



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

Tender No. AO/3437

Dated: 02-09-2024

TENDER DOCUMENT

FOR

**“PROCUREMENT OF SOLAR INVERTER FOR CENTER OF EXCELLENCE IN
MOLECULAR BIOLOGY (CEMB), UNIVERSITY OF THE PUNJAB, LAHORE ON FOR
BASIS”**



**CENTER OF EXCELLENCE IN MOLECULAR BIOLOGY, UNIVERSITY OF THE PUNJAB,
LAHORE-53700**



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

SECTION-I: INVITATION TO BIDS

SUBJECT: PROCUREMENT OF SOLAR INVERTER FOR CENTER OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB), UNIVERSITY OF THE PUNJAB, LAHORE ON FOR BASIS

1. The Center of Excellence in Molecular Biology (CEMB), Punjab University (PU) Lahore (here-in-after called the "Procuring Entity") invites proposals for the Supply of Inverter for CEMB, PU Lahore.
2. Sealed Bids for complete scope of work as per individual packages are invited from prospective **Manufacturers / Authorized / Sole Distributor/Contractors/Suppliers** to bid for the mentioned project.
3. A firm will be selected, under **Single Stage-Two Envelopes (SSTE) Bidding** and procedures described in this Bidding Document, in accordance with the PEC & PPRA Rules 2004 (amended up to date).

The preliminary details are as follows:

Procurement of one Inverter (115 KW Each) on FOR Basis	Estimated price: Rs 16,00,000/- PKR Bid security: 2% of above estimated price
---	--

The Bidders are required to submit the Technical and Financial Bid separately for either or one package. The Bid Security shall be enclosed in the Technical Bid for each proposal.

4. All bids must be accompanied by a Bid Security in the amount stated above in the shape of CDR in the Name of "**Director, Centre of Excellence in Molecular Biology (CEMB)**" and must be delivered at Purchase Section CEMB, University of the Punjab, Lahore on or before **18.09.2024 in sealed envelopes at 10:00 AM**. Technical Bids will be opened at **10:30 AM** on the same day in the presence of bidders' representatives who choose to attend at the same address.
5. The Director CEMB reserves the right to reject any or all tenders. No tender will be issued on the opening date. Tender documents will be available immediately after publication /uploading of tender notice. If there is a public holiday announced by the Government on the tender opening date, then the tender will be opened on the next working day. This tender notice is available at www.ppra.org.pk, as well as on the website of the CEMB (www.cemb.edu.pk). Interested bidders may also submit their bids by downloading bidding document from the website and submit with requisite fee as mentioned above in shape of bank draft/pay order. The results of the technical /tender opening Committee shall be announced loudly.

HEAD (Admin), CEMB
Email: admin@cemb.edu.pk
Phone: +92 (42) 35293145
Cell: 0300-4525194



CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore

SECTION-II. TECHNICAL SPECIFICATIONS OF EQUIPMENT

ON-GRID SOLAR SMART INVERTER

No.	ITEM(s)	Description	QTY
1	String Inverter	Inverter: Huawei/Solis/Growatt/FOX/ or equivalent On-Grid (On Grid – Net metering enabled) Inverter with built in MPPT Charge Controller and Remote Monitoring through Android/IOS App with Data Logger	1 No (115 KW Each)

DELIVERY SCHEDULE

Sr .	Location	Item	Delivery Period from the date of Notification of Award
1	Centre of Excellence in Molecular Biology (CEMB), University of the Punjab (PU), Lahore	Procurement of One Inverter (115 KW Each) on FOR Basis	25 Days from the Award of Contract

Note: The above equipment/goods shall be supplied at the location identified by the client complete in all respects with all warranty and compulsory documents / invoices.



