BID DOCUMENT

NATIONAL COMPETITIVE BIDDING

FOR

SUPPLY, INSTALLATION, COMMISSIONING & MAINTENANCE OF IMPEDANCE ANALYZER EQUIPMENT FOR I.K.G.PUNJAB TECHNICAL UNIVERSITY, KAPURTHALA AND ITS OTHER CONSTITUENT CAMPUSES (PUNJAB)

Bid No. : EdCIL/PROC/PTU-2017/LAB-MTECH-MICRO/MICRO-PKG1/1

PART-II- FINANCIAL BID

EdCIL (India) Limited
(A Govt. of India Mini Ratna Enterprises)
'EdCIL House', Plot No. 18A, Sector- 16A
NOIDA – 201301 (UP), INDIA
Tel: 0120 – 2512001-006, FAX: 0120-2515372

Dated: 09.06.2017
This document serially numbered from page number 01 to 15

FINANCIAL BID

Instructions to Bidders

1. Financial Bid shall be submitted with full price details.

Financial Bid shall contain only the prices duly filled in as per the format given in Schedule of Rates provided in the tender document. Price bid should not have any Commercial and/or Technical stipulation in addition to, what is already given in Part I – Technical bid.

Financial Bid Standard Forms (Form-1, Form-2A and /or Form-2B) shall be used for the preparation of the price quote according to the instructions provided.

2. **The Bidder should quote for all the Laboratory items / equipments listed in this document. In case, the Bidder/s does not quote for all the Laboratory items/Equipments, the Bid shall be treated as incomplete and shall be rejected summarily.**

3. The Items / equipments to be supplied / delivered / installed / commissioned at various locations of IKGPTU Campuses is as shown in the enclosed Annexure VI. The rate shall be inclusive of all taxes, octroi, transportation (as per the location), packing, loading and unloading (as designated location) ,Insurance etc. and nothing shall be paid extra.

4. The bid shall be evaluated on total value of all Laboratory items/Equipments as shown in summary and supply order shall be placed to a bidder as a composite bid.

5. The prices quoted by the bidder shall be fixed for the quantity mentioned for the duration of the contract and shall not be subject to adjustment on any account. Price should be firm for any positive or negative variation in quantities up to 100%.

6. The changes displayed in the corrigendum/addendum to the bid documents, particularly with the financial bid should be attached with the financial bid submission, in the same packet, duly signed and stamped by the authorized signatory of the Bidder firm.

FINANCIAL BID SUBMISSION FORM

To:

Chief General Manager (EIS & EPS)
EdCIL (India) Limited
EdCIL House, 18 A, Sector-16 A
NOIDA – 201301 (U.P.), India

Dated: ___/___/2017

Dear Sir,

We, the undersigned, offer to provide "SUPPLY, INSTALLATION, COMMISSIONING & MAINTENANCE OF IMPEDANCE ANALYZER EQUIPMENT" in accordance with your Request for Proposal dated ___/___/2017.

Our attached Financial Bid is for the amount of _____ *[Indicate the corresponding to the amount(s), currency(ies) {Insert amount(s) in words and figures}].*

Please note that all amounts shall be the same as in Form-1. Our Financial Bid shall be binding upon by us subject to the modifications resulting from Contract negotiations, if any, up to expiration of the validity period of the Proposal.

We remain,

Yours sincerely,

Authorized Signature {In full and initials}:
Name and Title of Signatory:
In the capacity of:
Address:
E-mail:

FORM-1

SUMMARY OF FINANCIAL BID

S. No.	Description	Amount (exclusive of Tax) (Rs.)	Tax (Rs.)	Amount (Inclusive of Tax) (Rs.)
A.	Impedance Analyzer (Form-2A and/or Form-2B)			
B.	Comprehensive Annual Maintenance (Annexure-IV)			
	Total (Rs.)			
Total Price Bid (exclusive of taxes) (in Words) (Rupees……..)				
Total Price of Bid (Inclusive of taxes) (In Words) (Rupees……)				
	Signature of bidder	……		
	Name & Address	…… ……		
Note :	Date	……		
i)	*Discount or any other offers affecting the package price must be mentioned here only. Discount or any other offers affecting the package price mentioned at any other place of the bid will not be considered.*			
ii)	*In case of discrepancy between unit price and total price, the unit price shall prevail.*			
iii)	*Bids shall be evaluated based on total price without taxes.*			

FORM-2A
(FINANCIAL BID)

PRICE SCHEDULE FOR GOODS TO BE IMPORTED

ANNEXURE – I
Date: ……

Name of the Department:
Name of the Laboratory:

(A) Price Schedule: (Format used for imported items)

S.No.	Currency	Description and Specification of the Item	Qty. in Units	Unit Price	Agency Commission (If applicable)	Discount	Ex-works price	Packing + Handling + DOC + Inland Freight +Insurance	CIF price	Insurance + Freight	CIP Price	Total Price
			(a)	(b)	(c)	(d)	(e)=(b+c-d)	(f)	(g)=(e+f)	(h)	(i) = (g+h)	(j) = (i*a)
				(i)In Figures: (ii)In words:								

Total Price of Bid (In Words) ……	
Signature of bidder	……
Name & Address	……
Date	……

Note:

1. ***The above financial template should be strictly followed. Any deviation from the above template (in terms of description and specification of the item) may debar the bidder at sole discretion of EdCIL.***
2. ***Discount or any other offers affecting the package price must be mentioned here only. Discount or any other offers affecting the package price mentioned at any other place of the bid will not be considered.***
3. ***In case of discrepancy between unit price and total price, the unit price shall prevail.***
4. ***Bids shall be evaluated based on total price including all charges as CIP Price.***
5. ***CIP - Carriage and Insurance Paid to (named place of destination):*** *The seller pays for the carriage of the goods up to the named place of destination and the seller is required to obtain insurance for the goods while in transit.*

FORM-2B

ANNEXURE-II

PRICE SCHEDULED FOR GOODS (INDIGENOUS / IMPORTED GOODS TO BE QUOTED IN INR)

Price Schedule: (Format used for indigenous items/ Imported Items).

S.No.	Description and Specification of the Item	Qty. in Units	Unit Price in Rs.	Excise Duty % /Custom Duty	CST/ VAT %	Insurance other duties and taxes if any,	Packing and Inland Transportation	F.O.R Destination Price	Total Price in Rs. (Excluding Taxes)	Total Price in Rs. (Including Taxes)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)=(b*a)	(i) = (g *a)
			(i)In Figures: (ii)In words:							
Total Price of Bid (In Words) ……										
								Signature of bidder	……	
								Name & Address	……	
								Date	……	

Note:

1. ***The above financial template should be strictly followed. Any deviation from the above template (in terms of description and specification of the item) may debar the bidder at sole discretion of EdCIL.***
2. ***Discount or any other offers affecting the package price must be mentioned here only. Discount or any other offers affecting the package price mentioned at any other place of the bid will not be considered.***
3. ***In case of discrepancy between unit price and total price, the unit price shall prevail.***
4. ***Bids shall be evaluated based on total price including all charges as F.O.R Destination Price.***

ANNEXURE – III

COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT PRICES SCHEDULE

S. No.	Item Description	2nd Yr.	3rd Yr.	Total Comprehensive Annual Maintenance Contract for 2 years(2nd year & 3rd year) after warranty period of 1 year from the date of successful installation. (E= C+D)
A	B	C	D	E
1.	Equipment: Make: Model: Qty.: *(Mention Total quantity from Annexure-VI)*			
			SUB-TOTAL(Rs.) (Carry forwarded to Summary)	
Sub-Total Price Bid (exclusive of taxes) (in Words) (Rupees……)				
Sub-Total Price of Bid (Inclusive of taxes) (In Words) (Rupees……)				
		Signature of bidder	……	
		Name & Address	…… ……	
Note:		**Date**	……	
i)	***Discount or any other offers affecting the package price must be mentioned here only. Discount or any other offers affecting the package price mentioned at any other place of the bid will not be considered.***			
ii)	***In case of discrepancy between unit price and total price, the unit price shall prevail.***			
iii)	***Bids shall be evaluated based on total price without taxes.***			

Note:

1. ***The above rates shall be included in computing the total cost of the equipments.***
2. ***Agency to use separate sheet for each equipment/Item/package.***

DETAILED TECHNICAL SPECIFICATIONS:

ANNEXURE-IV

1. Specifications for wide Band Dielectric Impedance Analyzer with High temperature control system:

S. No.	Technical Specification	
A.	**A complete setup with all accessories**	
	Frequency Range	<10µHz upto 20 MHz or better
	Signal Amplitude	Voltage 0 - 3V rms, Current 0-60mA
	AC resolution	50µV, 100nA or better
	DC Bias	+/- 40V DC, +/- 70mA or better
	DC resolution	10mV, 40µA.
	Resistance Range	10 mΩ - 100TΩ
	Capacitance Range	0.001pF -1F
	Tan Delta Range	$0 – 10^{6}$
	Tan delta resolution	10^{-5}
	Measuring current Range	10 pA- 60mA or better range
	Sweep Parameters	Voltage AC/DC, Frequency lin / log.
	Result Parameters	Real / Imaginary / Vector / parts of Z, R, X, Y, G, B, C, plus Q and D, Tan delta, Voltage – gain and phase differences
	Interface	IEEE 488(GPIB) (Compatible with PCI computer Interfacing card & connecting cable)
	Input Terminal	2, 3, 4 terminals measurement Configuration
	Power Supply	230V AC +/- 10% / 50-60 Hz
	User Calibrations/	Load, Short, Open, Internal Self Calibration, Automatic
	Operational software	All operation should be controllable through window based computer with user friendly interface.
B.	**Features for Dielectric Impedance measurement Software :** Evaluation and control software capable to control system and able to run on compatible PC with following facilities.	
	Measurements	Fully automated for impedance, capacitance, dielectric loss over entire Specified frequency and temperature range

	Control	Frequency, temperature, DC bias, AC voltage and time in any multi- dimensional combination.
	Display	Graphical online display of measured data,temperature curve and system status with facility for multiple data sets in a single graph, Bode and Cole-Cole Plots
	Graphics	2D and 3D representation of acquired / analytical data
	Calibration	Automatic calibration of Hardware and Sample cell
	Compatibility	Microsoft Windows 7 versions or above
	Online	Graphic Display & Text complete with explanations.
	Fully automatic temperature control software to support temperature control systems.	
C.	**High Temperature Control Systems upto 1200 deg C:**	
	Temperature range	Ambient to 1200 °C (continuous operation)
	Temperature Resolution	0.1 °C
	Temperature sensors	Pt-Rh based sensors for temperature monitoring.
	Electrical power	230 V ±10 %, 50/60 Hz AC single phase Requirement
	Temperature Controller	Controller with two signal channels for sample and furnace temperature sensors
	Furnace	Single zone vertical tubular furnace with adjustable stand. Work tube bore 45 mm or better, heated length 150 mm or better.
	Cell System:	
	• Base unit of Ni-plated brass, with all electrical, cooling water and gas connections.	
	• 2 gas connection stems, Swagelok quick-connects, brass, for 1/8' copper tubing	
	• 1alumina sample support tube assembly for disk sample with diameter 20mm	
	• 1standard alumina spring load assembly	
	• 1 spare set of long alumina bars for spring load	
	• 3 hot zone gas tube: two straight of alumina and one bent of silica.	
	• 1 Pt/Pt10Rh thermocouple assembly for disk setups	
D.	**All other accessories appropriate to cell to be provided as below:**	

	• 2 general purpose electrode nets with contact pair of Pt.
	• Electrode "hand" contact outer 2-wire assemblies of Pt/alumina with Pt net.
	• 1 inner "hand" electrode contact 2- wire assembly of Pt/alumina with Pt net . • 1 Guard-reference-ring electrode assembly of Pt/alumina.
	• 2 general purpose electrode nets of Pt .
	• 2 gold sealing rings.
	• 4 single coax/BNC cables, 2 m
	• 1 Thermocouple compensation cable, 3 m
	• 1 simple bench-top mounting stand set Transport and storage case aluminum,
	• User manual, set of Various small parts: various tools, spare Viton O-rings steel bar for base unit fixture, alumina spacer rings, outer transportation glass tube, alumina support plates, cooling water hose fitting with PVC hose,1alumina cap for thermocouples spare springs (soft and stiff), spare female feed through mini-contracts, extra silicone hose for gas supply tubes.
E.	**Safety features:** Automatic switch-off (heater disable and message display on sensor break or malfunction and over temperature Control of difference between furnace and sample temperatures (safety limit, luer- selectable value).
F.	**Other Acecssories:** Computer with supporting Operating System
	• Computer should be of HP/DELL/LENOVO.
	• Processor: i5 – 6th Generation
	• RAM: 4GB
	• Hard-disk: 1TB
	• Monitor Size: 24” Display
	• With Other essential peripherals

ANNEXURE-V

TECHNICAL COMPLIANCE REPORT:

1. Wide Band Dielectric Impedance Analyzer with High temperature control system:

S. No.	Technical Specification		Numerical Values and Other Information	Whether comply (Yes/No)
A.	**A complete setup with all accessories**			
	Frequency Range	<10µHz upto 20 MHz or better		
	Signal Amplitude	Voltage 0 - 3V rms, Current 0-60mA		
	AC resolution	50µV, 100nA or better		
	DC Bias	+/- 40V DC, +/- 70mA or better		
	DC resolution	10mV, 40µA.		
	Resistance Range	10 mΩ - 100TΩ		
	Capacitance Range	0.001pF -1F		
	Tan Delta Range	$0 – 10^6$		
	Tan delta resolution	10^{-5}		
	Measuring current Range	10 pA- 60mA or better range		
	Sweep Parameters	Voltage AC/DC, Frequency lin / log.		
	Result Parameters	Real / Imaginary / Vector / parts of Z, R, X, Y, G, B, C, plus Q and D, Tan delta, Voltage – gain and phase differences		
	Interface	IEEE 488(GPIB) (Compatible with PCI computer Interfacing card & connecting cable)		
	Input Terminal	2, 3, 4 terminals measurement Configuration		
	Power Supply	230V AC +/- 10% / 50-60 Hz		
	User Calibrations/	Load, Short, Open, Internal Self Calibration, Automatic		
	Operational software	All operation should be controllable through window based computer with user friendly interface.		

B.	**Features for Dielectric Impedance measurement Software :** Evaluation and control software capable to control system and able to run on compatible PC with following facilities.			
	Measurements	Fully automated for impedance, capacitance, dielectric loss over entire Specified frequency and temperature range		
	Control	Frequency, temperature, DC bias, AC voltage and time in any multi-dimensional combination.		
	Display	Graphical online display of measured data, temperature curve and system status with facility for multiple data sets in a single graph, Bode and Cole-Cole Plots		
	Graphics	2D and 3D representation of acquired / analytical data		
	Calibration	Automatic calibration of Hardware and Sample cell		
	Compatibility	Microsoft Windows 7 versions or above		
	Online	Graphic Display & Text complete with explanations.		
	Fully automatic temperature control software to support temperature control systems.			
C.	**High Temperature Control Systems upto 1200 deg C:**			
	Temperature range	Ambient to 1200 °C (continuous operation)		
	Temperature Resolution	0.1 °C		
	Temperature sensors	Pt-Rh based sensors for temperature monitoring.		
	Electrical power	230 V ±10 %, 50/60 Hz AC single phase Requirement		
	Temperature Controller	Controller with two signal channels for sample and furnace temperature sensors		
	Furnace	Single zone vertical tubular furnace with adjustable stand. Work tube bore 45 mm or better, heated length 150 mm or better.		
	Cell System:			

	• Base unit of Ni-plated brass, with all electrical, cooling water and gas connections.		
	• 2 gas connection stems, Swagelok quick-connects, brass, for 1/8' copper tubing		
	• 1alumina sample support tube assembly for disk sample with diameter 20mm		
	• 1standard alumina spring load assembly		
	• 1 spare set of long alumina bars for spring load		
	• 3 hot zone gas tube: two straight of alumina and one bent of silica.		
	• 1 Pt/Pt10Rh thermocouple assembly for disk setups		
D.	**All other accessories appropriate to cell to be provided as below:**		
	• 2 general purpose electrode nets with contact pair of Pt.		
	• Electrode "hand" contact outer 2-wire assemblies of Pt/alumina with Pt net.		
	• 1 inner "hand" electrode contact 2- wire assembly of Pt/alumina with Pt net . • 1 Guard-reference-ring electrode assembly of Pt/alumina.		
	• 2 general purpose electrode nets of Pt .		
	• 2 gold sealing rings.		
	• 4 single coax/BNC cables, 2 m		
	• 1 Thermocouple compensation cable, 3 m		
	• 1 simple bench-top mounting stand set Transport and storage case aluminum,		
	• User manual, set of Various small parts: various tools, spare Viton O-rings steel bar for base unit fixture, alumina spacer rings, outer transportation glass tube, alumina support plates, cooling water hose fitting with PVC hose,1alumina cap for thermocouples spare springs (soft and stiff), spare female feed through mini-contracts, extra silicone hose for gas supply tubes.		
E.	**Safety features:** Automatic switch-off (heater disable and message display on sensor break or malfunction and over temperature Control of difference between furnace and sample temperatures (safety limit, luer- selectable value).		
F.	**Other Accessories:** Computer with supporting Operating System		
	• Computer should be of HP/DELL/LENOVO.		
	• Processor: i5 – 6th Generation		
	• RAM: 4GB		
	• Hard-disk: 1TB		

	• Monitor Size: 24” Display		
	• With Other essential peripherals		

ANEXURE-VI

DETAILS OF EQUIPMENTS TO BE SUPPLIED AT VARIOUS IKGPTU CAMPUSES:

S. NO.	ITEMS/ EQUIPMENTS	Kapurthala	TOTAL
1	Wide Band Dielectric Impedance Analyzer with High temperature control system	1	1