



CSIR-CENTRAL GLASS AND CERAMIC RESEARCH INSTITUTE
[COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, CSIR]
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PURCHASE ORDER

M/s. ipgi Instruments, New No. 46, Old No. 15/1, Naickamar Street, West Mambalam, Chennai – 600 033, India Ph.: 044 4336 2589 Mob.: 09444345824, 07358082134 Email:– gbsubramani@ipgi.co.in	P.O. No.	P/NC/34/SG/DB/GTE/21-22
	Date	25/08/2022
	Subject	Purchase Order

Reference:

- a) Our Tender Document No. : P/NC/34/SG/DB/GTE/21-22 dt. 26/07/2021
b) Your Bid Ref. No. ipgi/173/2K21 dt. 20/08/2021
c) Your emails dt. 15/12/21, 08/02/22, 25/05/22, 28/06/22, 12/07/22, 25/07/22.

Dear Sir,

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

Sl. No.	Description	Quantity	Total Price in INR
01	Electrochemical workstation Model : Zive Sp1 ZIVE SP1, the compact type Corrosion Analyser having potentiostat / galvanostat / FRA, is the best choice for the complete DC and impedance characterization of various electrochemical application. System is designed under FPGA and DSP control with high speed capability. DAC control: Two set of high speed 16 bit DAC(50MHz) for offset & scanning & one set of 16 bit DAC(1MHz) for auxiliary analog output control ADC reading: Two set of 16 bit 500kHz ADC for reading voltage/current and 1 channel 16 bit 250kHz ADCs for auxiliary data. ZIVE SP1 is equipped with a frequency response analyzer(FRA) for system as standard and it provides high performance impedance measurements over the frequency range 10uHz to 1MHz. ZRA(zero resistance ammeter) function can measure max 1 A in galvanic corrosion technique. ZIVE SP1 can be easily upgraded with adding optional application software package without returning the system to the factory for upgrade. Versatility ZIVE SP1's system comes with auxiliary voltage input. Safety/Maintenance 1. When communication failure between PC and ZIVE SP1 occurs, running channel will continue the experiments and save the data into ZIVE memory up to 542,000 data point set . When the communication is recovered, ZIVE will transfer saved data to PC. User can transfer data set from ZIVE to PC anytime. This function will be highly efficient for long time experiment. 2. User can define safety condition setting by inputting his/her own safety levels for voltage, current, power,AuxV etc. If the measurement value	1 (One) Set	13,82,000.00

exceeds this setting value, the system will automatically stop to protect the system and cell.

3. If control value of voltage or current is different from measured value, the experiment will be stop automatically to protect the cell.

4. Automatic calibration function is supplied for user calibration. The system is controlled from a PC via USB or an Ethernet connection (Future function).

Application

ZIVE SP1 compact type electrochemical workstation is ideal for fundamental research in electrochemistry, development and quality assurance of new sensors, corrosion/coatings, electrode material, membrane, conducting polymer, evaluation power device research such as battery materials, fuel cells, super capacitors and solar cells.

Software (SmartManager)

ZIVE SP1 electrochemical workstation use SmartManager software. You can get more detailed information via above link.

Specification

Main system

PC communication USB2.0 High Speed

Line voltage 100-240VAC, 50/60Hz, 1Amp

Power adapter 24V @2A 60Watt

Size/weight 160X330X81mm(W*D*H) / 2.05kg

Max output power 15Watt

Control DSP with FPGA

Calibration Automatic

Data acquisition 2x16bit ADCs (500kHz)for voltage, current

ADC 1x 16bit ADCs(250kHz) for auxiliary voltage & temperature reading

DAC 2x16bit DAC(50MHz) for bias & scan

1X16bit DAC(1MHz) for analog output

Filter 4ea (5Hz,1kHz,200kHz, 5MHz)

Scan rate 0 – 200V/sec , 0-5000V/sec(fast scan)

Internal Data Memory 542,000 points

LCD Display DC & EIS mode automatically

Power amplifier(CE)

Power 12Watt (12V@1A)

Compliance voltage $\pm 12V$

Maximum current $\pm 1A$

Control speed selection 4ea

bandwidth 2MHz

Slew rate 10V/usec

Potentiostat mode(voltage control)

- voltage control

Control voltage range $\pm 10V$, $\pm 1V$, $\pm 100mV$

Voltage resolution 16 bit per each range

Voltage accuracy $\pm 1mV \pm 0.05\%$ of setting

Max. scan range $\pm 10V$ vs. ref. E

- current measurement Current ranges 9 ranges(auto/manual setting)

10nA ~ 1A (10nA with gain)

Current resolution 16 bit; 30uA,3uA,300nA,30nA,3nA,300pA, 30pA,3pA, 300fA

Current accuracy $\pm 10pA \pm 0.1\%$ of range(gain x1) >100nA fs.

