



CSIR-CENTRAL GLASS AND CERAMIC RESEARCH INSTITUTE

[COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, CSIR]

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PURCHASE ORDER

M/s. VEC SOLUTIONS # C 284 7th Cross Peenya 1st Stage Peenya Industrial Area Bangalore 560058 Email - admin@vecsolutions.com,anil@vecsolutions.com GST No. - 29BEVPM4988R1ZT Mob.: 9535433436	P.O. No.	P/NC/67/SB/DB/OTE/22-23(RE)
	Date	10/03/2023
	Subject	Purchase Order

Reference:

- Our Tender Document No. : P/NC/67/SB/DB/OTE/22-23(RE) dt. 05/12/2022
- Your Bid Ref. No. VEC/22-23Q204/06/TCF/CGCRI dt. 14th December, 2022
- Your email dt. 11/01/2023.
- Your Price Bid Ref. No. VEC/22-23Q204/06/TCF/CGCRI dt. 17/12/2022.
- Your email dt. 13/02/2023.
- Your email dt. 14/02/2023.

Dear Sir,

I am directed to request you to kindly supply the following material as the enclosed terms & conditions.

Sl. No.	Item Description	Quantity	Total Price/ INR
1.	SUPPLY, INSTALLATION, COMMISSIONING & TRAINING OF HIGH TEMPERATURE CONTROLLED ATMOSPHERE TWIN CHAMBER FURNACE WITH ACCESSORIES AS PER THE TENDER'S SPECIFICATION. Make: VEC Model No: HTF01 1. Resistive Furnace Chamber 2. Induction Furnace Chamber 3. Vacuum system for Resistive and induction chamber 4. Control Units for the furnace. 5. PLC-based Automation system 6. 4 Mass Flow Controller for Gas – Alicat make 7. Mounting stand 8. Chiller SPECIFICATIONS OF HIGH TEMPERATURE CONTROLLED ATMOSPHERE TWIN-CHAMBER FURNACE WITH ACCESSORIES: 01.The first chamber will have resistive heating for chemical vapour deposition /Infiltration. The second chamber will have induction heating for melt processing /infiltration	01 No.	65,43,000.00

Both the chambers will be double wall water cooled

Resistive Heating Furnace Chamber:

The Furnace with vacuum chamber is fabricated as per the specification. It essentially consists of:

- i) SS 304 / SS 321 make Water cooled vacuum chamber of 400x400x400mm length with No. of ports and 350 mm Dia x 350 mm height useful hot zone heated by Graphite heaters
2. **The vacuum Induction melting furnace is designed and fabricated as per your specification. It essentially consists of:**
Double Walled water-cooled SS 304 / SS 321 make cylindrical chamber of ID 500mm and 500mm long which acts as furnace chamber. (Hot zone size 350mmx350mm)
3. The furnace walls and tubing will be made of (MOC) SS304 /SS 321 or equivalent material.
4. Max Operating condition 1600°C for 5 hrs for the resistive furnace/chamber and 2000°C for 1 hr for induction Furnace / Chamber.
5. Maximum working temp for continuous operation in process/Purged gas atmosphere:1500°C for resistive furnace chamber (upto 96 hrs) and 1800°C for 2 Hrs for induction chamber
6. Temperature sensors: C type Thermocouple 2 nos
Pyrometer 1 No with measurement range 850°C-2000°C or better for induction chamber
7. Max Heating Rate 10°C/Min for resistive heating and 200°C/Min for induction heating.
8. Heating System: Graphite heaters for resistive heating system and graphite crucible for induction heating system. All graphite heaters and crucibles will be reputed brand (M/s Mersen / SGL). The heating elements will be connected in 3 phase either star or delta to ensure distribution of balanced loads.
9. Vacuum System: It consists one Rotary Vane Pump (Mechanical) and one diffusion pump along with suitable baffle and/or oil trap (using LN2) for sequential evacuation of one chamber at a time. Vacuum capacity of minimum 1×10^{-5} mbar at room temperature within 90 minutes in empty dry condition.
10. The cold-water supply will be made through properly designed refrigerated chilling plant. The walls and tubing as well as the cold-water tank of the chilling plant will be made of SS 304 material. The chiller unit and piping design will be common for both heating chambers.
11. Insulation of the furnace chamber design will meet the outer wall temperature not to exceed 50°C.
12. Temperature uniformity $\pm 5^\circ\text{C}$ for resistive and $\pm 15^\circ\text{C}$ for induction furnace at maximum operating temperature.
13. Gas flow in resistive heating Chamber.
 - a) One combined inlet port for two inert gases (N_2 & Ar)
 - b) Reactive process gases (Methane, Ammonia, BCl_3 (trichloro borane), (Methyl trichlorosilane) will be introduced in to the chamber through 4 no of individual mass-flow controller (MFC). Make: Alicat. The required mass flow rate range for the each MFC will be within 0-500 ml/min.
 - c) The flow of the process gasses will be continuous and maintaining a positive pressure in the range of 2-100 mbar inside the chamber in

resistive heating chamber.

14 Gas flow in induction heating chamber: One inlet port for inert gas and one outlet port for off gasses will be provided for induction heating chamber. Induction chamber will also operate at positive pressure in the range of 2-100 mbar.

15 Control System: Will consist two independent systems for each chamber integrated in a single panel unit. PLC Controlled. Make: Siemens with the latest user-friendly SCADA or equivalent. All parameters of the equipment during operation will be shown by Human Machine Interface (HMI).

16 Power supply: 3 Phase 50Hz 400V $\pm$ 8%

17 The furnace will be installed at the users' site by the VEC Engineers and will be handed over to user after successful commissioning and necessary training will be given to 2-4 members of CSIR-CGCRI personnel for smooth operation on key parameters as listed below.

a) Vacuum level of both chambers will be demonstrated to min 1×10^{-5} mbar at room temperature with in 90 minutes in empty dry condition.

b) The uniformity of temperature of resistive chamber at 1500°C and induction chamber at 1700°C will be demonstrated within the hot zone using standard calibration system.

c) Operation of the resistive heating chamber will be demonstrated by performing chemical vapour infiltration with a Carbon-preform (C-Preform) using methane gas at 1500°C for 4 hrs of duration at the customer site. Chemicals and C-Preform will be supplied by the customer.

18 Training: Onsite training on operation and maintenance of the complete system with accessories will be given by the VEC Engineers to 4-5 persons for two working days on completion of the acceptance test as per the requirements to the complete satisfaction of the user at CSIR-Central Glass Ceramic Res Institute Kolkata.

19 Warranty: The furnace will be covered under comprehensive warranty of one year from the date of installation.

HEATING ELEMENT AND RADIATION SHIELD:

Heating elements are graphite plates for resistive furnace. The heaters are mounted on the hot zone. Surrounding the heaters radiation shields are provided. The radiation shield is made out of 2mm thick graphite felt and surrounds the heater assembly to reduce radiation losses.

THYRISTOR CONTROL POWER SUPPLY:

The electrical connection of the heater supply is taken through water-cooled feed throughs. The furnace power supply works through thyristor control facility coupled to step-down transformer. The transformer primary is connected through thyristor controller which is controlled by PID controller.

