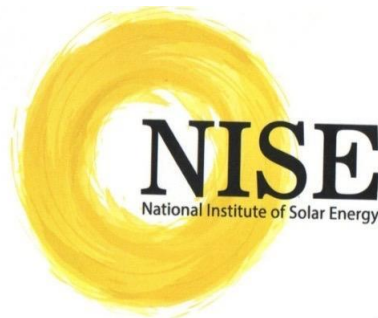


eTender Document

For

Supply, Installation & Commissioning of Electrochemical Capacitance Voltage (ECV) Profiler at National Institute of Solar Energy, Gurugram, Haryana.



NIT NO: 9/03(2)006/2019-NISE PV (R&D) Part A.

To be submitted online by (time) **17:00 hours** on (date) **25-04-2019** to

Website: www.tenderwizard.com/NISE

NATIONAL INSTITUTE OF SOLAR ENERGY

Gurgaon-Faridabad Road, Gwalpahari, Gurugram, Haryana-122003, INDIA

Telefax No.: +91-124- 285 3008 / 285 3114

Website: www.nise.res.in

National Institute of Solar Energy
(An Autonomous Institute of Ministry of New & Renewable Energy)

Gurugram-Faridabad Road
Gwal Pahari, Gurugram - 122 003; Haryana

On behalf of the Office of the Director General, the National Institute of Solar Energy (NISE), Gurugram invites sealed tenders from reputed Manufacturer/ Suppliers of **Electrochemical Capacitance Voltage (ECV) Profiler** for Supply, Installation & Commissioning of an Electrochemical Capacitance Voltage (ECV) Profiler as per the technical sections mentioned in the tender document.

Notice Inviting Bid (NIT) No	9/03(2)006/2019-NISE PV (R&D) Part A
Scope of Work	Supply, installation and Commissioning of an Electrochemical Capacitance Voltage (ECV) Profiler at NISE Campus
Supply, Installation and Commissioning	As per the Technical specification at Annexure 1
Submitting of Tenders	<p>1. The scope of work to be tendered are available in the complete bid documents which can be viewed /downloaded from e-tender portal of http://www.tenderwizard.com/NISE. Both Technical Bid and Financial Bid will be submitted concurrently duly digitally signed in the website http://www.tenderwizard.com/NISE. No claim shall be entertained on account of disruptions of internet service being used by bidders. Bidders are advised to upload their bids well in advance to avoid last minute technical snags.</p> <p>2. All Corrigendum/Amendment/Corrections, if any, will be published on the website http://www.tenderwizard.com/NISE.</p> <p>3. It is mandatory for all the applicants to have Class-III Digital Signature Certificate (in the name of person who will sign the bid document) from any of the licensed certifying agencies.</p> <p>4. To participate in the e-tendering submission, it is mandatory for the applicants to get registered their firm/joint venture with the e-tendering portal of http://www.tenderwizard.com/NISE.to have user ID & Password from M/s ITI Ltd.</p>
Bid Validity	Bids shall be valid for at least 120 days from the date of Technical bid opening.

Earnest Money Deposit (EMD)	<p>₹ 1,40,000/- (Rupees One Lakh and Forty Thousand Only) (refundable to the unsuccessful Bidders without any interest) in the form of account payee Demand Draft / FDR / Bank Guarantee from a Commercial Bank in India in acceptable form to NISE, Gurugram.</p> <p>In case of demand draft, the same may be drawn in favor of “National Institute of Solar Energy” payable at Gurugram.</p> <p>In case of Bank Guarantee, the same may be provided as per the format given at Annexure-5 of the Tender Document.</p>
Security/ Performance Guarantee	The successful bidder within 15 days from the date of receipt of Purchase Order should deposit 10% of contract value in form of Demand Draft / FDR / Bank Guarantee from a commercial bank in India should be provided as Security/ performance Guarantee valid for a period of 60 days beyond the warranty period.
Delivery time	Within 16 weeks from the date of LC opening.
Last date for submission of bids	<p>To be submitted online by (time) 17:00 hours on (date) 25-04-2019 to <u>website: www.tenderwizard.com/NISE</u></p> <p>(Note : In case this date is declared as a holiday by NISE or Govt. of India in future, then the next working day shall be the last date for submission of Bids)</p>
Date of opening of Technical bids	26th April, 2019 at 12:00 Hrs
Opening of Price Bids	The time & date for opening of the price bids will be intimated to the technically qualified Bidders.
Address for Communication	<p>The Deputy Director (Admin.) National Institute of Solar Energy Gurugram - Faridabad Road, Gwal Pahari, Gurugram - 122 003, Haryana, India. Email: ddadmin@nise.res.in Ph: +91 124-285 3008 / 285 3114</p>

INSTRUCTIONS TO BIDDERS

The following **KEY INSTRUCTIONS** for BIDDERS must be assiduously adhered to:

1. Obtain individual Digital Signing Certificate (DSC or DC) well in advance of your first tender submission deadline on M/s ITI E-tender Site.
2. Register your organization on M/s ITI E-tender Site well in advance of your first tender submission deadline on M/s ITI E-tender Site for obtaining credentials by paying Annual registration charges.
3. Get your organization’s concerned executives trained on M/s ITI E-tender Site well in advance of your first tender submission deadline on M/s ITI E-tender Site

4. Submit your tender well in advance by paying non-refundable TPF, and relevant documents along with copy of EMD of tender submission deadline on M/s ITI E-tender Site as there could be last minute problems due to internet timeout, breakdown, etc. While the first three instructions mentioned above are especially relevant to first-time users of M/s ITI E-tender Site, the fourth instruction is relevant at all times.
5. **Vendors Training Program:** Vendors are requested to contact at Tenderwizard Helpdesk HITI Officers for any information regarding E-tendering / training.
 - a) For online registration, intended bidders may write us at twhelpdesk680@gmail.com or contact no.011-49424365.
 - b) For any further query related to Training Session, Tender Uploading/downloading or any other query related to tender please contact Tenderwizard Helpdesk of M/s. ITI Ltd. Tel no.011-49424365 or write us mail on Email Id:- eprochelpdesk.nise@gmail.com / Executives Contact Number: 8800112479/9650520101

1. Eligibility of Bidders

- (i) Only those manufacturers who have adequate exposure and experience in the designing/manufacturing/maintenance/support of such equipment need to quote.
- (ii) Assembled/Refurbished/Prototype versions are not acceptable; only proven machines are to be quoted.
- (iii) If the bid has been made by an Agent (other than the manufacturer), an authorization certificate from the manufacturer in this connection should be submitted mandatorily along with the technical bid.
- (iv) The Bidders shall provide the details of Service Centers located in India and information on available Service support facilities.
- (v) The Bidder shall be equipped to carry out repair & maintenance on behalf of the Manufacturer and meet the inventory requirements.
- (vi) The bidder should submit about their company details as per the format given at **Annexure-2**.
- (vii) The bidder should mandatorily provide a list of their existing customer base in India/worldwide (with their full contact details such as name, telephone number, fax and email etc.) for the same system supplied, installed and operational in last 5 years as per the format given at **Annexure-3**.
- (viii) Bidders should submit their price bid as per format provided at **Annexure-4**.
- (ix) Bidders who do not meet the criteria given above or make untrue or false representation, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, do not properly complete the contract, cause inordinate delays in completion or financial failure are subject to disqualification.
- (x) All Bidders will undergo a strict scrutiny process for evaluation. Submission of the bid alone does not guarantee the award of Purchase Order to the Bidder.

1) Technical Specifications

Please refer to **Annexure –1** for Technical Specifications of Electrochemical Capacitance Voltage (ECV) Profiler.

2) GENERAL CONDITIONS OF CONTRACT

1. **Pre-dispatch inspection:** The Purchaser may depute its scientists/ engineers at its own cost to the Manufacturer premises for carrying out the factory acceptance test using calibrated samples of the equipment prior to its dispatch to the Purchaser's premises.
2. **Certificate:** The Bidder shall furnish, at its own cost, test certificate for standard material. Such certificate shall be from the Manufacturer for the particular consignment and shall be duly authenticated.
3. **Packing:** The Manufacturer/ 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 with stand, 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.
4. **Delivery and Documentation:** Delivery of the goods at **National Institute of Solar Energy, Gurugram–Faridabad Road, Gwal Pahari, Gurugram – 122 003, Haryana, India** should be made within 16 weeks from date of opening of LC. The Manufacturer/ Supplier shall mail the following documents to the purchaser with copy to the insurance company within 24 hours of shipment:
 - i) Copies of the Manufacturer/Supplier's invoice showing contract number, goods' description, quantity, unit price and total amount;
 - ii) Acknowledgment of receipt of goods from the consignee(s) by the transporters;
 - iii) Insurance certificate, if any.
 - iv) Manufacturer's warranty certificate;
 - v) Inspection Certificate issued by the Competent Authority, and the Manufacturer/Supplier's factory inspection report; and Certificate of Country Origin.
 - vi) Two copies of the packing list identifying the contents of each package.
5. **Insurance:** For delivery of goods at the purchaser's premises, the insurance shall be obtained by the Manufacturer/Supplier to an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destination i.e. NISE, Gurugram) on "All Risks" basis including War Risks and Strikes.
6. **Transportation:** The Manufacturer/Supplier is required under the Contract to transport the Goods from "warehouse to warehouse" (final destination i.e. NISE, Gurugram) and the related cost including insurance shall be included in the Contract Price.
7. **Warranty:** The Bidder must provide full comprehensive warranty for a period of **12 months post installation**. During this period they should provide all spare parts required for repair and maintenance. Along with repair maintenance service within 12 hours of communication of such services, warranty of 01 year from the date of commissioning against manufacturing

defects shall be provided. Warranty should be provided by the original Manufacturer.

- 8. Security/ Performance Guarantee:** The successful bidder within 15 days from the date of receipt of Purchase Order should deposit 10% of contract value in form of Demand Draft/ bank guarantee from a commercial bank in India as Security/ performance Guarantee valid for a period of 60 days beyond the warranty period as per the format given at **Annexure-6**.
- 9. Extended Warranty:** The Bidder must quote the extended warranty for 02 years. This extended warranty will start after completion of 01 year regular warranty period from the date of commissioning of the equipment. **The Bidders who do not quote for Extended Warranty shall not be considered for bid evaluation.**
- 10. Payment:** 90% through Letter of Credit against bank documents. All expenses towards this outside India will be in the scope of the Bidder. Remaining 10% shall be payable after testing & commissioning and acceptance of the system /equipment to the entire satisfaction of the Purchaser.
- 11. Taxes and Duties:** Manufacturer/Supplier shall be entirely responsible for all taxes, GST, license fees, Custom duty (NISE shall provide only Customs duty exemption and concessional GST exemption certificate), all other duties, demurrage charges (if any), road permits, etc., incurred until delivery of the contracted Goods at the Purchaser's premises i.e. NISE, Gurugram. In this respect, the bidders must ascertain all their doubts, if any, from NISE before submission of their bid.
- 12. Customs Duties and clearing charges:** Applicable as per Notification No.51/96- customs dated 23rd July 1996 (as amended by Notification No. 28/2003 dated 01.03.2003 & Notification No. 43/2017 dated 30.06.2017) and as amended from time to time for research purpose only. NISE is entitled to availing Customs Duty exemption as well as concessional GST at present, as per NISE Registration with Department of Scientific and Industrial Research (DSIR) of Govt of India; Regn No. TU/V/RG-CDE (1096) /2017 dated 23-8-2018 valid upto 31.08.2022, wherever applicable. The said certified DSIR certificate issued to NISE as well as other necessary certificates shall be provided as per rules at an appropriate time. The bare minimum Customs Duty (if any) shall be reimbursed or paid by NISE as per actuals. However all customs clearance charges (including Agent charges) shall be part of the price bid.
- 13. Liquidated Damage:** If the Manufacturer/Supplier fails to deliver 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 half percent of contract price per week of delay subject to a ceiling of 5% of final contract price.
- 14. Applicable Law:** The Contract shall be interpreted according to the laws of the Union of India and all disputes shall be subject to the place of jurisdiction in Gurugram, Haryana.
- 15. FREE MAINTENANCE AND DEFECT LIABILITY PERIOD DURING WARRANTY:** The Bidder/ Original Equipment Manufacturer (OEM) shall ensure the following free maintenance

services during the warranty period.

- i. Emergency call back service
- ii. Inspect, clean, where necessary
- iii. Adjustment of machinery
- iv. Replacement of any defective parts
- v. Any other necessary works for equipment functional operation.

16. Evaluation of Tenders: Each point in the technical compliance statement must be adequately supported by technical documentary proof. Mere statement of “complied with” without proper reference shall not be acceptable. Financial bid shall be evaluated based on CIF, NISE, Gurugram inclusive of all charges mentioned at serial no. 5, 6 & 11 of **GENERAL CONDITIONS OF CONTRACT along with** the charges for Annual Maintenance Contract (EXTENDED WARRANTY) for a 2 year period after the regular warranty period of 12 months.

17. Rejection of Tender: Incomplete, conditional, fax, late tenders and tenders without EMD will be rejected summarily. Director General, National Institute of Solar Energy reserves the right to reject any or all the tenders at his discretion without assigning any reason thereafter.

**The Director General
National Institute of Solar Energy
Gurugram-Faridabad Road
Gwal Pahari, Gurugram – 122 003
Haryana, India**

Technical Specifications for Electrochemical Capacitance Voltage (ECV) Profiler at NISE Gurugram

S No.	Parameter	Value or Range
1.	Etch Step	1 nm to 50 um
2.	Doping Sensitivity	10^{13} to 10^{20} cm ⁻³ or better
3.	Depth Resolution	1 nm
4.	Carrier Frequency	0.5-50 kHz
5.	Sample Size	10 mm ² to 156 mmx156 mm
6.	Calibration	Auto
7.	Stacked Layers Capability	Yes
8.	Substrate Property	Conducting or Insulating
9.	Capability	Si, Ge, SiC, III-V, II-VI Semiconductors.
10.	Sample Condition	Dry In/Dry Out
11.	Standard sample	To be provided, as per NIST or equivalent certifying agency, preferably Si.
12.	Computer	Desktop PC with Windows 7 or higher, i5 Processor minimum or equivalent or higher, 1 TB HDD and 4GB RAM
13.	Monitor	17 " or bigger
14.	Power Supply	220-240 V AC; 50 Hz; Plug as per Indian specifications
15.	Manuals	2 hardcopies in English to be provided; 1 softcopy to be provided as well.
16.	Warranty	1 year after installation
17.	User List	List of minimum 3 users with contact information together with satisfactory installation reports to be provided
18.	Extended Warranty	Extended warranty for 2 years to be provided. Cost of extended warranty will be included in the price for determining the lowest bidder.
19.	Training	4 days' training at NISE to be provided post installation.
20.	Acceptance criteria	As per item 11, test on standard sample
21.	Delivery Period	16 Weeks after Opening of LC
Optional		
1.	Capability to etch all wide band gap semiconductors (e.g. AlGaInN) both n & p type.	

FORMAT FOR SUBMISSION OF BIDDERS DETAILS

1.	Name of supplier	
2.	Registered Address	
2.	Phone No	
	Fax NO	
	Name of proprietor/CEO/ Chairman	
	Phone no/Mobile No	
	Email ID	
3.	Factory Address	
	Phone no	
	Fax no	
	Email ID	
4.	Delhi/NCR Address if any	
	Phone no	
	Fax no	
	Email ID	
5.	Correspondence Address	
6.	Name of contact Person	
	Designation	
	Phone no / Mobile No	
	Fax no	
	Email ID	
7.	Website	
8.	Bank related information	
	Bank name	
	Branch name	

	Bank address	
	Bank phone no.	
	Bank fax no.	
	Bank MICR Code (9 digit)	
	RTGS-IFC Code	
	Account type	
	Account no	
9.	PAN NO	
10	GST , PAN/TAN & TIN number of firm	

I certify that the information given herein is correct to the best of my knowledge and belief.

Signature of Proprietor/CEO/Chairman Seal of the company/concern.

Performance Statement Form of Electrochemical Capacitance Voltage (ECV) Profiler.

Name of Bidder: _____

Order No. & Date	Client	Contact person/ Phone	Description & quantities of ordered items	Value of order	Date of completion		Satisfactory completion
					As per contract	Actual	

To be attached: Documentary evidence (client’s letter or certificate) in support of satisfactory completion of above orders. Minimum 3 Customers

Signature and seal of the Bidder Date

Price Bid Format
(On Company's Letterhead)

Ref No. _____

Date: / / 2019

PRICE BID

The Director General
National Institute of Solar Energy (NISE)
Gurugram – Faridabad Highway
Gwal Pahari; Gurugram – 122 003, Haryana

Subject: Purchasing of Electrochemical Capacitance Voltage (ECV) Profiler at NISE Campus – Reg

Tender No.

S No	Item	CIF, NISE Gurugram inclusive of all charges as mentioned as sl. no. 5, 6 & 11	Extended warranty post warranty inclusive of all taxes for 2 Years	Total

EXTENDED WARRANTY period starts after one year of warranty period.

Note: The Bidders who shall not quote for EXTENDED WARRANTY Charges shall not be considered for bid evaluations. The bids shall be evaluated considering both CIF, NISE Gurugram Price and EXTENDED WARRANTY Charges.

Amount (in words)

Signature: _____

Name of the Representative Submitting the Bid:

Designation:

Company Seal

Bank Guarantee Format for EMD

Bank Guarantee No.

Bank Guarantee Amount: ₹ /-

Bank Guarantee Cover from: / / 2019 to / / 2019

Last Date of lodgment of Claim: / / 2019

FINANCIAL BANK GUARANTEE

To

The Director General

National Institute of Solar Energy

Gurugram – Faridabad Road

Gwal Pahari; Gurugram – 122 003

Haryana

Subject: Tender Document for Supply, Installation & Commissioning of 1 No of Electrochemical Capacitance Voltage (ECV) Profiler at National Institute of Solar Energy, Gurugram, Haryana (NIT No :.....)

Dear Sir / Madam,

Whereas M/s (hereinafter called the “Tenderer”) has submitted their offer dated for the **Supply, Installation & Commissioning of 1 No of Electrochemical Capacitance Voltage (ECV) Profiler at National Institute of Solar Energy, Gurugram** (hereinafter called the “Tender”) against the Purchaser’s Tender enquiry No.....,KNOW ALL MEN by these presents that WE of having our registered office at..... are bound to **M/s National Institute of Solar Energy, Gurugram** (hereinafter called the “Purchaser”) the sum of ₹ /- (Rupees ***** Only) for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this day of 2019.

THE CONDITIONS OF THIS OBLIGATION ARE:

- 1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- 2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-
 - a) If the tenderer fails to furnish the security/performance guarantee for the due performance of the contract.
 - b) Fails or refuses to accept/execute the contract.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing the occurrence of one or both the two conditions, specifying the occurred condition or conditions. This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the bank not later than the above date. Signature of the authorized officer of the bank's name and designation of the officer Seal, name and address of the Bank and address of the Branch.

“Not withstanding anything contained herein;

- Our liability under this Bank Guarantee shall not exceed ₹/- (Rupees..... Only).
- This Bank Guarantee shall be valid up to / / **2019**.
- We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only if you serve upon us a written claim or demand on a before / / **2019** (date of expiry of Guarantee). ”

Banker's Authorized Representative(s)

Date:
Place:

Bank Guarantee Format

SECURITY / PERFORMANCE BANK GUARANTEE

National Institute of Solar Energy
 Gurugram - Faridabad Road
 Gwal Pahari
Gurugram – 122 003, Haryana

Bank Guarantee No.
 Dated:

This deed of Guarantee is made on ____ the day of _____ (*write name of the month*), 20 ____ by _____ (*Write Bank name which is giving Bank Guarantee*), having branch office at _____ (*Write Bank Branch Office address*), (hereinafter called "**the Bank**"), which expression shall unless repugnant to the context and meaning thereof includes its legal representatives, successors and assignees and National Institute of Solar Energy, having their office at Gurugram - Faridabad Road, Gwal Pahari, Gurugram – 122 003, Haryana (hereinafter called "**the NISE**") which expression shall unless repugnant to the context and meaning thereof includes its legal representatives, successors and assignees.

Whereas NISE has awarded a supply contract bearing No. _____ (*Purchase Order or Work Order No*) dated _____ to M/s _____ (*Write the Manufacturer/ Supplier Company Name here*), having their Registered office at _____ (*Write Company Regd office address*), (hereinafter referred as "**the Manufacturer/ Supplier**") for _____ (*Write the description of the Purchase Order / Work Order*) as per the said order.

AND whereas, the **Manufacturer/ Supplier** has agreed to submit a Security/Performance in the form of a Bank Guarantee for Rs. _____ (*Rupees _____ Only*) to the NISE as per the Contract valid up to ____ / ____ /20 ____ .

The **Manufacturer/ Supplier** have agreed to perform or fulfill the contract as per terms and conditions of the said order. In case, the Manufacturer/ Supplier fails to perform or fulfill the contract as per the said order, the NISE is entitled to demand an amount equal to Rs. _____ (*Rupees _____ Only*) from the **Manufacturer/ Supplier**.

We, _____ (*Bank Name*), do hereby undertake and Guarantee to make payment to the NISE a sum of Rs. _____ (*Rupees _____ only*) in case the **Manufacturer/ Supplier** fails as per the said order.

Whereas, Bank's liability under this Bank Guarantee is restricted to Rs. _____ (Rupees _____ only) and it will remain valid till / / 20 . Unless a claim or demand in writing is made against us under this Guarantee before that date, all rights of the NISE under this Bank Guarantee shall be forfeited and the Bank shall be relieved and discharged from all liability there under. This guarantee shall automatically stand cancelled after the date of expiry as stated above notwithstanding the fact that the original guarantee document is returned to us by you or not.

NOTWITHSTANDING ANYTHING CONTAINED HEREIN:-

- a) Our liability under this Bank Guarantee shall not exceed to Rs. _____ (Rupees _____ only).
- b) This Bank Guarantee shall be valid up to / / 20 .
- c) The Bank is liable to pay the Guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon a written claim or demand on or before / / 20 .

Place.....

Date.....

Signature

Bank Seal

Bank Code No.

Bank Details for the Purpose of issuing EMD in the form of FDR / BG

Account Holder Name: National Institute of Solar Energy (NISE)
Gurugram - Faridabad Highway, Gwal Pahari
Gurugram - 122 003, Haryana
Tel: +91 124 285 3056; 3060

Bank Name: **State Bank of India**
Branch: State Bank of India – Sector 56, Gurugram

Address: 45-49 Centum Plaza, Sector 53
Gurugram - 122 002, Haryana

SB Account No. **33843408697**
IFSC Code: **SBIN0011443**
MICR Code: 110002460
SWIFT Code: SBININBB
Branch Code: 11443

NISE GST Details

NISE full address is:
National Institute of Solar Energy
Gurugram – Faridabad Road
Gwal Pahari; Gurugram – 122 003, Haryana

NISE GST No is **06AAAJN0939P1ZR**.
State Code : 06