Galvanostat mode(current control)

- Current control

Control current range Max. $\pm 1A \pm$ full scale depending on selected range

Current resolution 16 bit; 30uA,3uA,300nA,30nA,3nA,300pA, 30pA,3pA,

300fA,
Current accuracy $\pm 10\text{pA} \pm 0.1\%$ of range (gain x1) >100nA fs

- Voltage measurement

Voltage ranges 10V, 1V, 100mV
Voltage resolution 16 bit; 0.3mV, 30uV, 3uV
Voltage accuracy $\pm 1\text{mV} \pm 0.05\%$ of reading Electrometer
Max input voltage $\pm 10\text{V}$
Input impedance $2 \times 10^{13} \Omega || 4.5\text{pF}$
Bandwidth >22MHz
CMRR >114dB

EIS(Internal FRA) for system

Frequency range 10uHz ~ 1MHz

Frequency accuracy 0.01%
Frequency resolution 5000/decade
Amplitude 0.1mV ~ 5V rms (Potentiostatic) 0.1 ~ 70% f.s (Galvanostatic)
Mode Static EIS:
Potentiostatic, galvanostatic, pseudo-galvanostatic, OCP
Dynamic EIS:
Potentiodynamic, Galvanodynamic
Fixed frequency Impedance:
Potentiostatic, Galvanostatic, potentiodynamic, galvanodynamic
Multisine EIS:
Potentiostatic, Galvanostatic
Intermittent PEIS/GEIS

Interfaces for system

Auxiliary port
Auxiliary voltage inputs 1 analog Inputs: $\pm 10\text{V}$
For measurement of WE vs. CE
CE vs. RE or other signal
Misc. port I/F for external booster
Zero Resistance Ammeter 100nA ~ 1A ranges
Software
Max steps per experiment 1000
Shutdown safety limits Voltage, current, Auxiliary V etc
Max. sampling rate 20kHz(50uSec)-burst mode/500jHz(2uSec) in fast sweep mode
Max. sampling time unlimited
Sampling condition Time, dv/dt, dl/dt etc.
PC requirement: desktop or laptop with core i3 or higher with Windows 7 or higher is required.

General

Dummy cell One external dummy cell included
One external dummy cell included

Software Techniques:

Basic techniques with standard functions

- Potentiostatic
- Galvanostatic
- Double step potentiostatic
- Double step galvanostatic
- OCP measurement
- Potential sweep
- Current sweep
- Cyclic voltammetry
- Fast potential sweep
- Potentiostatic Ru measurement
- Galvanostatic Ru measurement

The above functions can be used sequentially by step control function.

Electrochemical Analysis Software Package(EASE)**1. Step techniques**

- CA(Chronoamperometry)
- CC(Chronocoulometry)
- CP(Chronopotentiometry)

2. Sweep techniques

- LSV(Linear sweep voltammetry)
- SDV(Sampled DC voltammetry)
- Fast CV
- Fast LSV

3. Pulsed techniques

- DPV(Differential pulse voltammetry)
- SWV(Square wave voltammetry)
- DPA(Differential pulse amperometry)
- NPV(Normal pulsed voltammetry)
- RNPV(Reverse normal pulse voltammetry)
- DNPV(Differential normal pulse voltammetry)

Corrosion Software Package(CORE)

- Tafel(Tafel experiment)
- Rp(Polarization resistance)
- Potentiodynamic
- Galvanodynamic
- Cyclic polarization
- Ecorr vs. time
- Galvanic corrosion
- RpEc trend
- Reactivation potential
- Critical pitting potential
- Potentiostatic ECN
- Galvanostatic ECN
- ZRA mode ECN

Energy Software Package(BATe)

- CC/CV test for cycle life test of lithium battery
- CC/CC test for cycle life test of NiCd or NiMH battery
- Discharging test
- EVS(Electrochemical voltage spectroscopy)
- Variable scan rate CV
- Potentiostatic IV curve
- Galvanostatic IV curve
- Steadystate CV
- GITT
- PITT

Sequential Editor:

User can design his/her experiment procedure by using TASK sequential

- Routine editor.
- Constant potential, current, C-rate, power, load, OCP
- Sweep potential, current
- Fast sweep potential, current
- Staircase potential, current
- CC-CV, CP-CV, CL-CV, C-rate-CV control
- Id, Is control
- EIS control
- Pulse or sinewave control
- Rest(voltage monitoring only)
- Loop(cycle) control

Cut-off (Vertex) Condition

- Time(step, test, loop, cycle)
- Current, current density
- Voltage
- Capacity

- C-rate
- -dV
- $|dV/dt|$
- $|dI/dt|$
- Aux1
- Eoc
- etc.