The secondary of the transformer is connected to the heating elements through water cooled feedthroughs. The heating rate is programmed through PID programmer cum controller and can be controlled to a maximum rate of 10 Degree C/min. Heating rate can be programmed as per user's requirement.

The vendor must ensure the distribution of balance 3 Phase load in the system.

TEMPERATURE MEASUREMENT AND CONTROL:

The temperature of the furnace is measured by 2 Nos of C Type thermocouples. There are 2 Nos. of thermocouples provided in the system. One for controller, another for load temperature measurement.

The temperature is controlled automatically and digital indication is provided on the front panel.

OVER TEMPERATURE CONTROLLER:

A non-indicating type over temperature controller coupled with independent thermocouple will switch off the heater power in case of temperature controller fails and malfunctions and temperature go above the set point value.

VACUUM SYSTEM:

The High Vacuum System is built with Diffusion Pump suitable for general pumping of gases in any chamber. The basic system is capable of giving the vacuum of the order 10^{-3} mbar. The system contains Rotary Vane type Mechanical Pump, High vacuum valve & necessary Plumbing Lines with Valves.

One Analog combined Pirani-Penning gauge is provided for monitoring vacuum of Backing, Roughing and High Vacuum. Complete system is assembled in a compact frame which is mobile with castor wheels. All protections are provided in the system.

Salient Features:

- Assured ultimate vacuum of 10^{-6} mbar.
- Manually operated High Vacuum valves, Backing & Roughing valve for easy operation.
- System is assembled on castor wheels for easy movement.
- Safety interlocks.

ROTARY VACUUM PUMP (30 M³/HR):

Salient features:

- Direct drive
- Air cooled
- Less oil charges
- Compact and rugged
- Light weight
- Gas ballast
- Less noise and vibration.
- Built in anti-suck back facility.

Specifications:

Free Air displacement capacity : 500lit/min

Ultimate Vacuum at the intake

With Mecleod Gauge

(with gas ballast closed) : 1×10^{-3} mbar

Vacuum Connection : KF-40

Motor H.P : 1.5 H.P. Single phase.

Cooling : Forced air cooling.

Pump rotation speed : 1440 rpm.

Vacuum with gas ballast open : 5×10^{-2} mbar.

AIR ADMITTANCE VALVE:

These valves are provided on the system. Air Admittance Valve is for venting the chamber after isolating the pumping system and Needle Valve is used for feeding gases of user's choice.

PLUMBING LINE:

Plumbing line consists of Roughing line & Backing line and are made of metal and flexible vacuum hose with KF-25 coupling. Backing and

Roughing Butterfly valves and Pirani Gauge Head adopter are fixed in the plumbing line.
Plumbing line is fitted with Pirani Gauges for monitoring of Roughing and Backing vacuum.

VACUUM MEASURING GAUGES:

VEC SOLUTION., Pirani Gauge is highly reliable vacuum measuring gauges covering the range of 0.5 mbar to 10^{-6} mbar. Pirani gauge is used to measure vacuum in the range of 0.5 to 10^{-3} mbar. Pirani gauge is provided with one or two sensors. Penning Gauge is to measure 10^{-6} . The simple design of the gauge head facilitates easy cleaning.

VACUUM PLUMBING LINE:

2" S.S Plumbing line is fabricated using SS pipe for plumbing the chamber. A manual isolation valve is provided in the plumbing line to isolate the chamber.

AIR ADMITTANCE VALVE:

A solenoid operated Air admittance valve is used in the system for venting the system.

GAS INLET:

Gas inlet and outlets are connected to the main chamber through KF-16 port with manual isolation valves.

MOUNTING FRAME:

The furnace mounted on a compact and sturdy MS frame (neatly painted) made out of MS Girder

DESIGN: Follows ASME Code Section VIII.

WELDING: Follows ASME Code Section IX.

DYE PENETRATION TEST: Dye penetration test will be done at all welding joints.

HELIUM LEAK TEST:

After complete assembly of the chamber, it is tested with Helium mass spectrometer leak detector for an individual leak rate of 1×10^{-8} std. cc/sec. All the above tests can be witnessed by your representative at our works.

The vacuum Induction melting furnace is designed and fabricated as per your specification. It essentially consists of:

- 1) Double Walled water-cooled SS cylindrical chamber of ID 500mm and 500mm long which acts as furnace chamber. (Hot zone size 350mmx350mm)
- 2) Induction heating and casting power supply of medium frequency with induction coils
- 3) Control console housing all the controls with system interlocks and safety.

INDUCTION CHAMBER

The furnace chamber is made out of SS 304 L materials. It is a cylindrical chamber It is a double walled water-cooled chamber. The outer chamber provided with baffled guides for effective water- cooling. Water inlets and outlets are provided in the outer chamber. Rear end is

also flanged and fixed with nuts and bolts with 'O' ring. The front door is also fixed with gasket and locking arrangement for vacuum integrity. The chamber has number of ports as per requirement. On the side a 4" port is provided for induction coil feedthrough and tilting mechanism. The furnace chamber houses induction coil with the crucible and mould assembly with mould platform. The temperature of the furnace will be measured by non-contact measurement method. The temperature will be measured by infrared pyrometer and it is used to measure 2000° C furnace temperature and also control of temperature.

The furnace is designed for a temperature upto 2000°C.

The chamber design follows ASME code Section VIII and all welding's are done by TIG Arc welding following ASME code section IX. All welding joints are leak tested by Helium Mass Spectrometer Leak Detector.

The welding joints are also radiographed for examination of weld quality. Finally, the chamber is buffed and polished to bright finish.

PORTS:

The melting Chamber consists of following 8 Ports,

1. 2 nos of 100 mm diameter sight glass port.
2. 1 no Inert gas connection port.
3. 1 no Admittance valve connecting port.
4. 1 NO coax power feedthrough port.
5. 1no 250 vacuum pumping port
6. 1 no of bridge breaker port
7. 1 no of optical pyrometer port
8. 1 no of over melting charge port.

MOULD TABLE, LIFTING/LOWERING SYSTEM

Mould chamber design will allow easy placement and removal of the mould on/from the mould table. The top position of the ram shall be adjustable to accommodate varying mould heights between 200 to 400mm. The ram shall be easy for removal from Mould chamber for servicing of 'O' ring and seals etc. The lifting mechanism will be protected from hot metal attack during the operation.

INDUCTION POWER SUPPLY AND CO AXIL POWER FEEDTHROUGH

The power supply provided is designed to melt the charge of 10 kgs. The power supply to be procured from plasma induction. Solid state mechanism frequency inverted power supply of -3PHASE 50Hz 400 V $\pm$ 8% induction melting. Power supplies are continuously tuned to the melt, eliminating the need of manual switching of capacitors (or) transformers taps.

Complete instrumentation and controls are included like controls and output meter, feedback circuits to regulate power throughout the melting cycle, capacitor circuit breakers, high frequency transformers, interlocked cut out for low pressure water supply, limiting circuit function to protect against overload.

Induction Melting Coil

This water-cooled Induction coils made from high Electrical

conductivity copper tube. This Coil will be insulated with Epoxy insulation which is suitable for Vacuum Melting Application. Coil Size (Dia 350 x 350).

