Warranty: | <p>Installation, validation, Training and Warranty:</p> <p>(i) Complete unpacking, installation, and validation of the system</p> <p>(ii) Supplier should demonstrate the operational capability within acceptable accuracy and precision on NIST glass standards</p> <p>(iii) Comprehensive onsite hands-on training of two persons on operation (application/software), and maintenance (a minimum of 3 days), at no cost to PRL.</p> <p>(v) Three-year standard warranty from the date of installation</p> <p>(vi) Vendor should include details of maintenance tools and initial stock of maintenance spares for three years that are essential for the proper operation and maintenance of equipment</p> <p>(vii) The vendor should provide assurance for the supply of spares for minimum 10 years after the installation</p> <p>vii) Optional CMC for an additional two years</p> | Yes / No / Explain |                       |        |

|   |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                    |  |  |
|---|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--|--|
| 2 | Service Support:            | Service Support:<br>(i) Remote assistance with the same day response<br>(ii) Telephone/mail assistance when the user has sufficient knowledge to attempt minor repairs<br>(iii) Maximum onsite response time of FIVE (5) working days for both hardware and software-related problems                                                                                                                                                                                                                                                                                                                    | Yes / No / Explain |  |  |
| 3 | Performance Specifications: | Performance Specifications:<br>The vendor must have installed a minimum of ten pieces of equipment of similar technology worldwide for elemental and isotopic applications in Geosciences research                                                                                                                                                                                                                                                                                                                                                                                                       | Yes / No / Explain |  |  |
| 4 | Additional add-ons:         | Additional add-ons:<br>(i) Data reduction software (GLITTER or equivalent) for LA-ICP-MS data with the capability to process isotopic, elemental, and mapping raw data<br>(ii) Provision for the installation of LIBS in the future<br>(iii) External Energy meter for fluency check<br>(iv) Reference standards to be provided with the system for U-Pb geochronology:<br>Zircon reference material (91500 and Plešovice), Apatite reference material (any two currently available), Rutile reference material (any two currently available), Monazite reference material (any two currently available) | Yes / No / Explain |  |  |
| 5 | Detailed Specification      | Detailed Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Yes / No / Explain |  |  |

|    |                       |                                                                                                                                                                                                                                                           |                    |  |  |
|----|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--|--|
| 6  | General Description:  | General Description:<br>193 nm Excimer Laser compatible with existing Thermo Scientific Element XR HR-ICP-MS for the U-Pb isotopic and trace element analysis of mineral/ rock/ meteorite/ fossil/ archaeological and rock metallurgical samples          | Yes / No / Explain |  |  |
| 7  | Laser Source:         | Laser Source:<br>193nm Excimer Laser source, air cooled, ≤5 ns pulse width, laser repetition rate in the range of 250-500 Hz, energy stability of better than 2%.                                                                                         | Yes / No / Explain |  |  |
| 8  | Beam Delivery System: | Beam Delivery System:<br>Rounded and square ablations with spot size in the range of 1–150 µm, having flat homogenous ablation craters base (with provision for beam expander to increase spot size), Fluency ≥ 15 J/cm <sup>2</sup> with fluency control | Yes / No / Explain |  |  |
| 9  | Viewing system:       | Viewing system:<br>High-resolution camera with 10x or better optical magnification, with a sample field of view navigation system, and image capturing capability                                                                                         | Yes / No / Explain |  |  |
| 10 | Lighting system:      | Lighting system:<br>Software-operated and independent LED light-based transmitted, ring, and coaxial light source with the provision for reflected and polarized light.                                                                                   | Yes / No / Explain |  |  |

|    |                                     |                                                                                                                                                                                                                                                                                           |                    |  |  |
|----|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--|--|
| 11 | Ablation Chamber and Stages:        | Ablation Chamber and Stages:<br>High-performance two-volume sample chamber for analysis and accommodation of large and small sample types. Software-controlled, fully motorized XYZ stage with a cross-stage motion reproducibility between 1-3 $\mu\text{m}$ .                           | Yes / No / Explain |  |  |
| 12 | Gas Handling:                       | Gas Handling:<br>Two mass flow controllers (MFCs) for helium and nitrogen, with an additional MFC for nitrogen, fully integrated with the sample chamber. This additional N2 mass flow controller (MFC) should have a precise c. 1-10 ml/min flow rate with a 1ml increment rate          | Yes / No / Explain |  |  |
| 13 | Sampling system and sample holders: | Sampling system and sample holders:<br>Laser spot size enhancer and flexible shutter modes, sample holders capable of holding (i) 1-inch and 1/2-inch circular shapes, (ii) 1-inch mounts and standard petrographic thin sections (rectangular/square), and (iii) universal sample holder | Yes / No / Explain |  |  |

|    |                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                        |                    |  |  |
|----|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--|--|
| 14 | PC and Software:                                       | PC and Software:<br>Fully Integrated control PC for laser, stage, and camera, and software with features such as fully integrated hardware management, which involves laser control, sequence editor, imaging, calibration tools for fluence control, automation, data logging compatibility for CSV, video, or image files. import capability; software-controlled turret assembly for automated objective switching. | Yes / No / Explain |  |  |
| 15 | Dimensions and support system:                         | Dimensions and support system:<br>Compact standalone system with stable frame and mobility options                                                                                                                                                                                                                                                                                                                     | Yes / No / Explain |  |  |
| 16 | Power compatibility:                                   | Power compatibility:<br>230V AC single phase, 50–60Hz, 10A service                                                                                                                                                                                                                                                                                                                                                     | Yes / No / Explain |  |  |
| 17 | Connectivity kit for coupling with existing HR-ICP-MS: | Connectivity kit for coupling with existing HR-ICP-MS:<br>Connectivity kit including Tygon tubing and bidirectional trigger cables compatible with Scientific Element XR HR-ICP-MS/quadrupole ICP-MS                                                                                                                                                                                                                   | Yes / No / Explain |  |  |
| 18 | Premix and He gas:                                     | Premix and He gas:<br>The vendor should supply premixed gas and high-purity helium (He) required for the system installation with compatible gas regulators.                                                                                                                                                                                                                                                           | Yes / No / Explain |  |  |

## Supporting Documents required from Vendor

### 1. OEM

5 additional documents can be uploaded by the vendor

## C.2 Commercial Terms / Bid

| Sl. No. | Description                                                                                                                                                                                           | Compliance         | Vendor Terms |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------|
| 1       | Supply and installation                                                                                                                                                                               | Yes / No / Explain |              |
| 2       | Brand New item only, not refurbished.                                                                                                                                                                 | Yes / No / Explain |              |
| 3       | Terms of Delivery [Normal delivery terms - FOR Destination]                                                                                                                                           | Yes / No / Explain |              |
| 4       | PO ordering address in full with Contact Persons Name, E-mail id, Phone No.                                                                                                                           | Yes / No / Explain |              |
| 5       | Payment [Within 30 days after receipt and acceptance of item at our site].                                                                                                                            | Yes / No / Explain |              |
| 6       | Validity of the offer as per tender Terms                                                                                                                                                             | Yes / No / Explain |              |
| 7       | Name and address of the Indian Agent, with e-mail ID (if any)                                                                                                                                         | Yes / No / Explain |              |
| 8       | Liquidated Damages as per Tender Terms                                                                                                                                                                | Yes / No / Explain |              |
| 9       | Percentage of agency commission included in the quoted price payable in Indian Rupees only directly to the Indian Agent.                                                                              | Yes / No / Explain |              |
| 10      | Warranty Period (Starts from the date of installation)                                                                                                                                                | Yes / No / Explain |              |
| 11      | Security Deposit: Successful Tenderer shall submit Security Deposit equivalent to 3% of the order value with requisite validity (applicable if value of offered goods or service is more than 5 Lakh) | Yes / No / Explain |              |
| 12      | Email ID of Authorized Contact Person (In case of any query)                                                                                                                                          | Yes / No / Explain |              |
| 13      | This tender is proposed as a DOMESTIC TENDER. Foreign vendor or Non Local suppliers are NOT allowed to participate. The bids can be submitted in INR only.                                            | Yes / No / Explain |              |
| 14      | Country of Origin of the offered product/Services                                                                                                                                                     | Yes / No / Explain |              |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |  |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--|
| 15 | ONLY Class -I/Class-II local suppliers as per make in India policy are eligible to participate in the bid. 2.The percentage of local content should be specifically mentioned in the offer for purchase preference, 3. Preference will be given to class-I Local Supplier/MSE eligible suppliers and in their absence, class-II / non MSE local Local supplier will be considered                                                                                                                                                                                                                            | Yes / No / Explain |  |
| 16 | Performance Bank Guarantee (PBG) for 3% of order value valid for warranty period plus two months. A combined BG can be given for SI 10 & 15.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Yes / No / Explain |  |
| 17 | Delivery Period from the date of PO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes / No / Explain |  |
| 18 | Purchase preference to eligible vendors are applicable as per extant notifications issued by the Government of India on MII and MSEs. The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall also indicate percentage of local content and provide self certification that the item (s) offered meets the local content requirement for Class-I / Class-II Local Suppliers as the case may be. They shall also give details of location (s) at which the local value addition is made. Certification has to be provided as sample certificate provided with the tender document. | Yes / No / Explain |  |
| 19 | Technical Bids will be opened at the scheduled due date & time. No further intimation will be sent in this regard. The schedule for price bid opening shown is only indicative. Price bids will only be opened in the case of parties who have been techno-commercially accepted, the details of which will be communicated at a later stage                                                                                                                                                                                                                                                                 | Yes / No / Explain |  |
| 20 | I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India published through DoE OM No 6/18/2019-PPD Dt 23 Jul 20; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.                                                                                                                                                                       | Yes / No / Explain |  |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |  |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--|
| 21 | In case of TWO-PART tender i.e. Techno-Commercial Bid (Part-I) and Price Bid (Part-II) shall be submitted separately. All technical and commercial terms and conditions shall be furnished in the Techno-Commercial Bid while price shall be indicated only in the Price Bid. Uploading price details anywhere else other than the price-bid shall lead to unconditional rejection of the tender. Please make note of the same. Tenderers are advised NOT TO UPLOAD any documents revealing the price of the main equipment, accessories, spares or AMC in technical & Commercial bid. They are however, requested to upload UNPRICED BIDS (i.e. Price details masked) showing appropriate breakup of components of main equipment, individual accessories and spares as desired. | Yes / No / Explain |  |
| 22 | Any other Terms and Conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Yes / No / Explain |  |
| 23 | Custom Duty Concession Certificate under Customs Notification No. 51/96 dated 23-07-1996 (as amended from time to time) applicable for Research Institutions shall be provided by PRL on demand. The supplier has to provide clear details of imported bill of material as per contract for issue of CDEC. Copy of Import invoice and Airway bill to be provided for seeking the above certificate. Please state clearly in the offer that this certificate is required. Amount of duty payable after issuance of Custom Duty Concession Certificate shall be borne by the seller only.                                                                                                                                                                                           | Yes / No / Explain |  |
| 24 | In case of vendors quoting imported product, price mentioned in the bid towards services such as transportation, insurance, installation, commissioning, training and after sales services support AMC/CMC/Extended warranty etc, will not be considered for local value addition.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Yes / No / Explain |  |
| 25 | GeM Seller ID (if applicable)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Yes / No / Explain |  |
| 26 | CAMC Charges are to quoted separately. CAMC Charges will not be considered during the evaluation process for determining the L1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Yes / No / Explain |  |

### C.3 Price Bid

| Sl. No. | Item                                                  | Quantity   | Unit Price | Currency | Total Price | Remark |
|---------|-------------------------------------------------------|------------|------------|----------|-------------|--------|
| 1       | Laser<br>ablation<br>sample<br>introduction<br>system | 1.00 Nos.  |            | -        |             |        |
| 2       | AMC                                                   | 2.00 Years |            | -        |             |        |