National Centre for Biological Sciences

Tata Institute of Fundamental Research

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ENQUIRY

Ref: NCB/CA26-147/261499 November 04, 2026

Dear Sirs

Please let us have your **Quotation** for the following:

S.No.	Description	Qty	UOM
1	Item Name: Cocoon Bag for Anoxic Treatment of Archival Materials	1.00	NO
2	Item Name: Portable Trace Oxygen Analyser for Anoxic Treatment of Archival Materials	1.00	NO
3	Item Name: High-Pressure Gas Supply Hose for Anoxic Treatment Setup	1.00	NO

NOTE :
1. Deatiled specification attached below.
2.Kindly share the specifications of the offered product.

1. The quotation shall be submitted in a sealed envelope duly superscribed with the enquiry number, and the due date for ..... Ref No: 261499. The bids should be addressed and to sent by post/courier to 'THE HEAD -PURCHASE'.

The bids are liable to be rejected if the sealed envelope is not addressed to “THE HEAD-PURCHASE? with Tender Ref No. and Item Description and due date. The bids delivered in person shall be dropped in Purchase Section. If the bids are sent through courier or mail,it should reach by submission date and time and NCBS will not be responsible for the delay.

2. DUE DATE FOR SUBMISSION OF QUOTATION AGAINST THIS ENQUIRY IS 18/11/2026 BY 5.30PM.

3.QUOTATIONS RECEIVED AFTER THE DUE DATE SHALL BE REJECTED.
4.The validity of your quotation should be for 60 days from the due date.
5.All duties, taxes, surcharge and cess as currently applicable must be stated in yourquotation, separately. Otherwise your quote is liable to be rejected.
6.Your quotation should indicate delivery period & warranty period.
7.Delivery to be made to our stores. Please indicate charges, if any extra. Transit Insurance should be done upto NCBS Stores.
8.If you are unable to supply the quality, specifications or brand as mentioned in our enquiry,please state so and then offer alternative to quality/specifications.
9.Payment: within one month after delivery & acceptance/satisfactory installation.
10.Please ensure that the enquiry number and the due date is superscribed on the envelope failing which your quotation is liable to be rejected.
11.Since we are a public funded research institution, we are exempted from paying Customs duty (Except advolerum duty of 5% + 2%Cess and 1% Cus Sec & High Edu. CESS vide Notification No.51/96 with latest amendments) and excise duty vide Notification No. 10/97 CENTRAL EXCISE dated 01-03-1997 for all scientific equipments, technical instruments, equipments (including computers), their accessories, spares,consumables and software. Hence, please offer your prices

12.If the item is covered under DGS&D rate contract, please quote the rate as per the DGS&D rate contract with xerox copy of the DGS&D order.

13. Any dispute or differences that may arise between the parties shall be referred to the sole arbitration of the Centre Director or his nominees. The decision of the arbitrator shall be final and binding on the parties. The venue for arbitration shall be Bangalore. The provisions of the Arbitration and Conciliation Act, 1996 as amended from time to time shall apply. The courts in Bangalore shall have exclusive jurisdiction to deal with any or all disputes between the parties.

14. Liquidity Damages:If the equipment/ items as per specifications in our P.O. is not supplied (shipped) within the specified delivery schedule, then liquidated damages (not in terms of penalty) will be imposed automatically and shall be deducted from the bill at the rate of 0.5% per week subject to a maximum of 10% of the order value.

15. Income Tax at the applicable rates as per the Indian Income Tax Act 1961 will be deducted at source for the services availed / ordered. In case of service provider, the rate of tax deduction shall be at 2% as per Section 194C, and in case of fee for professional / technical services
under section 194J, the tax reduction shall be at the rate of 10%. In case service provider does not provide PAN number, the deduction shall be at 20% under section 206 AA.
-Tax Deduction Certificates will be provided on request for non PAN holders & Foreign Vendors and PAN holders could avail them through NSDL site dealing with 26AS.

16. Micro and Small Enterprises (MSEs) seeking purchase preference must submit, along with their offer, valid proof of registration for the item tendered, as per the Public Procurement Policy for Micro and Small Enterprises (MSE) Order, 2012 dated 23.03.2012, issued by the Ministry of Micro, Small and Medium Enterprises, and subsequent orders/notifications from the concerned Ministry.