There will be a special arrangement for easy replacement of the Induction coil.

Power feed through, fabricated out of either copper/ bronze with Teflon insulator provides power to the heating coil and also acts as cooling water inlet and outlet for induction coil. This feedthrough is provided on one of the ports of the furnace chamber.

POWER FEED THROUGH PORT:

Power feed through port is designed to accommodate the co-axial power feed through assembly.

Heating Rate for Induction :200^oc /min for induction furnace

The temperature of the furnace is measured by Optical Pyrometer.

Induction power supply:

Specification for the pyrometer.

Temperature range : 850^oC to 2000^o C.

Detector : Si/Si layered detector, nominal 1 um

Accuracy : +/- (0.3% Tmeas + 2^oC), Tmeas in degree C

Repeatability : +/- 0.3% full scale.

Temperature resolution : 1^oC

Response time : 10 m Sec

Emissivity one – color : 0.10 to 1.0 in 0.01 increments.

Slope two- color : 0.85 to 1.150 in 0.001 increments

Signal processing : Peak hold and averaging.

VACUUM PUMPING SYSTEM

The furnace chamber is evacuated in the range of 10⁻⁵ mbar of vacuum by a combination of diffusion pump backed by rotary pump. The same rotary pump is used for roughing the furnace chamber from atmosphere. The pumping unit essentially consists of:

Rotary Vacuum pump

Right angle valve as high vacuum valve to diffusion pump

Butterfly valves as roughing and backing valve.

Pirani gauges.

SS plumbing line

Air and gas admittance valves.

Control console.

ROTARY VACUUM PUMP – 600 LPM

Specification

Model :

Technical specifications : 500 lit/min

Nominal pumping speed : 35 m³/hr.

Ultimate vacuum (on Mcleod gauge)

Gas Ballast closed : 1 x 10⁻³ mbar

Gas ballast open : 5 x 10⁻² mbar

Oil Capacity : 2.5 lit

Motor Rating : 1.5 HP Single phase

Rotational Speed : 1400

Max. nominal power rating : 1.1 KW Inlet flange : NW 40 Exhaust flange : NW 40 Weight : 60 Kgs DIFFUSION PUMP: 1) Diffusion Pump Specifications: Make : VEC Critical Backing Pressure : 0.3 mbar Recommended backing pump : 1000 Lit/min Recommended fluid charge : 2 Liters. (DC – 704 Oil) Inlet connection : ISO 400 Outlet connection : 4" Flange Water requirements : 6 Lit/min Warm up time (in minutes) : 45 Heater Power : 7.5 KW. Material : SS 304 Ultimate vacuum : 1×10^{-6} mb. Cooling water temperature : 20° C to 25° C Protection : Water flow switch and thermal cut off. Chevron baffle with Loop refrigeration system: The chevron baffle is fabricated from SS 304 material. It is essentially a SS cylindrical body with top and bottom flanges the top flange is exactly matches with the valve and bottom flange matches with the top of the oil diffusion pump. Inside the cylindrical structure angular baffles made out of copper are arranged in such a way that there is not line of sight from top to bottom i.e. it is optically opaque. These baffles are fixed with copper coils through which water circulates. And there by the baffles are cooled. This arrangement prevents to a large extent for the oil vapor from the diffusion pump to go to the vacuum chamber. In other words, the chevron baffle cuts down the back streaming LIQUID NITROGEN TRAP: This is fitted to other side of the elbow one side of the elbow is fitted to the collar the other side is fitted to the LN2.It is essentially a double walled container containing LN2 in the central chamber. The inner surface get cooled when LN2 filled and condenses water vapor and other condensable, thereby reduces the pressure by large extent. It requires 3 liters for 8 hours working. With the use of LN2 trap ultimate vacuum is 1×10^{-6} mb. PLUMBING LINE: 2" Size SS Plumbing line is fabricated using SS pipe for backing and roughing line with backing and roughing valves. There is provision for mounting the pirani gauge head in the plumbing line. Rigid line with KF coupling dismountable flange with SS flexible bellows gives flexibility of connecting all the component easily. BACKING & ROUGHING VALVE: 2 Nos. of 2" Size quarter swing Butterfly valve are used as backing and roughing valve.		
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VACUUM GAUGE:

Vacuum measuring gauge will be supplied to measure the vacuum in the range of 10^{-5} with diffusion Pump.

SAFETY DEVICES:

A safety device will be incorporated in the design of the plant to ensure conformity with statutory regulations and to afford protection of both the plant and the operators.

These devices include:

- a) Switches to protect the furnace against water failures or water starvation.
- b) Relays and interlocks to ensure the correct sequencing of the vacuum valves and protect the system against malfunction of the plant.
- c) Over load protection
- d) The furnace controls, switches and push buttons operate from a 24 Volt DC supply from a step-down transformer inside the vacuum control cubicle.

All the lines like air and water will be supplied. The details will be given below

- a) Air Lines will be provided to Interconnecting air lines between the vacuum valves and electro air control valves
- b) Water lines will be provided to Interconnecting water lines with valves, shut-off valves and water flow switches for connection to the customer's supply and return manifolds.

PROTECTION AND INTERLOCK:

- i. Switch of pump is interlocked with mechanical Pump.
- ii. Interlocking of roughing valves with high vacuum valves.
- iii. Close of backing valve is interlocked with opening of roughing valve.
- iv. High vacuum valve is interlocked with closing of roughing valve & opening of backing valve.
- v. In case of large leakage in furnace chamber, high vacuum valve and roughing valve is closed. Flash light and alarm start operating.
- vi. High Vacuum valve is interlocked with:
 - Backing valve.
 - Vacuum level.
 - Door lock.
 - Water supply.
 - Air supply.
- vii. Air failure indication with alarm.

MATERIAL:

The furnace chamber is made out of SS 304L material and all the plumbing line etc. are with SS material. Mounting stand is only MS.

MACHINING:

In General, Machining should be specified. Care will be taken to ensure that chatter marks, scratches, and burrs are removed from the machined surfaces. All sharp corners are to be rounded off in and out of the components. All tolerance, sizes and finishing will be as per the approved drawing.

WELDING:

All welding's are done by TIG Argon Arc welding by qualified welder following ASME Code Section IX with suitable welding rods and full weld penetration.

Welding procedure qualification will be carried out in accordance with ASME section IX.

Visual examination of the cross sections of the weld metal and heat affected zone will show complete fusion and freedom from crack.

SURFACE FINISH:

All stainless-steel sheet metal will be maintained 2 B finish. The standard commercial finish will be protected for the bought-out items like fasteners, valves and fittings. All the inner and outer edges and corners are rounded to eliminate sharp corners. Ultimately good surface finish as per requirements will be obtained and the final finish of the product.

HELIUM LEAK TESTING

All the weld joints as well as total assembly is leak tested using Helium Mass Spectrometer Leak Detector.

GROSS LEAK:

The Gross leak of the clean empty furnace chamber at ambient temperature is of 1×10^{-3} mbar lit/sec (measured by pressure rise method).

DESIGN: The design of the system follows ASME Code section VIII.