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

(On-Grid Solar Smart Inverter)

Parameters	Min. Specifications required
Inverter Manufacturer	50 GW or above deployment in last years. Renowned and verifiable brand having successful history in similar climatic conditions.
Inverter Type	String Inverter
Pakistan Local case reference	5 Cases of 3-5MW Solar Projects
Inverter Type	String Inverter
Max. Efficiency /European Efficiency	> 98.4% or above
Min. Output Power	115KW @ 25°C
Max. Input Voltage	1,100V
MPPT input current	30A
MPPT Operating Voltage Range	200V ~ 1000V
Output Voltage Range	400 Vac/ 480 Vac, 3W+(N) + PE
Max. Total Harmonic Distortion	<3%. As per relevant IEC clauses.
Power Factor	0.8 leading ~ 0.8 lagging
IP Protection	IP 66 or Better
Standby power consumption	Max 3.5W
Smart IV Diagnosis	Level 4, Globally applicable
Protections	<ol style="list-style-type: none"> 1. Smart String-Level Disconnect (SSLD) 2. Input-side Disconnection Device 3. Anti-islanding Protection 4. AC Overcurrent Protection 5. DC Reverse-polarity Protection 6. PV-array String Fault Monitoring 7. DC Insulation Resistance Detection 8. Residual Current Monitoring Unit 9. DC Surge Arrester 10. AC Surge Arrester
Operating temperature	-25°C to 60°C
Communication	With Remote Monitoring Feature, Mobile App, Web server user interface, Cloud Connected. Real Time System Monitoring. Alerts, Faults and Warning data display. System Statistics – System Parameters, PV predicted values, forecasted values, Load data, Energy Support W-LAN/4G/RS485 communication
Minimum Applicable Standards and Compliances	IEC62109-1/-2, IEC62116, IEC60068, IEC61683, IEC 61727
Additional Feature	IV curve tester should be built in, with no external system. Built-In Advanced Fault Detection. Smart String Level Detection should be available on board
Warranty	5 Years Standard replacement warranty; And support 20 Years extension warranty



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

SECTION-III: BID DATA SHEET (BDS)

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB) Part One. Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

Introduction
ITB 1.1 a) Name of Procuring Agency: Centre of Excellence in Molecular Biology (CEMB), University of the Punjab (PU), Lahore b) Name of Project: Solarization of the Center of Excellence In Molecular Biology (CEMB), University Of The Punjab, Lahore. c) Name of Contract: Procurement of Solar Inverter for Centre of Excellence In Molecular Biology (CEMB), University of the Punjab, Lahore d) Financial year for the operations of the Procuring Agency: 2023-24 e) Name of financing institution: CEMB, PU
ITB 4.1 Name of Purchaser: Centre of Excellence in Molecular Biology (CEMB), University of the Punjab (PU), Lahore
ITB 6.1 For clarification purposes, the Employer's address is: Head Admin, Centre of Excellence in Molecular Biology (CEMB), University of the Punjab (PU), Lahore.
ITB 8.1 Language of the Bid: English

Bid Price, Currency & Payments
ITB 11.2 <ul style="list-style-type: none">• The Bidder shall indicate on the appropriate Price Schedule the unit prices (applicable) and total bid price of the goods, equipment, instrument it proposes to supply under the contract along with a price for extended warranty per year, if any.• All prices should be in PAK rupees indicating both exclusive and inclusive of all Taxes. GST and /or other Tax amount where applicable, should be mentioned in separate column(s) and the total given in a separate column. Prices indicated on the Price Schedule shall be item wise/ package wise.• Prices indicated on the invoice schedule shall be on FOR basis up to CEMB, Lahore risk coverage included. Payment will be made within one month after final supply of goods. The transportation up till delivery on site premises will be arranged and paid by Supplier/bidder.• The Bidder's separation of price components in accordance with BOS/forms will be solely for the purpose of facilitating the comparison of bids by the Purchaser and will not in any way limit the Purchaser's right to contract on any of the terms offered.• Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account, unless otherwise specified in the Bid Data Sheet. <i>A bid submitted with an adjustable price quotation will be treated as nonresponsive and will be rejected.</i>



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

Preparation and Submission of Bids

Qualification/Eligibility Criteria/Knock Down Criteria (To be fulfilled)

In addition to PPRA Rules 2004, the potential bidder must fulfill the following requirements:

-

1. Certificate of Incorporation of bidder's firm showing its location and the date of registration etc.
2. Active registration with Securities and Exchange Commission of Pakistan (SECP).
3. Active NTN and GST Registration Certificate
4. Bidders with international partner company have provide registration/affiliation/authorization certificate with any such international agency located in relevant country of origin.
5. JV/Consortium Agreement in case of Joint Venture Partners bidding for the tender.
6. Affidavit on Stamp Paper that Company/Firm is not blacklisted by any of Provincial or Federal Government Department, Agency, Organization or Autonomous Body or Private Sector Organization anywhere in Pakistan etc.
7. Valid evidence showing Firm has never been litigated, will allow to participate in the bidding process. Affidavit on stamp paper shall be provided.
8. Audited Financial Statements of last three years shall be provided. Annual average turn over shall be more than 100 million PKR.
9. Manufacturer Authorization is required from the bidder bidding for the said tender.
10. Warranty declarations from the manufacturer are compulsory, along with its details of Warranty/Extended Warranty (if any).
11. Compliance with the Technical Specifications of each Equipment/Instrument as specified in this Bid Document.
12. Technical Brochures of Equipment quoted, mentioning its specifications, manufacture's model, product/catalogue number, and country of origin.
13. Authority Letter from the Bidder Company authorizing the relevant person/firm to represent the company in Pakistan as an Authorized/Sole Distributor.
14. If an Agent submits bids on behalf of more than one Manufacturer, unless each such bid is accompanied by a separate Bid Form for each bid, and a bid security, when required, for each bid, and a valid authorized dealership certificate from the respective Manufacturer, all such bids will be rejected as nonresponsive.

ITB 15.1 Amount of Bid Security:

Package 1	Procurement of one Inverter (115 KW Each)	Estimated price: Rs 16,00,000/- PKR Bid security: 2% of above estimated price
------------------	--	--

Bids shall be in the prescribed format, sealed and accompanied by the Bid Security in the form of Call Deposit, Bank Draft, or Pay Order in favor of Centre of Excellence in Molecular Biology (CEMB), University of the Punjab (PU), Lahore having its **validity 90 days from the date of opening of Bid.**

ITB 16.1 Bid Validity Period: 90 days after the date of opening of bid.

ITB 18.2 (a) Address for Bid Submission: Director, Centre of Excellence in Molecular Biology (CEMB), University of the Punjab (PU), Lahore.

- a) **ITB 18.2 (b) IFB Title and Number:** Procurement of Inverter for Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore, *Tender Notice/Advertisement/Request for Proposal Red No.:* _____

ITB 19.1 Deadline for Bid Submission: 18th September 2024 before 10:00 AM at the



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

Office of Head Admin, Centre of Excellence in Molecular Biology (CEMB), University of the Punjab (PU), Lahore.

**ITB 22.1 Time, Date, and Place for Bid Opening: 10.30 pm. 18th September 2024, at
Committee Room, Centre of Excellence in Molecular Biology (CEMB), University of the
Punjab (PU), Lahore.**

Bid Evaluation Criteria & Marking System

ITB 25.3 Criteria & Marking System on Comparative Basis for the Evaluation of Technical Proposals are under for Bidder:

Parameters	Detail		Total Marks	
Past Performance (Within Previous 3 Y)	No. of Institutions Served		20	
	i	1 to 3		5
	ii	4 to 6		10
	iii	7 to 10		15
	iv	10 and above		20
Age of the Company	Age of the Company		20	
	i	1-2 year		8
	ii	2-4 years		15
	iii	Above 4 years		20
Length of Dealership / Authorization etc	Length of Dealership/Authorization etc		20	
	i	Above 4 years		20
	ii	3 – 4years		15
	iii	2 – 3 years		10
	iv	1 – 2 years		5
	v	Below 1 year		0
Financial Status	Financial Status		20	
	i	Tax Returns (Last 3 years) (1 marks each year)		5
	ii	Bank Statement (Last 3 Y with Turnover of 100 Million PKR)		10
	iii	Balance above the amount of quoted items.		5



