



PURCHASE ORDER

No: PUR/IICT/0328/24-25/EQPT/1535

Date: 21-10-2024

To

M/s. AdiChem Technology Pvt Ltd
301, Shree Ganesh Avenue Building
Gangapur Road, Sector -C, Nashik-422013
Ph:+90280 78783/9075078783
Email:info@adichemtechnology.com

Sub: - "Supply Installation and Commissioning of Lab Scale Molten Metal Equipment with GC - reg.

Ref: - 1. Our Tender Enquiry No. PUR/IICT/0328/24-25/EQPT/ and CPPP tender enquiry No.2024_CSIR_199813_1 dt.29.06.2024.

2. Your bid reference No. Nil dt.28.07.2024

3. Revised quote offered by your firm vide email date 10-10-2024 after negotiation

Dear Sirs,

Kindly supply the following item(s) strictly as per the terms and conditions.

Sl. No	DESCRIPTION OF MATERIAL	Quantity	Price in (₹)	Total Amount in (₹)
1.	Supply Installation and Commissioning of Lab Scale Molten Metal Equipment with Shimadzu GC Model 2014C(300ML) with both FID and TCD and automatic Gas sampling valve interfaced to TCD. (Detailed Specifications and other items and accessories as per Annexure enclosed)	1 No	43,98,000.00	43,98,000.00
			Add GST @18%	Inclusive
			FOR CSIR-IICT, Hyderabad	43,98,000.00

दुरभाष/Tel: +91-40-27193461, 27193228; फैक्स/Fax: +91-40-27193147

ईमेल/ Email: cosp@iict.res.in; csiriict@csiriict.in वेबसाईट/website:www.iictindia.org



सीएसआईआर- भारतीय रासायनिक प्रौद्योगिकी संस्थान
CSIR-Indian Institute of Chemical Technology
आई. एस. ओ. 9001 संगठन (विश्लेषणात्मक परिसेवा हेतु) / ISO 9001 Organization (for Analytical Services)
(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद) / (Council of Scientific and Industrial Research)
तारनाका, उप्पल रोड, हैदराबाद, तेलंगाना राज्य, भारत. 500 007.
Tarnaka, Uppal Road, Hyderabad. Telangana State, India. 500 007



TERMS & CONDITIONS:

- Prices:** FOR CSIR-IICT Inclusive of all taxes, duties etc., Hyderabad. Unloading the consignment at our site is your cost.
- Order Acknowledgement:** Kindly send order acknowledgement within 15 days through Email: cosp@iict.res.in and csiriicthyd@csiriict.in mention PO No. in the subject line. If you notice any discrepancy/typographical error etc. in this order, you must immediately request for its amendment/correction. You are also required to sign a contract agreement in pursuance of this Purchase Order in the prescribed format on a Non-Judicial Stamp paper of Rs 200/-
- Taxes and Levies:** All Inclusive to be borne by supplier.
- Delivery Period :** The ordered material should be supplied within the delivery period of 14-18 Weeks from the date of receipt of the Purchase Order.
- PAYMENT TERMS: 100%**, payment will be done through our Bankers State Bank of India, IICT Branch, Hyderabad, Uppal Road, Hyderabad – 500 007, Telangana, India after successful Installation and commission and acceptance of End User.
- Warranty:** Warranty should be furnished for **12 months** from the date of successful installation and commissioning of the equipment and subject to final acceptance by the CSIR-IICT user.
- Performance Bank Guarantee:** 5% PBG valid till 14 months from the date of installation and commissioning to be submitted within 21 days from the date of the Purchase Order. Failing which order may be cancelled.
- INSTALLATION, COMMISSIONING AND DEMONSTRATION:** A qualified and factory-trained service engineer should commission the supplied equipment free of cost within *one* month from the date of receipt of the ordered goods and training to be provided for 2 persons 3 working days at our premises i.e., I.I.C.T., Telangana, India.
- LD clause:** Timely supply is the essence of stipulation in the delivery period of our purchase order, for our requirements have got a direct bearing with time targeted research work. By any measure, if there is any delay in delivery of the ordered material(s), a sum equivalent to 0.5 (point five) per cent of contract



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(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद) / (Council of Scientific and Industrial Research)
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value for each week of delay or part thereof until actual delivery will be deducted from the contract value as liquidated damages, subject to the maximum deduction of 10 (ten) per cent. We are also at liberty to consider the termination of the contract of the items is not delivered within the delivery period.

10. The terms and conditions and tender specifications and clarification there off as contained in the tender document shall form part of this purchase order.
11. CSIR-IICT-GST No: 36AAATC2716R2ZF
PAN No. AAATC2716R TAN No. HYDI00674C
12. Availability of spares and service engineer support shall be conformed for a period of 7 years as part of after sales and service support on applicable charges after warranty period.

Yours faithfully,
For & on behalf of CSIR,

(Dharmendra Kumar)
Controller of Stores & Purchase

Note: Kindly, mention our purchase order reference number for all your official correspondence so as to enable us to avoid any delay while tracking/clearing the material(s).

Budget Head: FTT-060505 for Rs. 43,98,000/- (Rupees Forty Three lakhs only)

1. Indentor's copy: Dr.A.Venugopal Dept. of CFC
2. Accounts copy;
3. Office copy;
4. Guard File copy
5. Spare copy;



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DT.21.10.2024

Annexure

Supply Installation and Commissioning of Lab Scale Molten Metal Equipment with Shimadzu GC Model 2014C(300ML) with both FID and TCD and automatic Gas sampling valve interfaced to TCD

SN#	Item Description
01	<p>SUPPLY OF BENCH SCALE MOLTEN METAL EQUIPMENT UNIT:</p> <p>a) Vessel (300 ML)</p> <ul style="list-style-type: none">- HSN : 8419- Make : AdiChem- Capacity : 300 ml- Dimensions : Dia: 64 mm Depth: 100 mm;- Design Temperature : 1000 deg C- Operating Temperature : 900 deg C- Design Pressure : 1 bar- Split Ring Closure with six compression bolts- MOC : Hastelloy (Suitable for high temp)/ HK40 / Monel <p>b) Head Fittings:</p> <ul style="list-style-type: none">- Gauge adapter with 1 barg- Rapture disc bust pressure: 1 Bar- Provision for K type thermocouple <p>c) High temperature Filter:</p> <ul style="list-style-type: none">- Model: Filter element- Size: do: - 50 mm, di: - 20 mm, l: - 135 mm <p>d) MFC's for N2, CH4, H2 Gas Purging</p> <p>MFC are in lined with Bulk Head Union, Filter, Pressure Gauge, Ball Valve & Check Value. Below are the details of MFC;</p> <ul style="list-style-type: none">- Make : Brooks/Alicat- Gas Name : N2, CH4, H2 - (Nitrogen)- Design Conditions : 5 Barg @ Amb Temperature- Maximum inlet pressure : 5 Barg @ Amb Temperature- Maximum Operating Conditions : 1 Barg @ Amb Temperature- Contact part M.O.C. : 316 SS- Gas Flow Range : N2 gas 0 - 200 LPM,- Inline filter size : 7 Micron- Inline Pressure Gauge Range : 0 to 1 Barg- Inline Check Valve rating : 10 psi cracking pressure- Qty : 3 Nos <p>e) Control Panel</p> <ul style="list-style-type: none">- Type : PID Based- Temperature Indicator & Controller: Multispan/ Eq.- Power Supply : On/Off Switch- Emergency Switch- MOC : MS powder coated- Power Supply : 1 Phase <p>f) Gas Chromatography:</p> <p>Gas Chromatograph, Microprocessor based GC with Advanced Flow Technology and Fast GC ready with FID</p> <ul style="list-style-type: none">- Capable of installing 3 injectors and 4 detectors on single GC- Large high-power oven with temperature range of Ambient +40C to 4500C- Oven Program rate setting rage -2500C to +2500C/min.- 20 ramps column oven heating steps- Total column oven programming time of 9,999.99 mins



	<ul style="list-style-type: none">- Ultrafast column oven cooling from 4500C to 500C in 3.4 mins- Split / Splitless capillary injector with maximum temperature range of 4500C- High pressure Advance Flow Controller for electronic control of carrier gas pressure and flow independently- Capability of connecting micro-bore column of 0.1mmID for Fast GC analysis- Carrier gas pressure setting range from 0 to 970 kPa- Carrier gas flow setting range from 0 to 1,200 ml/min, Helium- 7 step pressure and flow programming each- Constant Pressure, Constant Linear Velocity mode <p>Programmable split ratio setting from 1 to 9,999.9</p> <ul style="list-style-type: none">- Large LCD Graphic User Interface for displaying all GC parameters including acquired chromatogram- High sensitive Flame Ionization Detector (FID) with temp range up to 450°C & Dynamic range of 10⁷- FID minimum detection limit of 1.5pgC/sec (Dodecane)- Quartz FID nozzle for inertness and high-speed FID acquisition rate of 250Hz (4ms)- Electronic control of all detector gases H₂, Air and Make-up through Advanced Pressure Controller- Thermal Conductivity Detector (TCD) with temp range up to 4000C and Dynamic range of 10⁵- TCD sensitivity of 20,000 mV mL/mg (Decane) <p>g) H₂/CH₄ gas sensor with alarm</p> <ul style="list-style-type: none">- Gas detection limits: Range from 10 ppm to 100 ppm.- Gas alarm should be audible and detected gases levels in ppm should be visible on LCD display.- Gas alarm will be adjustable limits.- Sensor detector work for both H₂/CH₄ gases
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Automatic gas sampling valve connected to TCD

COSP