CONTROL CONSOLE: (Independent Control Panel with PLC)

The control system will have Two independent control systems for each chamber. integrated in a single panel unit. It will be PLC Controlled. PLC operation and control will be of Siemens make with latest user-friendly version of SCADA. All parameters of the furnace during operation will be shown by Human Machine Interface. (HMI)

Instrument Controls - The control panel will be rated to IP54 standard and will

house the following controls and instrumentation:

- One - Siemens S7 PLC control system will be provided.
- One - Set of relays, motor starters and circuit breakers will be provided.
- One - Set of push button controls and indicator lamps will be provided.
- One - Mains isolating switch will be provided.

Makes will be of: Siemens/stange/schneider/allen /GE/GIS

A Siemens touch screen HMI will be provided with the following screens:

- Status Screen - Displays the logical status of the furnace.
- Melt Screen - Displays the manual melt control / time-based melting profile.
- Leak Check and Vacuum Screen - Displays the vacuum values and leak rate test values.
- Alarm Screen - Displays the current alarms.

3.	GST @18%		11,77,740.00
4.	Packing & Forwarding Charges		9,000.00
5.	Inland Transportation & Insurance		18,000.00
	FOR CSIR-CGCRI		77,47,740.00
1.	Installation, Commissioning and Training Charges		27,000.00
	FOR CSIR-CGCRI with Installation & Commissioning charges		77,74,740.00

The Specifications of the goods and other services shall strictly conform to those laid down in your offer No. VEC/22-23Q204/06/TCF/CGCRI dt. 14/12/2022, 17/12/2022 and subsequent communications / correspondences.

This Contract/Purchase Order shall be governed by:-

- (1) General Conditions of Contract and Special Conditions of Contract as detailed in the Bid Document and
- (2) Special Conditions of Contract enclosed with this Purchase Order.

The Order Acknowledgement must be submitted immediately and in any case, within 14 days from the date of placement of this Purchase Order failing which, the order will be deemed as cancelled, and the Bid Security submitted by you/Indian Branch Office will be forfeited.

You are requested to return the duplicate copy of this Purchase Order, duly signed and stamped, as a token of your acceptance to this order.

Yours faithfully,

Anjani Kr. Pandey
10.03.2023

(Anjani Kr. Pandey)

Stores & Purchase Officer

For & on behalf of the Council of Scientific & Industrial Research

Enclo:

1. Terms & Conditions.

अंजनी कुमार पाण्डेय/Anjani Kumar Pandey
खण्डार एवं क्रय अधिकारी/Stores & Purchase Officer
सीएसआईआर - केन्द्रीय काँच एवं सिरामिक अनुसंधान संस्थान
CSIR - CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE
196, राजा एस. सी. मुल्लिक रोड / 196, Raja S. C. Mullick Road
कोलकाता / Kolkata-700 032

Explanations:-

The following words and expressions used in this Tender Document shall have the meanings hereby assigned to them:

Purchaser	means CSIR-CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE, 196 RAJA S.C. MULLICK ROAD, KOLKATA 700 032, INDIA
Supplier	Principal/Mfr. - means M/s. VEC Solutions, Bangalore

1.	Delivery Term	FOR CSIR-CGCRI, Kolkata
2.	Purchase Order Value / Contract Price	INR 77,74,740.00 (INR SEVENTY SEVEN LAKHS SEVENTY FOUR THOUSAND SEVEN HUNDRED FORTY ONLY)
3.	Payment	The payment shall be made in Indian Rupees, as follows: Inland Letter of Credit for 100% of the PO value for Rs. 77,74,740.00 shall be established out of which payment shall be released in the following ways:- A. On Shipment: 80% of the price of goods including packing, forwarding and inland transportation + 100% GST amounting to Rs. 52,56,000.00 (80% of cost) + Rs. 11,77,740.00 (100% GST) = Rs. 64,33,740.00 shall be paid against dispatch documents through Inland Letter of Credit. B. Remaining 20 % of the price of goods including packing, forwarding and inland transportation + Installation & Commissioning charges amounting to Rs. 13,14,000.00 (20% of cost) + Rs. 27,000.00 (Installation & Commissioning charges) = Rs. 13,41,000.00 shall be paid by Inland Letter of Credit to the Supplier after successful installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser subject to submission of performance security. Note: All payments due under the Contract shall be paid after deduction of statutory levies at source (like ESIC, Income Tax, etc.), wherever applicable.
4.	Performance Security	To be submitted @ 3% of PO value after completion of installation & commissioning which shall be valid for Warranty Period + 60 days
5.	Goods & Service Tax (GST)	No GST Exemption Certificate shall be provided. 5 % GST against GST Exemption Certificate. CSIR-CGCRI GST No.: 19CALC01020F1DL

6.	Delivery period	The Supplier shall deliver the consignment within 120 days from the date of issue of our Purchase Order / establishment of Inland Letter of Credit. Denial Clause (over and above levy of Liquidated Damage): any increase in statutory duties and/or upward rise in prices due to the PVC (Price Variation Clause) clause and/or any adverse fluctuation in foreign exchange are to be borne by the seller during the extended delivery period, while the purchaser reserves his right to get any benefit of a downward revisions in statutory duties, PVC and foreign exchange rate.
7.	Warranty	1 Year from the date of completion of Installation & Commissioning.
8.	Insurance	The Insurance in respect of goods to cover all risks upto final destination shall be borne by Supplier at its own costs.
9.	Installation & Commissioning	Installation, commissioning and demonstration of function of the furnace will be done by the firm's engineers including acceptance test at site within 60 days from the receipt of material in CSIR-CGCRI.
10.	Training	04-05 Personnel for 02 working days will be trained in the operation and maintenance of the furnace after installation and commissioning at CGCRI's site which should be completed within installation period of 60 days.
11.	LD Clause	It will be applicable for delay in delivery including completion of all contractual obligations beyond deadlines as mentioned in the PO.
12.	Certificate for effecting payment	Firm will submit the acceptance certificate from the user of CSIR-CGCRI alongwith invoice for effecting the payment.

Yours faithfully,

Anjani Kr. Pandey
10.03.2023

(Anjani Kr. Pandey)

Stores & Purchase Officer

For & on behalf of the Council of Scientific & Industrial Research

अंजनी कुमार पाण्डेय/Anjani Kumar Pandey
भण्डार एवं क्रय अधिकारी/Stores & Purchase Officer
सोएतबाईगार - केन्द्रीय काँच एवं सिरेमिक अनुसंधान संस्थान
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CONDITIONS OF CONTRACT

A GENERAL CONDITIONS OF CONTRACT (GCC)

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2.44	Order Acceptance

GENERAL CONDITIONS OF CONTRACT (GCC)

2.1 Definitions

2.1.1

The following words and expressions shall have the meanings hereby assigned to them:

- (a) "Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- (b) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.
- (c) "Contract Price" means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.
- (d) "Day" means calendar day.
- (e) "Completion" means the fulfilment of the Goods and related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (f) "GCC" means the General Conditions of Contract.
- (g) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
- (h) "Related Services" means the services incidental to the supply of the goods, such as transportation, insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract.
- (i) "SCC" means the Special Conditions of Contract.
- (j) "Subcontractor" means any natural person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
- (k) "Supplier" means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
- (l) The "Council" means the Council of Scientific & Industrial Research (CSIR), registered under the Societies Registration Act, 1860 of the Govt. of India having its registered office at 2, Rafi Marg, New Delhi-110001, India.
- (m) The "Purchaser" means any of the constituent Laboratory/Institute of the Council situated at any designated place in India as specified in SCC.
- (n) "The final destination," where applicable, means the place named in the SCC.

