CSIR-NML

सीएसआईआर - राष्ट्रीय धातुकर्म प्रयोगशाला
(सीएसआईआर की एक संघटक प्रयोगशाला, विज्ञान एवं प्रौद्योगिकी मंत्रालय)
भारत सरकार, बर्मामाइंस, जमशेदपुर - 831007, झारखंड (भारत)

CSIR-National Metallurgical Laboratory
(A Constituent Laboratory of CSIR, Ministry of Science & Technology)
Govt. of India, Burmamines, Jamshedpur - 831 007, Jharkhand (India)

12.11.2026

CORRIGENDUM

Tender Reference No. :- PUR/118/AKC/DB/GTE/25-26

Tender ID :- 2026_CSIR_294936_1

Item Name :- Supply, Installation & Commissioning of

THERMAL DESORPTION SPECTROMETER

NOTE: The Bids must be submitted in the Central Public Procurement Portal (URL:https://etenders.gov.in/eprocure/app) only. Manual/Offline bids shall not be accepted under any circumstances. Bidders should quote in INR only.

Consequent to the Pre-Bid Meeting held on 27.10.2026, the technical specifications of the above referred tender has been revised and are attached at Annexure-I. The bidders are requested to submit their bid based on the revised technical specifications as per Annexure-I.

Further, the bid submission end date and date of opening of bid are extended as follows:-

Bid Submission End Date	**08.12.2026 (03.00 PM)**
Bid Opening Date	**09.12.2026 (03.00 PM)**

Based on the request of various participating vendors during Pre-Bid Conference, the concerned Committee of CSIR-NML has decided to amend the delivery period and payment terms of the tender document. Accordingly, the amended delivery period and payment terms of the tender document shall be as follows :-

AMENDED DELIVERY PERIOD (vide Tender Document Chapter 3)	
Delivery Period [Goods to be delivered in one lot at final destination.]	**GOODS SUPPLIED FROM ABROAD :-** Goods shall be shipped within **12 months** from the establishment of LC.* **GOODS SUPPLIED FROM INDIA :-** Goods shall be delivered and unloaded at CSIR-NML within **12 months** from the award of Contract. ***Establishment of LC will be done only upon receipt of award confirmation and receipt of Performance Security within 21 days of issuance of Purchase Order. In the event of delay in Performance Security submission, delivery period will be reduced accordingly.**

AMENDED PAYMENT TERMS

[vide Tender Document Chapter 2B- SPECIAL CONDITIONS OF CONTRACT (SCC)]

PAYMENT FOR GOODS SUPPLIED FROM ABROAD:

Payment of foreign currency portion shall be made in currency of the Contract in the following manner:

(a) On Shipment : 80 % (Eighty Percent) of the Contract Price of all the ordered Goods **(except AMC Charges)** shipped shall be paid through irrevocable Letter of Credit opened in favour of the Supplier in a bank in its country, upon submission of documents specified in the LC.

(b) **On Acceptance: 20% (Twenty Percent)** of the Contract Value of all the ordered goods shall be paid through Wire Transfer after successful installation, commissioning and training including completion of all contractual obligations upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security including fulfilment of all contractual obligations subject to the submission of Performance Security.

The Performance Security of 3% (Three percent) of value of Purchase Order should be valid till 60 (Sixty) days beyond the date of expiry of Warranty Period of **03 (Three) Years comprehensive Warranty** from the date of acceptance.

As already mentioned in the tender document under GCC Clause No. 2.13, the Performance Security is to be submitted by the supplier within **21 days** after notification of award/PO.

GOODS AND SERVICES SUPPLIED FROM INDIA:

The payment shall be made in Indian Rupees, as follows:

a) Upon complete delivery and inspection at delivery site :- 80% (Eighty Percent) of the Contract Value of all the ordered goods **(except AMC Charges)** shall be paid through RTGS within 30 days upon delivery of all the ordered goods at CSIR NML and completion of inspection of goods by the consignee at final destination site (CSIR-NML).

b) On Acceptance:- 20% (Twenty Percent) of the Contract Value of all the ordered goods shall be paid through RTGS after successful installation, commissioning and training including completion of all contractual obligations upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security including fulfilment of all contractual obligations subject to the submission of Performance Security.