Sampling Condition

- Time, $|dI/dt|$, $|dV/dt|$, $|dA1/dt|$, burst time

Eis Software package (EISe)

- Potentiostatic EIS
- Galvanostatic EIS
- Pseudo galvanostatic EIS
- OCP EIS
- Potentiodynamic PEIS
- Galvanodynamic GEIS
- Potentiodynamic HFR
- Galvanodynamic HFR
- Potentiostatic HFR monitor
- Galvanostatic HFR monitor
- Multisine potentiostatic EIS
- Multisine galvanostatic EIS
- Intermittent potentiostatic EIS
- Intermittent galvanostatic EIS

Note: Electrodes & Computer are not included here. The same is to be arranged by customer.

Zman EIS Analysis software

IV Man DC Analysis software

IVman Photovoltaic Analysis Software

IVman corrosion Analysis software

IVman battery parameter analysis software

Photo electrochemical cell Horizontal compact design supplied with Black bod to avoid stray light from external sources. – 1 No.

P/N: ipgi_PEC_50

Includes

Glass Reservoir– 1 No.

Volume ~50ml

Silicon cap for all 3 ports

Quartz window 20mm dia

MOC: Glass , Silicon , Teflon , Quartz , SS

Pt wire Coil Electrode 25Cm Length pt wire with gold plated contact pin

Mounted in PEEK– 1 No.

Sample Size max 25 x 25mm

Sample Shape: any shape

Reference electrode

Electrochemical cell kit – 1 No.

Cell stand – 1 No.

Pt counter electrode – 1 No.

Ag/AgCl Reference electrode – 1 No.

Glassy carbon working Electrode – 1No.

Xe light Source – 1 No.

Xenon light source 150W

Xe light source

[101-9109] 150 W Collimated Research Grade Arc Lamp Source, 1 inch, F/1.5, Single Plano-

Convex Lens, Fused Silica, Ozone-free

Lamp Power: 150W

Lamp Type: Xenon Output Beam Type: Collimated Output Beam Diameter: 25mm (1") Lens Type: Single Plano-Convex Lens Lens Material: Fused Silica Ozone Producing: No Sciencetech's Research Grade Arc Lamp Source Packages come with all the components required to operate a research-quality xenon arc lamp source: power supply, arc lamp housing, output optics, and lamp. These systems feature a configurable housing capable of being operated in the vertical or horizontal position. Each housing comes with adjustable base plates for both configurations. Desk top PC core i5 , 8GB RAM, 1000GB HDD , video card with 1GB ram, 19" led monitor , key board , windows 10 Pro		
	Sub-Total	13,82,000.00
	(+) GST @18%	2,48,760.00
	Total F.O.R CSIR-CGCRI Price	16,30,760.00
	(+) Installation Charges	4,237.00
	(+) GST @ 18% on Installation Charges	763.00
	Total F.O.R CSIR-CGCRI Price incl. of Installation Charges	16,35,760.00

The Specifications of the goods and other services shall strictly conform to those laid down in your offer No. ipgi/173/2K21 dt. 20/08/2021 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)

Stores & Purchase Officer

For & on behalf of the

Council of Scientific & Industrial Research

Enclo:

1. Terms & Conditions.

अंजनी कुमार पाण्डेय / Anjani Kumar Pandey
भण्डार 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
Manufacture	means M/s. WonATech Co. Ltd., 7, Neunganmal 1-gil, Soecho-gu, Seoul, 06801, Korea

1.	Delivery Term	FOR CSIR-CGCRI, Kolkata
2.	Purchase Order Value / Contract Price	INR 16,35,760.00 [INR SIXTEEN LAKHS THIRTY FIVE THOUSAND SEVEN HUNDRED SIXTY ONLY].
3.	Payment	<u>The payment shall be made in Indian Rupees, as follows:</u> On Delivery & Inspection: 80 (Eighty) % of the Basic Price of goods + 100% GST of the goods = INR 11,05,600.00 + INR 2,48,760.00 = INR 13,54,360.00 shall be paid through RTGS after delivery & inspection of the all ordered Goods. On Acceptance: The remaining 20 (Twenty) % of the basic price of goods, i.e. INR 2,76,400.00 shall be paid through RTGS to the Supplier within thirty (30) days of receipt of Goods and successful installation & commissioning and upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security and completion of all contractual obligations. - Installation Charges of INR 4,237.00 + GST @ 18% on Installation Charges of INR 763.00 = INR 5000.00 shall be paid by RTGS with the balance 20 (Twenty) % payment. 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	The Bidder or his Indian Agent has to furnish a Performance Bank Guarantee equivalent to 3% of the Purchase Order Value as per the format, specified by CSIR-CGCRI (enclosed) prior to release of balance payment. The validity of the PBG should cover the period of 1 (One) Year Warranty from Installation & Commissioning plus 60 Days. This PBG will be returned to the vendor soon after successful completion of Warranty plus performance obligations.
5.	Goods & Service Tax (GST)	GST @ 18% on all items is included in Purchase Order value. CSIR-CGCRI GST No.: 19CALC01020F1DL
6.	Delivery period	The Supplier shall deliver the consignment within 8 weeks from the date of issuance of Purchase Order. 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 (One) Year from the date of successful completion of Installation & Commissioning and acceptance provided by the user of CSIR-CGCRI, Kolkata.