2.2 Contract Documents

2.2.1

Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

2.3 Code of Integrity

2.3.1

Without prejudice to and in addition to the rights of the Purchaser to other penal provisions as per the bid documents or contract, if the Purchaser comes to a conclusion that a (prospective) bidder /supplier, directly or through an agent, has violated this code of integrity in competing for the contract or in executing a contract, the Purchaser may take appropriate measures including one or more of the following:

- a) Cancellation of the relevant contract and recovery of compensation for loss incurred by the purchaser;
- b) Forfeiture or encashment of any other security or bond relating to the procurement;
- c) Recovery of payments including advance payments, if any, made by the Purchaser along with interest thereon at the prevailing rate.
- a) Provisions in addition to above:
 - 1) Removal from the list of registered suppliers and banning/debarment of the bidder from participation in future procurements of the purchaser for a period not less than one year;
 - 2) In case of anti-competitive practices, information for further processing may be filed under a signature of the Joint Secretary level officer, with the Competition Commission of India;
 - 3) Initiation of suitable disciplinary or criminal proceedings against any individual or staff found responsible.

2.4 Joint Venture, Consortium or Association

- 2.4.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfilment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.

2.5 Scope of Supply

- 2.5.1 The Goods and Related Services to be supplied shall be as specified in Chapter 4 i.e. Specifications and allied technical details.

2.6 Suppliers' Responsibilities

- 2.6.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with Scope of Supply Clause of the GCC, and the Delivery and Completion Schedule, as per GCC Clause relating to delivery and document.

2.7 Contract price

- 2.7.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid.

2.8 Copy Right

- 2.8.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

2.9 Application

- 2.9.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

2.10 Standards

- 2.10.1 The Goods supplied and services rendered under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

2.11 Use of Contract Documents and Information

2.11.1

The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.

2.11.2

The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated above except for purposes of performing the Contract.

2.11.3

Any document, other than the Contract itself, enumerated above shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

2.12 Patent Indemnity

2.12.1

The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 2.12.2 Indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

- (a) the installation of the Goods by the Supplier or the use of the Goods in India;
and
- (b) the sale in any country of the products produced by the Goods.

2.12.2

If any proceedings are brought or any claim is made against the Purchaser, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

2.13 Performance Security

2.13.1 Within 21 days of receipt of the notification of award/PO, the Supplier shall furnish performance security in the amount specified in SCC, valid till 60 days after the warranty period.

2.13.2

The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

2.13.3

The Performance Security shall be denominated in Indian Rupees for the offers received for supplies within India and denominated in the currency of the contract in the case of offers received for supply from foreign countries or in equivalent Indian Rupees in case the Performance Security is submitted by the Indian Agent.

2.13.4

In the case of imports, the PS may be submitted either by the principal or by the Indian agent and, in the case of purchases from indigenous sources, the PS may be submitted by either the manufacturer or their authorized dealer/bidder.

2.13.5 The Performance security shall be in one of the following forms:

- (a) A Bank guarantee or stand-by Letter of Credit issued by a Nationalized/Scheduled bank located in India or a bank located abroad in the form provided in the bidding documents.
Or
- (b) A Banker's cheque or Account Payee demand draft in favour of the purchaser.

2.13.6

The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in SCC, without levy of any interest.

2.13.7

In the event of any contract amendment, the supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the performance security, rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter.

2.13.8

The order confirmation must be received within 14 days. However, the Purchaser has the powers to extend the time frame for submission of order confirmation and submission of Performance Security (PS). Even after extension of time, if the order confirmation /PS are not received, the contract shall be cancelled provided that the purchaser, on being satisfied that it is not a case of cartelization and the integrity of the procurement process has been maintained, may, for cogent reasons, offer the next successful bidder an opportunity to match the financial bid of the first successful bidder, and if the offer is accepted, award the contract to the next successful bidder at the price bid of the first successful bidder.

2.13.9

Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

2.14 Inspections and Tests

2.14.1

The inspections & test, training required would be as detailed in Chapter-4 of the Bidding Document relating to Specification and Allied Technical details.

2.15 Packing

2.15.1

The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

2.15.2

The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by the Purchaser.

2.16 Delivery and Documents

2.16.1

Delivery of the Goods and completion and related services shall be made by the supplier in accordance with the terms specified by the Purchaser in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

2.16.2

The terms FOB, FCA, CIF, CIP, etc. shall be governed by the rules prescribed in the current edition of the Inco terms published by the International Chambers of Commerce, Paris, currently it is Incoterms 2010.

2.16.3

The mode of transportation shall be as specified in SCC. In case the purchaser elects to have the transportation done through Air, then air lifting needs to be done through Air India only. In case Air India does not operate in the Airport of despatch, then the bidder is free to engage the services of any other Airlines.

2.17 Insurance

2.17.1

Should the purchaser elect to buy on CIF/CIP basis, the Goods supplied under the Contract shall be fully insured against any loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in SCC.

2.17.2

Where delivery of the goods is required by the purchaser on CIF or CIP basis the supplier shall arrange and pay for Cargo Insurance, naming the purchaser as beneficiary and initiate & pursue claims till settlement, on the event of any loss or damage.

2.17.3

Where delivery is on FOB or FCA basis, insurance would be the responsibility of the purchaser.

2.17.4

With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.

2.18 Transportation

2.18.1

Where the Supplier is required under the Contract to deliver the Goods FOB, transport of the Goods, up to and including the point of putting the Goods on board the vessel at the specified port of

loading, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract price. Where the Supplier is required under the Contract to deliver the Goods FCA, transport of the Goods and delivery into the custody of the carrier at the place named by the Purchaser or other agreed point shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

2.18.2

Where the Supplier is required under the Contract to deliver the Goods CIF or CIP, transport of the Goods to the port of destination or such other named place of destination in the Purchaser's country, as shall be specified in the Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

2.18.3

In the case of supplies from within India, where the Supplier is required under the Contract to transport the Goods to a specified destination in India, defined as the Final Destination, transport to such destination, including insurance and storage, as specified in the Contract, shall be arranged by the Supplier, and the related costs shall be included in the Contract Price.

2.19 Incidental Services

2.19.1

The supplier may be required to provide any or all of the services, including training, if any, specified in chapter 4 of Tender Document.

2.20 Spare Parts

2.20.1

The Supplier shall be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- (a) Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
- (b) In the event of termination of production of the spare parts:
 - (i) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
 - (ii) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

2.21 Warranty

2.21.1

The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

2.21.2

The Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in India.

2.21.3

Unless otherwise specified in the SCC, the warranty shall remain valid for Twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the SCC, or for Eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.

2.21.4

The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.