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

Human Resource Strength/Experience of Technical Staff (Attach Documentary Proof)	HR Education & Experience		10	
	i	Less than 2 persons		2
	ii	3 -5 persons		5
	iii	6 -9 persons		8
	iv	10 persons and above		10
Good Reputation Certificate from any Govt. Institution / Private Sector in Connection with Services	Good Reputation Certificate		10	
	i	No certificate provided		0
	ii	1 to 2		4
	iii	3 to 5		6
	iv	6 and above		10

Eligibility of Bidders will be determined as per BDS. Only Eligible bidders will be evaluated further. Following mandatory evaluation criteria will be followed:

Note: Marks would only be Awarded Based on Verifiable Documentary Proofs

Bidders in order to qualify technically needs to have at least 65 points in accordance with the above requirements/criteria. Evaluation of Technical Bids will be carried out on a PASS/FAIL basis. The Bidder qualifying the above mandatory criteria will be declared Technically Qualified. Financial Bids of only technically qualified bidders will be opened. Financial Bids of Not-Qualified bidders will be returned un-opened

Contract Award

ITB 28, 29, 32, 33

- a) Contract would be awarded to the successful Bidder whose bid has been determined technically responsive, qualified and has the lowest evaluated financial bid.
- b) **Percentage for quantity increase or decrease:** 15 % of total contract value.
- c) The successful Bidder will furnish 5% of the Contract Value as performance security in shape of Bank Guarantee/DD/Bankers Cheque in Pak Rupees in accordance with the Conditions of Contract along with the Performance Security Form.



SECTION-VII: SAMPLE FORMS

8.1 Bid Form

[To be signed & stamped by the Goods Provider and reproduced on the letter head. To be attached with the Bid in case of Single Stage Two Envelope Procedure]

Date: _____

To: *[name and address of Procuring Agency]*

Gentlemen and/or Ladies:

Having examined the Bidding documents including Addenda Nos. *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, in conformity with the said Bidding documents for the sum of *[total Bid amount in words and figures]* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, specified in the Schedule of Requirements.

If our Bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to **10%** of the Contract Price for the due performance of the Contract, in the form prescribed by the Procuring Agency.

We agree to a Bid by this Bid for a period of **120** days from the date fixed to Bid opening under Clause 2.3.8 of the Instructions to Bidders, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed (*if required*), this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

The Composition of our bid consists on separate Technical and financial bids, detail of which is as follows:

Technical bid includes the following:-

- a) Complete bidding document (without filling) signed and stamped by the bidder.
- b) All the forms relevant to the technical bid, to be reproduced on the letter head of the bidder as indicated on each individual form.
- c) Copy of bid security form along with copy of financial instruments *[to be decided by the procuring agency i.e. Bank Guarantee / Bank call-deposit (CDR) / Demand Draft (DD) / Pay Order (PO) or Banker's cheque]* valid for 120 Days, beyond the validity of Bid in the manner as prescribed on the bid security form **8.10**.
- d) Any other document required by the procuring agency not inconsistent with PPR-14.

Financial bid includes the following: -

- a) Original Bid form (as per **form 8.1** of Bidding documents) on letter head of the firm,



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

- duly signed and stamped.
- b) Price schedule / financial form (as per **form 8.10**) to be reproduced on the letter head of the bidder duly signed and stamped.
 - c) Original Bid security form (as per **form 8.11**) along with Original financial instrument *[to be decided by the procuring agency i.e. Bank Guarantee / Bank call-deposit (CDR) / Demand Draft (DD) / Pay Order (PO) or Banker's cheque]* valid for 120 Days, beyond the validity of Bid.
 - d) *Any other document required by the procuring agency not inconsistent with PPR-14.*

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of goods provider	Amount and Currency
------------------------------------	---------------------

_____	_____
_____	_____
_____	_____

(if none, state "none")

We understand that you are not bound to accept the lowest or any Bid you may receive.
Dated this _____ day of _____ 20_____.

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

8.2 Bidder's JV Members Information Form

{To be reproduced and signed & stamped by the lead partner and all JV members on their letter Pad, to be attached with Technical Bid in addition to the JV agreement}

{The Bidder shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the Bidder and for each member of a Joint Venture}.

Date: *[insert date (as day, month and year) of Bid submission]* RFB No.: *[insert number of RFB process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

Page _____ of _____ pages

1. Bidder's Name: <i>[insert Bidder's legal name]</i>
2. Bidder's JV Member's name: <i>[insert JV's Member legal name]</i>
3. Bidder's JV Member's country of registration: <i>[insert JV's Member country of registration]</i>
4. Bidder's JV Member's year of registration: <i>[insert JV's Member year of registration]</i>
5. Bidder's JV Member's legal address in country of registration: <i>[insert JV's Member legal address in country of registration]</i>
6. Bidder's JV Member's authorized representative information Name: <i>[insert name of JV's Member authorized representative]</i> Address: <i>[insert address of JV's Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Member authorized representative]</i> Email Address: <i>[insert email address of JV's Member authorized representative]</i>
Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4. In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Purchaser, in accordance with ITB 4.6. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

8.3. Manufacturer's Authorization Form

[To be signed and stamped by the Bidder and to be attached with Technical Bid]

[See Clause 2.3.6 (iii) of the Instructions to Bidders.]

To: *[name of the Procuring Agency]*

WHEREAS *[name of the Manufacturer]*, who are established and reputable manufacturers of *[name and/or description of the goods]* having factories at *[address of factory]* do hereby authorize *[name and address of Agent]* to submit a Bid, and subsequently negotiate and sign the Contract with you against for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation to Bids.

[Signature for and on behalf of Manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Bidder in its Bid.



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

8.4. Bidder Profile Form

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Technical Bid]

Sr.#	Particulars
1.	Name of the company:
2.	Registered Office:
Address:	
Office Telephone Number:	
Fax Number:	
3.	Contact Person:
Name:	
Personal Telephone Number:	
Email Address:	
4.	Local office if any:
Address:	
Office Telephone Number:	
Fax Number:	
5.	Registration Details:

a) Audited Financial Statement Attachment/Income Tax Returns (Last __years)

Yes	No
-----	----

b) Details of Experience (Last _____Years)

(i)	Similar Project (Agency/Department)	Item Name
(ii)	Value of total Projects/Tenders/POs	Amount

c) Staff Detail and last month Payroll

Yes	No
-----	----



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

8.5. General Information Form

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Technical Bid]

		Particulars		
Company Name				
Abbreviated Name				
National Tax No.			Sales Tax Registration No	
PRA Tax No.				
No. of Employees			Company's Date of Formation	

*Please attach copies of NTN, GST Registration & Professional Tax Certificate

Registered Office Address		State/Province	
City/Town		Postal Code	
Phone		Fax	
Email Address		Website Address	



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

8.6. Affidavit

[To be printed on PKR 100 Stamp Paper, duly attested by oath commissioner. To be attached with Technical Bid]

Name: _____ *(Applicant)*

I, the undersigned, do hereby certify that all the statements made in the Bidding document and in the supporting documents are true, correct and valid to the best of my knowledge and belief and may be verified by employer if the Employer, at any time, deems it necessary.

The undersigned hereby authorize and request the bank, person, company or corporation to furnish any additional information requested by the *[name of Procuring Agency]* of the Punjab deemed necessary to verify this statement regarding my (our) competence and general reputation.

The undersigned understands and agrees that further qualifying information may be requested and agrees to furnish any such information at the request of the *[name of Procuring Agency]*. The undersigned further affirms on behalf of the firm that:

- (i) The firm is not currently blacklisted by the Procuring Agency.
- (ii) The documents/photocopies provided with Bid are authentic. In case, any fake/bogus document was found at any stage, the firm shall be blacklisted as per Law/ Rules.
- (iii) Affidavit for correctness of information.
- (iv) *****omitted*****

[Name of the Contractor/ Bidder/ Supplier] undertakes to treat all information provided as confidential.

Signed by an authorized Officer of the company

Title of Officer: _____

Name of Company: _____

Date: _____



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

8.7. Performance Guarantee Form

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Technical Bid]

To,

[name and address of the Procuring Agency]

WHEREAS (Name _____ of _____ the Contractor/
Supplier)

_____ hereinafter called "the Contractor" has undertaken, in pursuance of "INVITATION TO BID FOR THE "PROVISION OF _____" procurement of the following:

1. *[Please insert details]*.

(Here in after called "the Contract").

AND WHEREAS it has been stipulated by you in the Contract that the Contractor shall furnish you with a bank guarantee by a scheduled bank for the sum specified therein as security for compliance with the Contractor's performance obligations in accordance with the Contract; **AND WHEREAS** we have agreed to give the Contractor a Guarantee;

THEREFORE WE hereby affirm that we are Guarantor and responsible to you, on behalf of the Contractor, 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 Contractor to be in default under the Contract, and without cavil or argument, any sum or sums as specified by you, 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.

This guarantee is valid until _____ day of _____, 20__, or _____ [insert number of days] after the rectification of the Defects, whichever is later.

[NAME OF GUARANTOR]

Signature _____ Name _____ Title _____
Address _____ Seal _____
Date _____



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

8.8. Technical Bid Form (As per BOQ provided in Section III and IV)

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Technical Bid]

On-Grid Solar Smart Inverter

Sr. No.	Item name	Brand name with Country of Manufacturer	Make & model	Quantity	Country of Origin	Specifications dimensions

Stamp & Signature of Bidder _____



Technical Bid Form On-Grid Solar Smart Inverter

The bidders need to fill this specification forms and provide documentary evidence.

Parameters	Min. Specifications required	Status		Documentar y Evidence attached	
		YES	NO	YES	NO
Inverter Manufacturer	50 GW or above deployment in last years. Renowned and verifiable brand having successful history in similar climatic conditions.				
Inverter Type	String Inverter				
Pakistan Local case reference	5 Cases of 3-5MW Solar Projects				
Inverter Type	String Inverter				
Max. Efficiency/ European Efficiency	> 98.4% or above				
Min. Output Power	115KW @ 25°C				
Max. Input Voltage	1,100V				
MPPT input current	30A				
MPPT Operating Voltage Range	200V ~ 1000V				
Output Voltage Range	400 Vac/ 480 Vac, 3W+(N) + PE				
Max. Total Harmonic Distortion	<3%. As per relevant IEC clauses.				
Power Factor	0.8 leading ~ 0.8 lagging				
IP Protection	IP 66 or Better				
Standby power consumption	Max 3.5W				
Smart IV Diagnosis	Level 4, Globally applicable				
Protections	1. Smart String-Level Disconnecter (SSLD)				
	2. Input-side Disconnection Device				
	3. Anti-islanding Protection				
	4. AC Overcurrent Protection				
	5. DC Reverse-polarity Protection				
	6. PV-array String Fault Monitoring				
	7. DC Insulation Resistance Detection				
	8. Residual Current Monitoring				



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

Parameters	Min. Specifications required	Status	Documentar y Evidence attached
	Unit		
	9. DC Surge Arrester		
	10.AC Surge Arrester		
Operating temperature	-25 ⁰ C to 60 ⁰ C		
Communication	With Remote Monitoring Feature, Mobile App, Web server user interface, Cloud Connected. Real Time System Monitoring. Alerts, Faults and Warning data display. System Statistics – System Parameters, PV predicted values, Forecasted values, Load data, Energy Support W-LAN/4G/RS485 communication		
Minimum Applicable Standards and Compliances	IEC62109-1/-2, IEC62116, IEC60068, IEC61683, IEC 61727		
Additional Feature	IV curve tester should be built in, with no external system. Built-In Advanced Fault Detection. Smart String Level Detection should be available on board		
Warranty	5 Years Standard replacement warranty; And support 20 Years extension warranty		

Stamp & Signature of Bidder _____



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

8.9. Financial Bid Form/Price Schedule

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Financial Bid]

SCHEDULE OF PRICES – SUMMARY OF BID PRICES PACKAGE I

Name of Project: Procurement of Solar Inverter for Centre of Excellence In Molecular Biology (CEMB), University of the Punjab, Lahore

Item No.	Project Description	Total Cost of Equipment (FOR basis) PKR	Total Cost of Services (FOR basis) PKR	Total Cost (FOR Basis) PKR
1	Procurement of One Inverter (115 KW Each) for CEMB, PU, Lahore.			

(Note: Total Price, in Pak Rupees, shall be provided in figures as well as in words, Prices should be included with all applicable Government taxes)

NOTE: Lump Sum (Summary of Bid Prices) and Item wise (BOQ of the System / Schedule of Prices (BOQ)) rate must be submitted in the Financial Proposal. The Bid not accompanied with the Item wise rates shall be rejected and declared non-responsive. Name of Project should be clearly mentioned in bold letters over the sealed envelope of the Financial Proposal.

Stamp & Signature of Bidder _____



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

**SCHEDULE OF PRICES – ITEM WISE BID PRICES ITEM WISE COSTS
BREAKDOWN**

Package 1: On-Grid Solar Smart Inverter

Item No.	Project Description	Price of Single Inverter (FOR basis in PKR) excluding GST	Price of Single Inverter (FOR basis in PKR) with GST	Price of Services (FOR basis) PKR	Total Price (FOR basis in PKR) for 1 Inverter with GST
1	Procurement of one Inverter (115 KW Each) for CEMB, PU, Lahore				

(Note: Total Price, in Pak Rupees, shall be provided in figures as well as in words, Prices should be included with all applicable Government taxes)

NOTE: Lump Sum (Summary of Bid Prices) and Item wise (BOQ of the System / Schedule of Prices (BOQ)) rate must be submitted in the Financial Proposal. The Bid not accompanied with the Item wise rates shall be rejected and declared non-responsive. Name of Project should be clearly mentioned in bold letters over the sealed envelope of the Financial Proposal.

Stamp & Signature of Bidder _____



CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore

Section IX- Check List

[To be signed and stamped and presented on Bidder's letter head pad]

The provision of this checklist is essential prerequisite along with submission of tenders (with technical proposal).

Sr. #	Detail	Responsive	Non-responsive
1	Original receipt for purchase of tender along with Standard Bidding Documents.		
2	2% Bid Security of estimated cost of articles / items given by the department. The Bid security must be submitted with technical proposal.		
3	All required samples (if demanded) have been submitted in <i>[name of the Procuring Agency]</i> sample store.		
4	Active Registration with Income Tax Authorities (National Tax Number NTN) at least three years old		
5	Copy of active Registration with Sales Tax Authorities (STRN)		
6	Copy of active Registration (Professional Tax Certificate)		
7	Bidder s JV Member information as per form		
8	At least _____ of similar nature having similar cost or above have been performed / executed in public organization during last 02 years (certificate duly signed by gazetted officer attached).		
9	Technical Bid Form (as per form of Bidding documents) on letter head of the firm duly signed and stamped.		
10	Financial Bid Form (as per form of Bidding documents) on letter head of the firm, duly signed and stamped.		
11	Bid Security Form (as per form of Bidding documents) on letter head of the firm, duly signed and stamped.		
12	Performance Guarantee Form (as per form of Bidding documents) on letter head of the firm, duly signed and stamped.		
13	General Information Form (as per form of Bidding documents) on letter head of the firm duly signed and stamped.		
14	Affidavit (as per form) on non-judicial Stamp Paper of Rs.100/- The firm is not currently blacklisted by the Procuring Agency. The documents/photocopies provided with Bid are authentic. In case of any fake/bogus document look at any stage. They shall be black listed as per Rules /Laws.		



**CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY (CEMB),
CEMB-87-West Canal Bank Road,
Thokar Niaz Baig, Lahore**

	Detail	Responsive	Non-responsive
	Affidavit for correctness of information. ****omitted*** Affidavit for correction of information Form (as per form of Bidding documents) on letter head of the firm, duly signed and stamped.		
15	Work order / supply order / purchase order of previous relevant experience. Company profile. Staff list along with location and address [<i>where applicable</i>]. Income Tax Returns/Audited Financial Statement, National tax number Certificate, General Sale Tax Number Certificate (last 03 year). Bidders profile Form (as per form of Bidding documents) on letter head of the firm, duly signed and stamped.		
16	All documentation to establish the eligibility of Firm for further evaluation as per BDS		

Stamp & Signature of Bidder _____