Yours faithfully

HEAD (PURCHASE)

Item Name: Cocoon Bag for Anoxic Treatment of Archival Materials

Technical Description:

Supply of a reusable, gas-barrier cocoon bag designed for anoxic treatment of archival materials, books, manuscripts, paper-based records, textiles and other compatible heritage objects for pest management without chemical fumigants.

The bag shall provide a sufficiently gas-tight enclosure to maintain a controlled low-oxygen atmosphere throughout the treatment period. It shall be manufactured from durable, flexible, conservation-compatible, low-oxygen-permeability material and shall have reliable airtight sealing arrangements.

The bag shall be compatible with nitrogen/argon gas purging, oxygen scavengers, oxygen indicators and oxygen monitoring equipment. It shall include suitable gas inlet and sampling ports for introducing nitrogen/argon and measuring oxygen concentration without repeatedly opening the enclosure. Collapsible, reusable, and leak-tested at supply.

Capacity: 5 Metric Ton, subject to confirmation of the manufacturer's capacity rating.

Dimensions and Technical Specification: L in cm (inch): 297.5 (117.13) x W in cm (inch) 165.0 (64.96) x H in cm (inch) 150.0 (59.06).

Volume m^3: 7.36

Material: Polyvinyl Chloride

Color: White

Thickness, cm (inch): 0.083(0.033)±7%

Material Weight, g/m^2: 1,050

OTR (Oxygen Transmission Rate), $cc/m^2/day$: <500

WVTR (Water Vapor Transmission Rate), $g/m^2/day$: <9

Sealing mechanism: PVC Hermetic Zipper

Shelf Life, years: 10

Warranty, years: 5

The vendor shall specify the material composition, thickness, cm(inch), material weight

(g/m^2) oxygen transmission rate (OTR) in $cc/m^2/day$, WVTR (Water Vapour Transmission Rate) in $g/m^2/day$, sealing mechanism, maximum allowable operating pressure, reusability, maintenance requirements and compatibility with anoxic treatment accessories. The vendor shall provide operating instructions and technical documentation.

Important Features: Verified low oxygen transmission rate (OTR). The supplier shall confirm the OTR test method and conditions and verify the bag's suitability for maintaining the required low-oxygen atmosphere throughout the intended anoxic treatment period. The bag shall also have airtight seals, suitable gas inlet and oxygen sampling ports, and a manufacturer-specified maximum allowable operating pressure.

Application: Anoxic treatment and preventive conservation of archival collections.

Quantity: 1 unit.

Item Name: Portable Trace Oxygen Analyser for Anoxic Treatment of Archival Materials

Technical Description:

Supply of a portable trace oxygen analyser for measuring and monitoring residual oxygen concentration inside a sealed cocoon bag or anoxic chamber used for pest management of archival materials, including manuscripts, books, paper-based records, textiles and other compatible heritage objects.

The analyser shall be suitable for measuring low oxygen concentrations in nitrogen-rich atmospheres and shall enable verification that the required oxygen level has been achieved and maintained throughout the treatment period.

Minimum Technical Specifications:

1. **Measurement Range:** 0–1,000 ppm oxygen or better, with an additional range of up to 21% or 25% oxygen where available.
2. **Resolution:** 1 ppm or better in the trace oxygen range.
3. **Accuracy:** Manufacturer-verified accuracy suitable for low oxygen concentrations, with the accuracy specification explicitly stated at or near the intended treatment threshold.
4. **Sensor Type:** Electrochemical, zirconia-based or equivalent sensor technology suitable for trace oxygen measurement in nitrogen-rich atmospheres.
5. **Display:** Digital display indicating oxygen concentration in ppm and/or percentage.
6. **Sampling System:** Built-in sampling pump or suitable diffusion-based sampling arrangement, with compatible gas-sampling tubing, connectors and fittings for sampling from the sealed cocoon bag.
7. **Alarm:** Adjustable high-oxygen alarm with audible and/or visual indication, configurable to the approved treatment threshold.