2.21.5

Upon receipt of such notice, the Supplier shall, within a reasonable period of time, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

2.21.6

If having been notified, the Supplier fails to remedy the defect within a reasonable period of time; the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

2.21.7

Goods requiring warranty replacements must be replaced on free of cost basis to the purchaser.

2.22 Terms of Payment

2.22.1

The method and conditions of payment to be made to the Supplier under this Contract shall be as specified in the SCC.

2.22.2

The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to Delivery and document Clause of the GCC and upon fulfilment of other obligations stipulated in the contract.

2.22.3

Payments shall be made promptly by the Purchaser but in no case later than thirty (30) days after submission of the invoice or claim by the Supplier. While claiming the payment, the supplier should certify in the bill/invoice that the payment being claimed strictly in terms of the contract and all

obligations on the part of the supplier for claiming the payment have been fulfilled as required under the contract.

2.22.4 Payment shall be made in currency as indicated in the contract.

2.23 Change Orders and Contract Amendments

2.23.1

The Purchaser may at any time, by written order given to the Supplier pursuant to Clause on Notices of the GCC make changes within the general scope of the Contract in any one or more of the following:

- (a) Increase or decrease in the quantity required, exercise of quantity opinion clause;
- (b) Changes in schedule of deliveries and terms of delivery;
- (c) The changes in inspection arrangements;
- (d) Changes in terms of payments and statutory levies;
- (e) Changes due to any other situation not anticipated;

2.23.2

No changes in the price quoted shall be permitted after the purchase order has been issued except on account of statutory variations.

2.23.3

No variation or modification in the terms of the contract shall be made except by written amendment signed by the parties.

2.24 Assignment

2.24.1

The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

2.25 Subcontracts

2.25.1

The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the Supplier from any liability or duties or obligation under the contract.

2.26 Extension of time.

2.26.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser.

2.26.2

If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.

2.26.3

Except as provided under the Force Majeure clause of the GCC, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to liquidated damages Clause of the GCC unless an extension of time is agreed upon pursuant to above clause without the application of penalty clause.

2.26.4

Denial Clause (over and above levy of Liquidated Damage): any increase in statutory duties and/or upward rise in prices due to the PVC (Price Variation Clause) clause and/or any adverse fluctuation in foreign exchange are to be borne by the seller during the extended delivery period, while the purchaser reserves his right to get any benefit of a downward revisions in statutory duties, PVC and foreign exchange rate.

2.27 Liquidated Damages

2.27.1

Subject to GCC Clause on Force Majeure, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services or contract value in case the delivered price of the delayed goods or unperformed services cannot be ascertained from the contract, for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the Percentage specified in SCC. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause on Termination for Default.

2.28 Termination for Default

2.28.1

The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part

- (a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause on Extension of Time; or
- (b) If the Supplier fails to perform any other obligation(s) under the Contract.

- (c) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent or collusive or coercive practices etc as defined in GCC Clause and ITB clause on code of integrity in competing for or in executing the Contract.

2.28.2 In the event the purchaser terminates the contract in whole or in part, he may take recourse to any one or more of the following action:

- (a) The Performance Security is to be forfeited;
- (b) The purchaser may procure, upon such terms and in such manner as it deems appropriate, stores similar to those undelivered, and the supplier shall be liable for all available actions against it in terms of the contract.
- (c) However, the supplier shall continue to perform the contract to the extent not terminated.

2.29 Force Majeure

2.29.1

Notwithstanding the provisions of GCC Clauses relating to extension of time, Liquidated damages and Termination for Default the Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

2.29.2

For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

2.29.3

If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within 21 days of its occurrence. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

2.29.4

If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of Force Majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.

2.30 Termination for Insolvency

2.30.1

The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

2.31 Termination for Convenience

2.31.1

The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

2.31.2

The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

- (a) To have any portion completed and delivered at the Contract terms and prices; and/or
- (b) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

2.32 Settlement of Disputes

2.32.1

The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

2.32.2

If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.

2.32.3

The dispute settlement mechanism/arbitration proceedings shall be concluded as under:

- (a) If any dispute or difference arises between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Delhi International Arbitration Centre (DIAC), Delhi High Court, New Delhi. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
- (b) In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not

acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.

2.32.4

The venue of the arbitration shall be the place from where the purchase order or contract is issued.

2.32.5

Notwithstanding, any reference to arbitration herein,

- (a) The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
- (b) the Purchaser shall pay the Supplier any monies due the Supplier.

2.33 Governing Language

2.33.1

The contract shall be written in English language which shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the English language only.

2.34 Applicable Law

2.34.1

The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction as specified in SCC.

2.35 Notices

2.35.1

Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX, e-mail or and confirmed in writing to the other party's address specified in the SCC.

2.35.2

A notice shall be effective when delivered or on the notice's effective date, whichever is later.

2.36 Taxes and Duties

2.36.1

For goods manufactured outside India, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside India.

2.36.2

For goods Manufactured within India, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred till its final manufacture/production.

2.36.3

If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in India, the Purchaser shall make its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

2.36.4

All payments due under the contract shall be paid after deduction of statutory levies (at source) (like IT, etc.) wherever applicable.

2.36.5

Customs Duty – If the supply is from abroad this Institute is permitted to import goods as per notification No.51/96 – Customs and pay a concessional duty up to 5% as per notification 24/2002 – Customs on all imports.

2.37 Right to use Defective Goods

2.37.1

If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

2.38 Protection against Damage

2.38.1

The system shall not be prone to damage during power failures and trip outs. The normal voltage and frequency conditions available at site as under:

- (a) Voltage 230 volts – Single phase/ 415 V 3 phase (+_ 10%)
- (b) Frequency 50 Hz.

2.39 Site preparation and installation

2.39.1

The Purchaser is solely responsible for the construction of the equipment sites in compliance with the technical and environmental specifications defined by the Supplier. The Purchaser will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchaser's site immediately after notification of award/contract.

2.40 Import and Export Licenses

2.40.1

If the ordered materials are covered under restricted category of EXIM policy in India the Vendor / Agent may intimate such information for obtaining necessary, license in India.

2.40.2

If the ordered equipment is subject to Vendor procuring an export license from the designated government agency / country from where the goods are shipped / sold, the vendor has to mention the name, address of the government agency / authority. The vendor must also mention the time period within which the license will be granted in normal course.

2.41 Risk Purchase Clause

2.41.1

If the supplier fails to deliver the goods within the maximum delivery period specified in the contract or Purchase Order, the purchaser may procure, upon such terms and in such a manner as it deems appropriate, Goods or Services similar to those undelivered and the Supplier shall be liable to the purchaser for any excess costs incurred for such similar goods or services.

2.42 Option Clause

2.42.1

The Purchaser reserves the right to increase or decrease the quantity of the required goods up to 25% (Twenty-Five) per cent at any time, till final delivery date (or the extended delivery date of the contract), by giving reasonable notice even though the quantity ordered initially has been supplied in full before the last date of the delivery period (or the extended delivery period)

2.43 Integrity Pact

2.43.1

The SCC shall specify whether there is a need to enter into a separate Integrity pact or not.

2.43.2

The names and contact details of the Independent External Monitors (IEM) on the event of the need of IP is as detailed in the SCC.