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	Applicable. Installation & Commissioning to be completed within 2 weeks from the receipt of goods in this Institute.
10.	Training	Training at site free of cost. Standard operations and maintenance related training to be provided for 02 days to 02 personnel at CSIR-CGCRI premises.
11.	LD Clause	It will be applicable for delay in delivery including completion of all contractual obligations beyond deadlines as mentioned in the P.O.
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,

Sumit 25.08.2022

(Anjani Kr. Pandey)

Stores & Purchase Officer

For & on behalf of the Council of Scientific & Industrial

Research

अंजनी कुमार पाण्डेय / Anjani Kumar Pandey

स्टोर्स एवं क्रय अधिकारी / Stores & Purchase Officer

सीएसआईआर - केन्द्रीय काँच एवं सिरेमिक अनुसंधान संस्थान

CSIR - CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE

196, राजा एस. सी. मल्लिक रोड / 196, Raja S. C. Mullick Road

कोलकाता / Kolkata- 700 032

CONDITIONS OF CONTRACT

A GENERAL CONDITIONS OF CONTRACT (GCC)

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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.

2.27 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) In case of Dispute or difference arising 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 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."

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,

i. The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

ii. The Purchaser shall pay the Supplier any monies due the Supplier.

(a) 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.

2.33 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 Manufacturer is: M/s. WonATech Co. Ltd., 7, Neunganmal 1-gil, Soecho-gu, Seoul, 06801, Korea
SCC 3	The Supplier is: M/s. ipgi Instruments, New No. 46, Old No. 15/1, Naickamar Street, West Mambalam, Chennai – 600 033, India.
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: INR 49,073.00 [INR FORTY NINE THOUSAND SEVENTY THREE ONLY]. 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) at the time of release of balance payment shall be made by RTGS within 30 days from the date of installation, commissioning and acceptance of goods and completion of other contractual obligations. 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 8 weeks from the date of issuance of Purchase Order. The delivery should be synchronized alongwith 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. 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.
SCC 9	Part supply will not be accepted.
SCC 10	The country of origin of the Goods is South Korea, Canada , India.
SCC 11	The port of shipment of the Goods is any airport in South Korea.
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 weeks from the receipt of goods in this Institute.. The Supplier shall depute its experts / engineers at CSIR-CGCRI for carrying out the installation and commissioning and training of the equipment to 02 days to 02 personnel to the entire satisfaction of the CSIR-CGCRI. The charges are included in the Contract Price of the goods.
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 xxxxxxxxxxxxxxxx.
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. 1 (One) Year from the date of completion of Installation & Commissioning. The Buyer shall promptly notify the Supplier in writing of any claims arising under this warranty. 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: ➤ On Delivery & Inspection: 80 (Eighty) % of the Basic Price of goods + 100% GST of the goods = INR 11,05,600.00 + INR 2,48,760.00 = INR 13,54,360.00 shall be paid through RTGS after delivery & inspection of the all ordered Goods. ➤ On Acceptance: The remaining 20 (Twenty) % of the basic price of goods, i.e. INR 2,76,400.00 shall be paid through RTGS to the Supplier within thirty (30) days of receipt of Goods and successful installation & commissioning and upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security and completion of all contractual obligations. ➤ Installation Charges of INR 4,237.00 + GST @ 18% on Installation Charges of INR 763.00 = INR 5000.00 shall be paid by RTGS with the balance 20 (Twenty) % payment. 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 deliver the consignment within 8 weeks from the date of issue of Purchase Order unless an extension is granted by a mutual agreement. As the sole and exclusive remedy for delay in delivery beyond the agreed upon delivery 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.

25.08.2022

अंजनी कुमार पाण्डेय / Anjani Kumar Pandey
 Buyer's Officer / Stores & Purchase Officer
 सौरभ जाईन - केन्द्रीय लेव एवं सिमानक अनुसंधान संस्थान
 CSIR - CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE
 196, राजा एच. सी. मुल्लिक रोड / 196, 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: _____