The Performance Security of 3% (Three percent) of value of Purchase Order should be valid till 60 (Sixty) days beyond the date of expiry of Warranty Period of **03 (Three) Years comprehensive Warranty** from the date of acceptance.

As already mentioned in the tender document under GCC Clause No. 2.13, the Performance Security is to be submitted by the supplier within **21 days** after notification of award/PO.

The above amendment shall be considered in the original tender document wherever applicable.

All other terms and conditions shall remain same.

12/11/20

Stores & Purchase Officer,
CSIR-NML, Jamshedpur

ANNEXURE-I

Annexure I: Technical specification of Thermal Desorption Spectrometer

S. No.	Item	Description/Details
01	Mass spectrometer	Mass analyser: Quadrupole mass spectrometer
		UHV chamber with Vacuum level: $< 5 \times 10^{-7}$ Pa
		Mass range: 1-100 amu or higher
		Sensitivity of hydrogen detection: ≤ 0.01 wt. ppm
		Detector: Dual Detector - Electron multiplier detector and Faraday cup detector
		Dynamic Range: $\geq 10^7$
		Stable low hydrogen background $\leq 5 \times 10^{-9}$ Pa
		Ionization method: Electron ionization
02	Sample size	Dimension: 1 cm × 1 cm × 0.5 cm or higher in all dimensions
03	Test chamber and sample heating	Heating/ramp rate: 1-10 ℃/minute or higher
		Temperature range: Room temperature to 1000 ℃ or higher
		UHV chamber with Vacuum level: $< 5 \times 10^{-7}$ Pa
04	Load lock chamber	Vacuum Level: $< 5 \times 10^{-5}$ Pa
		Pumping time: ≤ 30 minutes
		Ultra-High Vacuum compatible sample transfer to heating/test chamber
05	Calibration	Calibration of the instrument through certified hydrogen standard leak gas of different concentrations or any other standard method
		Calibration capability: Between 0.01 wt. ppm or lesser and 15 wt. ppm or higher
		Supply of standard sample/gases for calibration for at least 5 years
06	Interfacing, software and operations	Hydrogen amount estimation through software
		PC/PLC/PC+PLC based automation for operation and control of the equipment
		Real time TDS spectra
		Peak integration and fitting possibilities in software
		PC with latest windows operating system version
		Background subtraction should be possible
07	Safety	Hydrogen gas leak detection sensor
		Flame detector (Heat rise sensor)
		Auto-cut provision in case of leak/fire/any other safety breach
08	Spares	Standard spare parts to be provided for trouble-free operation of the equipment for at least 5 years after expiry of comprehensive warranty
09	Power supply rating	Equipment operable at 220 V AC, 50 / 60 Hz, single phase
10	Warranty	3 years comprehensive on-site warranty for the system and its peripherals from the date of installation of the system
11	Manuals and documents	User, service and maintenance manuals including relevant drawings

21/11/26

Other Terms and Conditions

1. Supply, installation and commission of TDS equipment at CSIR-NML laboratory.
2. Training on the equipment for 5 members of CSIR-NML for at least 5 days.
3. AMC charges for 2 years (after expiry of 3 years of comprehensive warranty period) to be furnished and the same will be considered for price comparison.
4. The supplier should have supplied at least five (05) Thermal Desorption Spectrometer (TDS) systems of equivalent specification in the last five (05) years within India or abroad and should produce the original purchase order copies/applicable document.
5. The TDS system of the asked specification must be readily available for use. Any proposal for design and fabrication of the TDS system as per the asked specification cannot be accepted.
6. Upgradation of software for free of cost during warranty period.
7. Spare/Consumables should be available in the market at least for 10 years after the Supply/installation (whichever is later) of the equipment.

Acceptance Criteria

1. Demonstration of quantitative hydrogen measurement using certified reference materials and hydrogen-charged metallic samples covering the measurement range of the instrument, including low hydrogen concentration (~0.01 ppm or lower) and higher concentrations up to at least 15 ppm, with reproducible results.
2. Demonstration of real-time acquisition and analysis of TDS spectra (desorption rate versus temperature/time) and software-based quantification of cumulative as well as interval-specific hydrogen content over user-defined temperature ranges.
3. Demonstration of simultaneous monitoring and recording of multiple mass channels, including at least m/z = 2 (H_2), 18 (H_2O), and 28 (CO/N_2), during a programmed thermal desorption experiment.