2.44 Order Acceptance

2.44.1

The successful bidder should submit Order acceptance within 14 days from the date of issue of order/signing of contract, failing which it shall be presumed that the vendor is not interested and his bid security is liable to be forfeited pursuant to clause 1.16.9 of ITB.

SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

SCC 1	The Purchaser is: Director, CSIR-Central Glass & Ceramic Research Institute, 196, Raja S. C. Mullick Road, P.O. Jadavpur, Kolkata-700032, West Bengal, India.
SCC 2	The Supplier is: Principal/Mfr. – VEC Solutions, Bangalore
SCC 4	Calibration: Certificates of calibration traceable to International Standards must be provided, if applicable.
SCC 5	Final Destination: CSIR-Central Glass & Ceramic Research Institute, 196, Raja S. C. Mullick Road, P.O. Jadavpur, Kolkata-700032, West Bengal, India
SCC 6	Order Acknowledgement/Confirmation: The order confirmation should be received within 14 days from the date of purchase order indicating detailed specifications of the equipment as mentioned in the purchase order including the value of the purchase order/equipment.
SCC 7	Performance Security The amount of the Performance Security shall be: The Supplier shall furnish performance security equivalent to 3% of the contract price, valid till 60 days after the warranty period plus extended warranty (if applicable) to be submitted after completion of satisfactory Installation & Commissioning. The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract. The Performance security shall be in one of the following forms: a) A Bank guarantee or stand-by Letter of Credit issued by a Nationalized/Scheduled bank located in India Or b) A Banker's cheque or Account Payee demand draft in favour of the purchaser. The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, without levy of any interest.
SCC 8	Delivery: The delivery of the Goods shall be within 120 days from the date of establishment of Inland Letter of Credit. The delivery should be synchronized along with the supply of main imported items. (IF APPLICABLE) Except as provided under the Force Majeure clause, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to Penalty Clause unless an extension of time is agreed upon pursuant to above clause without the application of penalty clause.
SCC 9	Part supply will not be accepted.
SCC 10	The country of origin of the Goods is India
SCC 11	The port of shipment of the Goods is India.
SCC 12	The mode of shipment: By Road - FOR CSIR-CGCRI, Kolkata as per Purchase Order.
SCC 14	Pre-Despatch Inspection: (NOT APPLICABLE) The Director, CSIR-Central Glass & Ceramic Research Institute, Kolkata reserves the right to depute the persons from CSIR-CGCRI for pre-despatch inspection, if required, at the Works of Supplier. The Supplier shall inform the Purchaser the readiness of the equipment before its despatch for arranging pre-despatch inspection.
SCC 15	Training, Installation & Commissioning: Supplier shall arrange to complete installation, commissioning and training including all contractual

	obligations of the goods/equipment within 2 months from arrival of goods/equipment at CSIR-CGCRI. The Supplier shall depute its experts / engineers at CSIR-CGCRI for carrying out the installation and commissioning and training of the equipment to the entire satisfaction of the CSIR-CGCRI. The charges are included in the Contract Price of the goods. 04-05 Personnel for 02 working days will be trained in the operation and maintenance of the furnace after installation and commissioning at CGCRI's site which should be completed within installation period of 60 days.
SCC 16	Inspection and Tests The Inspection tests prior to shipment of goods and at final acceptance at buyers site. After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the Supplier's plant by the Supplier prior to shipment to check whether the goods are in conformity with the technical specifications. Manufacturers Test Certificate with data sheet shall be issued to the effect and submit alongwith delivery documents. The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at Purchaser's site in the presence of supplier's representatives. The acceptance will involve trouble free operation. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified. In the event of the ordered item failing to pass the acceptance test, a period not exceeding two weeks will be given to rectify the defects and clear the acceptance test, failing which, the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser. Successful conduct and conclusion of the acceptance test for the installed goods and equipment shall also be the responsibility and at the cost of the Supplier. Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance Manuals together with Drawings of the goods and equipment built. These shall be in such details as will enable the Purchase to operate, maintain, adjust and repair all parts of the works as stated in the specifications. The Manuals and Drawings shall be in the ruling language (English) and in such form and numbers as stated in the Contract. Unless and otherwise agreed, the goods and equipment shall not be considered to be completed for the purposes of taking over until such Manuals and Drawing have been supplied to the Purchaser. On successful completion of acceptability test, receipt of deliverables, etc. and after the Purchaser is satisfied with the working of the equipment, the acceptance certificate signed by the Supplier and the representative of the Purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of successful commissioning of the equipment.
SCC 17	Annual Maintenance Contract (AMC) (NOT APPLICABLE) In case CSIR Central Glass & Ceramic Research Institute, Kolkata requires AMC, a separate contract will be issued to the vendor based on the AMC quote received from M/s -xxxxxxxxxxxxxx.
SCC 18	Packing: The marking and documentation within and outside the packages shall be: - Each package should have a packing list within it detailing the part No.(s), description, quantity etc. - Outside each package, the contract No., the name and address of the purchaser and the final destination should be indicated on all sides and top. - Each package should be marked as 1/x, 2/x, 3/x.....x/x, where "x" is the total No. of packages contained in the consignment. - All the sides and top of each package should carry an appropriate indication/label/stickers indicating the precautions to be taken while handling/storage.

Shipping and other Documents

Details of Shipping and other Documents to be furnished by the Supplier are

(i) For Goods manufactured within India

Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by registered post / speed post and copies thereof by FAX:

(a) Two copies of Supplier's Invoice indicating, *inter-alia* description and specification of the goods, quantity, unit price, total value;

(b) Packing list;

(c) Certificate of country of origin;

(d) Insurance certificate, if required under the contract;

(e) Railway receipt/Consignment note;

(f) Manufacturer's guarantee certificate and in-house inspection certificate;

(g) Inspection certificate issued by purchaser's inspector, if any and

(h) Any other document(s) as and when required in terms of the contract.

Note:

1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)

2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses

(ii) For Goods manufactured abroad

Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by Registered Post/courier and copies thereof by FAX:

(a) Two copies of supplier's Invoice giving full details of the goods including quantity, value, etc.;

(b) Packing list;

(c) Certificate of country of origin;

(d) Manufacturer's guarantee and Inspection certificate;

(e) Inspection certificate issued by the Purchaser's Inspector, if any;

(f) Insurance Certificate, if required under the contract;

(g) Name of the Vessel/Carrier;

(h) Bill of Lading/Airway Bill;

(i) Port of Loading;

(j) Date of Shipment;

(k) Port of Discharge & expected date of arrival of goods and

(l) Any other document(s) as and when required in terms of the contract.

Note:

1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s).

2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.