8. **Calibration:** Provision for calibration using appropriate zero and span gases, as applicable to the sensor technology. A calibration certificate shall be supplied.
9. **Monitoring:** Suitable for periodic measurements and, where required, continuous monitoring throughout the anoxic treatment period.
10. **Operating Conditions:** The vendor shall specify the operating temperature, humidity limits and sampling flow requirements.
11. **Power Supply:** Rechargeable battery or suitable external power adapter, with a low-battery indication where applicable.
12. **Sensor Life and Maintenance:** The vendor shall specify expected sensor service life, replacement requirements, calibration interval and maintenance procedures.
13. **Accessories:** The analyser shall be supplied with the required sensor, sampling tubing, compatible fittings, power supply or batteries, carrying case where applicable, user manual and calibration certificate.
14. **Documentation and Warranty:** The manufacturer's technical datasheet, operating instructions, calibration procedure, warranty details and after-sales service information shall be provided.

Application and Performance Requirement:

The analyser shall be capable of verifying an oxygen concentration of less than 0.1% (1,000 ppm), subject to the approved treatment protocol for the target pest and archival material. The instrument must have sufficient accuracy at this concentration to reliably determine whether the specified treatment threshold has been achieved and maintained.

The supplier shall clearly state the instrument's minimum detectable oxygen concentration, measurement accuracy at 1,000 ppm or below, response time, sampling flow rate and suitability for use with nitrogen-purged cocoon bags.

Quantity: 1 unit.

Item Name: High-Pressure Gas Supply Hose for Anoxic Treatment Setup

Description: Supply of a 2-metre-long, high-pressure gas supply hose for connecting the gas cylinder regulator to the gas inlet port of the anoxic treatment chamber (cocoon bag).

Technical Specifications:

- **Length:** 2 metres.
- **Working pressure:** 1,300 psi (approximately 88.4 atmospheres or 91.4 kg/cm²), as confirmed by the vendor.
- **Burst pressure:** Minimum 5,200 psi, subject to applicable standards and manufacturer specifications.

- **Material:** Reinforced, gas-compatible, low-permeability hose suitable for high-pressure gas service.
- **Gas compatibility:** Suitable for nitrogen (N_2). Compatibility with any additional gases or mixtures shall be confirmed by the manufacturer.
- **End connections:** Compatible with the regulator outlet and anoxic chamber gas inlet fittings.
- **Safety and documentation:** The supplier shall provide manufacturer documentation confirming the working pressure, burst pressure, gas compatibility and connection specifications. The hose and fittings shall be leak-tested and suitable for the intended application.

Application: Controlled nitrogen delivery for anoxic treatment of archival materials.

Quantity: 1 No.

General Vendor Compliance and Safety Requirements:

1. **Technical Compliance:** The supplier shall review and confirm compliance with all specified technical requirements for the cocoon bag, portable trace oxygen analyser and high-pressure gas supply hose before supply.
2. **Deviations:** Any deviations, exclusions or proposed substitutions from the specified technical requirements shall be clearly identified by the supplier and submitted for approval by the Archives before supply.
3. **Technical Documentation:** The supplier shall provide relevant manufacturer datasheets, operating instructions, warranty details and applicable performance, calibration and pressure-rating certificates.
4. **System Compatibility:** The supplier shall confirm the compatibility of the cocoon bag, gas supply hose, regulator, gas inlet connections and oxygen analyser for the intended anoxic treatment application.
5. **Hose Pressure Rating:** The supplier shall confirm that the hose has a manufacturer-certified working pressure rating of 1,300 psi and that the supplied hose, fittings and connections are suitable for the intended installation and gas service.
6. **Overpressure Protection:** The supplier shall specify the maximum allowable operating pressure of the cocoon bag and confirm the appropriate pressure-regulating and overpressure-protection arrangements required to prevent the bag from being exposed to excessive pressure. The cocoon bag shall not be connected directly to the unregulated cylinder pressure.
7. **Pre-Supply Confirmation:** The supplier shall submit technical compliance confirmation and clarify any outstanding technical requirements before the purchase is finalised and the equipment is supplied.