SCC 20	Mode of despatch In case of supplies from within India, the mode of transportation shall be by Road. In case of supplies from abroad, the mode of transportation shall be by Air.
SCC 21	Insurance The Insurance in respect of goods to cover all risks upto final destination shall be borne by Supplier at its own costs.
SCC 22	Warranty: The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract. The Supplier should further warrant that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in India. The period of validity of the Warranty shall be 1 (One) Year Warranty from the date of acceptance, successful installation, commissioning, training and completion of all contractual obligation. Upon receipt of such notice, the Supplier shall, within 21 days, repair or replace the defective goods or parts thereof, free of cost at the ultimate destination point / Buyer's site i.e CGCRI premises. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Buyer for the replaced parts/goods thereafter on this account. The period for correction of defects in the warranty period is 21 days. If the Supplier having been notified fails to remedy the defects within 21 days, the Buyer may proceed to take such remedial action as may be necessary, at the Supplier's risk and expenses and without prejudice to any other rights which the Buyer may have against the Supplier under the order.
SCC 23	Payment: The payment shall be made in Indian Rupees, as follows: Inland Letter of Credit for 100% of the PO value for Rs. 77,74,740.00 shall be established out of which payment shall be released in the following ways:- I. On Shipment: 80% of the price of goods including packing, forwarding and inland transportation + 100% GST amounting to Rs. 52,56,000.00 (80% of cost) + Rs. 11,77,740.00 (100% GST) = Rs. 64,33,740.00 shall be paid against dispatch documents through Inland Letter of Credit. II. Remaining 20 % of the basic price of goods + Installation & Commissioning charges amounting to Rs. 13,41,000.00 shall be paid by Inland Letter of Credit to the Supplier after successful installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser subject to submission of performance security. Note: All payments due under the Contract shall be paid after deduction of statutory levies at source (like ESIC, Income Tax, etc.), wherever applicable.
SCC 24	Liquidated Damages : Subject to the operation of force majeure, time of delivery and acceptance is the essence of this order. The supplier shall arrange to ship the consignment within 120 days from the date of establishment of Inland Letter of Credit unless an extension is granted by a mutual agreement. As the sole and exclusive remedy for delay in shipment beyond the agreed upon shipment date, the supplier shall pay to the buyer liquidated damages at 0.5% per week or part of a week towards late delivery and towards delay in installation and commissioning including all contractual obligations. The maximum amount of liquidated damages shall be 10%. The liquidated damages shall be levied on the delivered price of the delayed Goods or unperformed Services or contract value.
SCC 25	Site preparation and installation The Purchaser along with the Supplier will demarcate the scope along with responsibility of site preparation and installation. The Purchaser in consultation with the Supplier will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchaser's site immediately after notification of award/contract.

SCC 26	Manuals & Drawing Supplier will make available to the Buyer necessary documents and manuals. Before the goods and equipment's are taken over by the Buyer, the Supplier shall supply operation and maintenance manuals together with drawings of the goods and equipment's built. These shall be in such details as will enable the Buyer to operate, maintain, adjust and repair all parts of the equipment to be delivered under this Purchase Order. The manuals and drawings shall be in the ruling language (English). Unless and otherwise agreed, the goods / equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Buyer.
SCC 27	Notice of Improvement On a continuing basis, the supplier shall inform the buyer the time to time improvement in respect of the equipment. Such information shall be accompanied by technical newsletter, reliability improvement notice etc.
SCC 28	Force Majeure Notwithstanding the provisions relating to extension of time and penalty the Supplier shall not be liable for forfeiture of its performance security or liquidated damages, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes. If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within 21 days of its occurrence. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of force majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.
SCC 29	Settlement of Disputes (i) The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract. (ii) If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. (iii) The dispute settlement mechanism/arbitration proceedings shall be concluded as under: (a) In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to a matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996 and Arbitration & Conciliation (Amendment) Act 2015, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Delhi International Arbitration Centre (DIAC), Delhi High Court, New Delhi. (b) "Arbitration Clause" in the domestic agreement will be as under:- "ARBITRATION" 1. In the event of any question /dispute/difference arising under the agreement or in connection herewith (except as to matters the decision of which is specially provided under this agreement) the same shall be referred to the Delhi International Arbitration Centre for appointment of Arbitrator to adjudicate the

	dispute. 2. The award of the Arbitrator shall be final and binding on the parties. The Arbitrator may give interim award(s) and /or directions, as may be required. 3. Subject to the aforesaid provision, the arbitration and conciliation act, 1996 and the rules made hereunder and any modification thereof from time to time being in force shall be deemed to apply to the Arbitration proceedings under this clause." (c) in the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules. (iv) The venue of the arbitration shall be the place from where the purchase order or contract is issued. (v) Notwithstanding any reference to arbitration herein, (a) the parties shall continue to perform their respective obligations under the Contract unless the parties otherwise agree; and (b) the Purchaser shall pay the Supplier any monies due the Supplier.
SCC 30	Supplier's Integrity The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.
SCC 31	Integrity Pact The Integrity pact is not to be signed.
SCC 32	Termination for Default The Buyer may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Purchase Order / Contract in whole or part a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Purchase Order, or within any extension thereof granted by the Buyer. b) If the Supplier fails to perform any other obligation(s) under the Purchase Order. c) If the Supplier, in the judgment of the Buyer has engaged in corrupt or fraudulent or collusive or coercive competing for or in executing the Purchase Order /Contract. In the event the Buyer terminates the contract in whole or in part, he may take recourse to any one or more of the following action: a) The Performance Security is to be forfeited. b) The Buyer may procure, upon such terms and in such manner as it deems appropriate, stores similar to those undelivered, and the Supplier shall be liable for all available actions against it in terms of the contract. c) However, the Supplier shall continue to perform the contract to the extent not terminated.
SCC 33	Applicable Laws The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to the jurisdiction of Kolkata, India.

3 June 2023
10.03.2023.

अंजनी कुमार पाण्डेय/Anjani Kumar Pandey
भण्डार एवं क्रय अधिकारी/Stores & Purchase Officer
सीएसआईआर - केन्द्रीय काँच एवं सिरेमिक अनुसंधान संस्थान
CSIR - CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE
198, राजा एस. सी. मुल्लिक रोड / 198, Raja S. C. Mullick Road
कोलकाता / Kolkata- 700 032

PERFORMANCE SECURITY FORM

MODEL BANK GUARANTEE FORMAT FOR PERFORMANCE SECURITY

To,

.....
WHEREAS (name and address of the supplier) (hereinafter called "the supplier") has undertaken, in pursuance of contract No. datedto supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the day of, 20.....

(Signature of the authorized officer of the Bank)

.....
Name and designation of the officer

.....
Seal, Name & Address of the Issuing Branch of the Bank

Note: Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

FORM OF NO CLAIM CERTIFICATE
(On company letterhead)

To,

Name & Address of CSIR Labs/Instts _____

Attention:

NO CLAIM CERTIFICATE

Sub: Contract Agreement no.dated for the supply of

We have received the sum of Rs. (Rupees only) in full and final settlement of all the payments due to us for the supply of under the abovementioned contract agreement, between us. We hereby unconditionally and without any reservation whatsoever, certify that with this payment, we shall have no claim whatsoever, of any description, on any account, against afore said contract agreement executed by us. We further declare unequivocally, that with this payment, we have received all the amounts payable to us, and have no dispute of any description whatsoever, regarding the amounts worked out as payable to us and received by us, and that we shall continue to be bound by the terms and conditions of the contract agreement, as regards performance of the contract.

Yours faithfully,

Signatures of Supplier or
Officer authorised to sign the contract documents
on behalf of the supplier
(company stamp)

Date:

Place:

