

INVITATION FOR TENDER FOR SUPPLY OF EQUIPMENT

Sealed tender offers are invited in two separate sealed covers (Technical and Commercial offers) from eligible manufacturers/suppliers or their direct Indian agents for the supply of the following equipment.

Equipment for augmenting the Li-ion battery laboratory for the fabrication of 20Ah pouch cells.

Sl. No.	Equipment
1	Semi-Automatic electrode Z-stacking machine for Li-ion pouch cells
2	Semi-automatic electrolyte filling machine with degassing and heat sealing function
3	Ultrasonic welding machine for welding stacked electrode sheets and tabs
4	Pouch cell case/ cup forming machine for Aluminum laminated films
5	Semi-automatic precision die cutter for electrode sheets

Please send offers, ALONG WITH DESCRIPTIVE CATALOGUE/ BROCHURE. The validity of the bid should be at least four months (120 days) or more from the date of the opening of this tender. Please ensure that your quotation reaches not later than **25.07.2018 at 15:00 Hrs** at the following address:

Prof. Siddhartha Mukhopadhyay
Professor, Department of Electrical Engineering,
Indian Institute of Technology Kharagpur – 721 302, West Bengal, India

Earnest money of **Rs. 1,50,000/-** is to be deposited in the form of Account payee Demand Draft in favour of IIT Kharagpur, payable at Kharagpur, India. Any bid which is not accompanied with an EMD shall be summarily rejected. Earnest money deposited will be forfeited if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender. No interest will be paid on the earnest money of the unsuccessful bidders.

Tender Reference	IIT/SRIC/EE/HEV/SM/18-19/EQ-28 Dated: 29.06.2018
Price of Tender Document	NIL
Last Date and Time for submitting the tender document	25.07.2018 at 15:00 Hrs (Indian time)
Time and Date of Opening of Technical Bids	25.07.2018 at 16:00 Hrs (Indian time)
Place of Opening Tender	O/O Prof. Siddhartha Mukhopadhyay Professor, Department of Electrical Engineering, Indian Institute of Technology Kharagpur – 721 302, West Bengal, India
Address of Communication	Dr. Sreeraj Puravankara, School of Energy Science and Engineering Indian Institute of Technology Kharagpur – 721 302, West Bengal, India
Contact Telephone Numbers	+91- 3222 - 260801
E-mail	sreeraj@iitkgp.ac.in

Technical specifications for the Equipment

Li-ion pouch cells up to 20 Ah capacity will be fabricated under UAY (HEV) project electric/hybrid vehicles. For the augmentation of the existing Li-ion battery laboratory the following equipment will be procured.

Sl. No.	Equipment
1	Semi-Automatic electrode Z- stacking machine for Li-ion pouch cells
2	Semi-automatic electrolyte filling machine with degassing and heat sealing function
3	Ultrasonic welding machine for welding stacked electrode sheets and tabs
4	Pouch cell case/ cup forming machine for Aluminum laminated films
5	Semi-automatic precision die cutter for electrode sheets

Technical criteria of material feed for all Equipment

Electrode Dimensions: Length: 200 ± 15 mm, Width: 150 ± 5 mm, Thickness: upto 200 μ m, Tab length: upto 20 mm. Tab width: upto 50 mm

Separator: 20 – 30 micron thickness

Electrode layers in the stack: Upto 100 layers (30 mm thickness) stack

Al-laminated films for pouch cell: Thickness- upto 150 microns

Pouch Cell dimensions: : Length (excluding tab): 230 ± 15 mm, Width: 170 ± 5 mm, Thickness: 0.7-3 mm, Tab length: upto 40 mm, Tab width: upto 50 mm

Hot melt adhesive: Width 8 mm, thickness 0.1 mm

The equipment should account for the extra space in the pouch (additional length/width: 50 mm) to allow for the gas formation during formation cycles.

Notes:

The following points are to be met in addition to the general terms & conditions listed at the end of the document.

1. All the supplied equipment should be compatible with the dimensions mentioned above.
2. Quotation from OEM and / or authorized distributors (certificate to be submitted indicating Tender Enquiry number) with technical support provider in India only will be accepted. The bidder should provide the list of users in India, their contact details and year of installation in the format enclosed with the tender document. The supplier should be working in this field for last 5 years and should have sound technical know-how.
3. It is mandatory to all the participating OEM and /or authorized distributors to visit the Li-ion battery lab at IIT Khargapur to check the existing equipment and present their expertise. The compatibility of existing equipment with the proposed equipment to be made sure before the submission of the bid. **Please ensure that the compatibility statement clearly stating the same reaches us not later than 15.07.2018 at 16:00 hrs (IST). Kindly send a hard copy and a soft copy (email attachment) of the compatibility statement to the address of communication given above.**

4. The technical bid should contain the technical specifications of each of the quoted equipment under the respective sub-headings. **The price bid should contain one single quote for all the equipment together. Individual equipment should not be quoted separately.** Any deviation from these points will lead to immediate disqualification of the bid.
5. Warranty period: 3 years from the date of installation, commissioning and acceptance at IIT Kharagpur.
6. AMC for 4 years after warranty period to be indicated and to be quoted separately in the price bid.
7. Delivery period: Within 2 months from the date of placement of order / contract.
8. Scope of supply includes delivery at IIT Kharagpur, installation, commissioning and demonstration of functionality of the equipment. Training for the operation of the machine to IIT Kharagpur personnel at least for 7 days after installation and commissioning.
9. List of spares, jigs and accessories for the equipment to be indicated and price bid should contain price for these suggested (by firm) spares & accessories separately. Confirmation of availability of spares, jigs and accessories for a period of 10 years should be provided in the technical and price bids.
10. Acceptance tests are to be demonstrated on the equipment at IIT Kharagpur after installation.

Sl. No.	Tests	Description
1.	Visual examination	Equipment will be checked for defect free construction, absence of cracks & dents.
2.	Physical inspection	Presence of components and final equipment will be checked
3.	Equipment	<p>Functionality of all the equipment will be checked as per specifications.</p> <ul style="list-style-type: none"> • Functionality feature. • Safety features. • The supplied equipment must be augmented along with the existing equipment in the process line. Demonstration by assembling 15 units of 20 Ah pouch cells using the vendor's/distributors materials and another 15 units of 20 Ah pouch cells using electrodes optimized at IIT Kharagpur, so as to show the compatibility and repeatability of augmented process line. The materials/chemicals required for the demonstration can be charged separately and to be quoted separately in the price bid.

Technical Specifications for individual Equipment

1. Semi-automatic Z-stacking machine for pouch cells

It is required to stack & assemble electrodes with winding separator in between under applied load, to align them with precision to avoid edge contact. It will improve compactness to enhance rate capability & life cycle. The electrodes cut as per dimension will be placed on the magazine of the stacking machine manually. The machine shall perform stacking of electrodes automatically as per the program by means of electrode sheet lifting & transferring device from magazine to stacking platform with winding of separator in between. It will also perform other operations like electrode sheet counting, laminating, taping, etc. Stacking of electrodes and separator under applied load with high precision alignment to avoid edge contact and for better compactness; enhances rate capability, life cycle, safety and reliability of the Li-ion cell. All the functionalities are integrated in the machine which works automatically as a single unit achieving precision operations.

DETAILED TECHNICAL SPECIFICATIONS FOR

1. Semi-Automatic electrode Z- stacking machine for Li-ion pouch cells

No.	Description	Specifications
1.1	Method	Semi-Automatic Electrode Sheet stacking with separator winding / Z-fold stacking
1.2	Details of the electrode sheets to be stacked	a) Length: 200 ± 15 mm (190 mm, 200 mm & 210 mm) b) Width: 150 ± 5 mm (145 mm, 150 mm & 155 mm) c) Thickness : 250 micron (max) d) Tab length : upto 30 mm, Tab width: 50 mm Equipment shall be capable of stacking electrodes with 9 different combinations of width and length within the above range.
1.3	Stack thickness /sheet layers	Up to 30 mm stack thickness or 100 layers (1 layer = 1 anode + 1 cathode + 2 separators)
1.4	Materials feed	<ul style="list-style-type: none"> • Electrodes from magazine • Separators from roll • Tape from roll
1.5	Stacking plate module	To accommodate 9 different electrode sizes
1.6	Separator	20 – 30 micron thickness
1.7	Size tolerance of electrodes	± 300 micron
1.8	Stacking precision	≤ 500 micron (anode to cathode overlap)
1.9	Electrode stacking time	< 10 sec per sheet
1.10	Electrode stacking	Automatic by vacuum pad & block
1.11	Feautred automatic functions in the stacking machine	The machine shall perform stacking automatically by means of the following: <ul style="list-style-type: none"> • Separator auto unwinding unit with speed control, constant tension control & auto correction for uniform stacking. • Magazine for electrodes & stacking platform.

		<ul style="list-style-type: none"> • Electrode supplying units (electrode sheet lifting & transfer device) for both anode and cathode • Electrode alignment and compression unit • Sheet counting • Wrapping & clamping device • Cell transfer device.
1.12	Automatic/ manual functions in the stacking machine	<ul style="list-style-type: none"> • Loading the electrodes in box • Taping the battery core • Collecting the taped battery core
1.13	Equipment frame	<ul style="list-style-type: none"> • Self standing rigid frame with wheels attached for easy shifting and positioning. • Machine shall be in transparent enclosure with safety switch.
1.14	Separator roll unwinding	Separator roll will be maintained under tension and unwound.
1.15	Electrodes pick & place	Equipped with suction cup plates / robotic arm, pick the respective electrode from the magazine and place it in the stacking platform sequentially.
1.16	Taping	Closing tape shall be applied at the end of Z stacking cycle after separator cutting and cell unloading
1.17	Safety features	<ul style="list-style-type: none"> • Signal detection and collection system for each moving parts and running / stacking status display in control systems. • Auto alarm, if fault arises during running and stop working with fault position indication. • Repairs / Auto start up after alarm clear. • Alarm when safe door is open. • Protection to system for static, electric leakage, short circuit, overvoltage, etc., and insulation to power ports. • Signal tower indication with emergency switch.
1.18	Control	Presetting the operational parameter and status display through touch panel
1.19	Working temperature	20 – 35 °C
1.16	Operational Humidity	Shall be 1% RH
1.17	Compressed Dry air	0.5 – 0.7 MPa (4 - 8 kg.f/cm ²), 100 L/min, dry
1.18	Vacuum	-0.06 MPa (approx)
	<p><u>NOTE:</u></p> <ul style="list-style-type: none"> • Oil free (dry) vacuum pump & related accessories for operation of the machine shall be supplied by the vendor. 	

DETAILED TECHNICAL SPECIFICATIONS FOR

2. Semi-automatic electrolyte filling machine with degassing and heat sealing function

No.	Description	Specifications
2.1	Method	<ul style="list-style-type: none"> • For dispensing predefined electrolyte quantity under vacuum for pouch cell either in Glove box or 1% RH dry room. • All dispensing parameters shall be adjustable by control box touch panel without any mechanical adjustment.
2.2	Pouch cell adaptability of the work stations	Should be compatible with the pouch cell dimensions : Length (excluding tab): 230 ± 15 mm, Width: 170 ± 5 mm, Thickness: 0.7-3 mm,
2.3 Electrolyte filling machine features:		
2.3.1	a. Dispensing Volume: b. Electrolyte Filling cycle: c. Electrolyte Dispenser: d. Electrolyte Filling Accuracy: e. Filling control:	Minimum 5 ml to preferably till 250 ml or more (should be adjustable according to the pouch cell dimensions.) 1-40 Cycle (can be pre-settable) 2 -5 L dispenser with metering pump for precise electrolyte filling. (± 0.5 - $\pm 1\%$ accuracy) Touch Screen (pre-settable)
2.3.2	Pressurization and Vent	Dr air, N ₂ or Ar . Compressed air - 0.5 – 0.7 MPa (4 - 8 kg.f/cm ²), 100 L/min, dry
		<ul style="list-style-type: none"> • Note : An oil free (dry) vacuum pump should be supplied; Pump should be chemical resistant with chemically resistant valves and internal fittings and accessories. Adequate vacuum (≤ 100 mbar) for filling should be achieved. • Electrolyte compatibility: Components of the machine shall be compatible with all type of electrolyte solvents (EC, DMC, DEC, etc.), Li salts with additives.
2.4 Electrolyte diffusion & degassing equipment features:		
2.4.1	Diffussion & Degassing	<ul style="list-style-type: none"> • Electrolyte diffusion and degassing chamber: Li-ion pouch cell with the given dimensions shall be placed in the chamber for evacuating, gas purging and electrolyte filling or better facility integrated with the machine. • Max dimension of the Cell to be placed in the chamber & filled: 300 mm (H) x 80 mm (T) x 200 mm (w) (or appropriate) • Adequate wetting of the electrodes/separator and

		degassing of the pouch cell
2.5. Heat sealing machine for presealing and final sealing of the pouch cells		
2.5.1	Heat sealing	The chamber should be anti-corroding. The sealing die width and length should be compatible and customizable with the given pouch cell dimensions. The sealing pressure and temperature with controls to ensure proper sealing.
2.5.2	a. Heat sealing Head temperature b. Heat sealing pressure: c. Heat sealing time: d. Sealing width: e. Max sealing length:	200 - 300° C (should be able to adjust to needs) Accuracy: ±2°C 5~7 Kg/cm ² , (should be able to adjust to needs) 0~99 second, (should be able to adjust to needs) 5 mm 300 mm (adjustable)
2.5.3	Power	Single phase/ 220V/50Hz , 1 KW
2.5.4	Compressed Dry air	0.5 – 0.7 MPa (4 - 8 kg.f/cm ²), 100 L/min, dry

DETAILED TECHNICAL SPECIFICATIONS FOR

3. Ultrasonic welding machine for welding stacked electrode sheets and tabs

No.	Description	Specifications
3.1	Method	Ultrasonic welding machine for welding stacked electrode sheets (up to 60 layers) and tabs. Welding head and welding base for welding Cu, Al current collectors and Ni & Al tab welding on to current collectors.
3.2 Welding machine features:		
3.2.1	a. Frequency:	20KHz±10%
	b. Max power:	4200 W - 5000W
	c. Power supply:	220VAC±10%
	d. Air pressure:	0.4~0.6MPa
	e. Welded area:	Welding area for the Ni & Al Tab welding should match the general dimesions mentioned at the start.
	f. Welding time:	0.1-0.8 sec (adjustable)
	g. Adjustable precision:	0.01s
	h. Pneumatic control	Air Compressor
	i. Welding pressure:	0.1-0.6 Mpa
	j. Adjustable precision:	0.02 Mpa
	k. Amplitude:	1μm-the max amplitude
	l. Adjustable precision:	1μm

DETAILED TECHNICAL SPECIFICATIONS FOR

4. Pouch cell case/ cup forming machine for Aluminum laminated films

No.	Description	Specifications
4.1	Power	Single-phase 220V+/- 10%, 50Hz
4.2	Power consumption	100 – 200 W
4.3	Compressed air requirement	0.4-01 MPa
4.4	Work bed dimension	400 mm x 500 mm
4.5	Desired cup dimension	L230mm × W170mm× D up to 8 mm
4.6	Punching depth	3mm - 8mm (adjustable)
4.7	Acceptable Al laminated film thickness	0.11 – 0.3 mm
4.8	Degree of parallelism between the bottom plane of the die handle and the bottom plate	within 0.02 mm
4.9	Flatness of upper and lower moulds	within 0.02 mm
4.10	Maximum punching pressure	As per requirement of obtaining optimum cups.
4.13	Safety features	Built in Safety Curtain to protect against hand injuries during cup forming

NOTE: The machine should be supplied with the required connectors, cup depth gauges for different sizes, wrenches and the required accessories.

DETAILED TECHNICAL SPECIFICATIONS FOR

5. Semi-automatic precision die cutter for electrode sheets

No.	Description	Specifications
5.1	Power supply	AC 220V +/- 10%, 50 Hz
5.3	Air Pressure:	0.5-0.8 Mpa
5.4	Max cutter die size:	300 mm * 200 mm (Optional ranges should be available and adjustable to obtain the given dimensions of electrodes with tab)
5.5	Cutting Accuracy:	±0.1 mm
5.6	Air Cylinder	: 3 tons Max. pressure
5.7	Tensile Cylinder:	0.15 tons pressure
5.8	Cutting stroke:	150mm
5.9	Feeding:	Manually
5.10	Production Yield:	800 - 2000 pieces of electrodes per hour
5.13	Safety Protection:	Built in IR sensor to protect against hand injuries during electrode feeding or alternate mechanism. Double start press button for enhanced safety

Note: All the adequate Air/Gas compressors and vacuum pumps for the pneumatics and vacuum required for the Equipment should be quoted separately. A common adequate vacuum systems and compressors with all the accessories for the trouble free functioning of the equipments should also be planned and quoted separately by the vendor.

GENERAL TERMS & CONDITIONS

PLEASE SPECIFICALLY INDICATE THE FOLLOWING POINTS IN YOUR QUOTATIONS AND COMPLY THE TERMS AS MENTIONED HEREUNDER:-

1. TENDERS ARE INVITED COMPLYING THE REQUIREMENT FOR TENDER AS DETAILED IN THE TENDER SPECIFICATION TO BE SUBMITTED IN THE COMPANY'S / FIRM'S LETTERHEAD NEATLY PRINTED / TYPED DULY SIGNED BY AUTHORIZED PERSON WITH THE SEAL OF THE BIDDERS. ALL ENVELOPS CONTAINING THE TENDER SHOULD BE PROPERLY SEALED. SEPARATE ENVELOPS SHOULD BE USED FOR TECHNICAL AND PRICE BID AND INDICATION TO THEIR EFFECT MAY PLEASE BE SUPERSCRIBED ON THE ENVELOP.

THE FOLLOWING DOCUMENTS ARE REQUIRED FROM THE INDIAN AGENTS OF FOREIGN FIRMS:

1.1 FOREIGN PRINCIPAL'S PROFORMA INVOICE INDICATING THE COMMISSION PAYABLE TO THE INDIAN AGENT AND NATURE OF AFTER SALES SERVICE TO BE RENDERED BY THE INDIAN AGENT.

1.2 COPY OF THE AGENCY AGREEMENT WITH THE FOREIGN PRINCIPAL INDICATING THE NATURE OF AFTER SALES SERVICES, PRECISE RELATIONSHIP BETWEEN THEM AND THEIR MUTUAL INTEREST IN THE BUSINESS.

2. TECHNICAL CATALOGUE/LEAFLET SHOULD BE ENCLOSED WITHOUT FAIL. PROVIDE COMPLIANCE STATEMENT WITH RESPECT TO THE TECHNICAL SPECIFICATIONS MENTIONED ABOVE.
3. PLEASE CONFIRM WHETHER YOU ARE AUTHORISED TO QUOTE ON BEHALF OF YOUR PRINCIPALS AND IF SO, PLEASE ENCLOSE A COPY OF SUCH AUTHORISATION WITH YOUR QUOTATION.
4. **PRICE BIDS FOR FOREIGN FIRMS:** PRICES ARE TO BE QUOTED ON 'EX-WORKS' DULY PACKED OR ON "FCA/FOB" INTERNATIONAL PORT" BASIS AND ALSO INCLUDING AGENCY COMMISSION PAYABLE TO YOUR INDIAN AGENTS, IF ANY SHOWING CLEARLY THE FOLLOWING BREAK UP:-

- I) EX-WORKS PRICE
- II) PACKING & FORWARDING
- III) FREIGHT
- IV) ANY OTHER RELEVANT EXPENSES.
- V) TAXES PAYABLE BY THE INSTITUTE

INSURANCE WILL BE PAID BY OUR INSTITUTE SEPARATELY AND SHOULD NOT FORM PART OF THE QUOTED PRICE.

PRICE BIDS FOR INDIAN FIRMS: PRICES ARE TO BE QUOTED ON F.O.R., IIT KHARAGPUR, ON DOOR DELIVERY BASIS CLEARLY SHOWING THE BREAK UP.

5. **PERIOD OF VALIDITY:** BIDS SHALL REMAIN VALID FOR ACCEPTANCE FOR A PERIOD OF 120 DAYS FROM THE DATE OF OPENING.
6. INDIAN AGENTS ADDRESS AND PERCENTAGE OF AGENCY COMMISSION INCLUDED IN ABOVE F.O.B./EX-WORKS PRICE. (THIS WILL BE PAID TO THE INDIAN AGENTS IN INDIAN RUPEES ONLY AND NOT IN FE). PLEASE ENCLOSE COPY OF AGENCY AGREEMENT ENTERED INTO WITH YOUR PRINCIPALS INDICATING THE NATURE OF AFTER SALES SERVICES OF INDIAN AGENTS, PRECISE RELATIONSHIP & MUTUAL INTEREST IN THE BUSINESS.

7. **MEASUREMENTS/WEIGHT:** NETT/GROSS OF THE CONSIGNMENT. IN CASE OF AN ORDER, YOU SHALL USE AIR WORTHY PACKAGE (AS APPLICABLE) DULY CERTIFIED WITH DOCUMENTS – PLYTO – SANITARY CERTIFICATE (AS PER QUARANTINE ORDER 2003).

8. **SCOPE OF SUPPLY:** SHOULD INCLUDE FREE INSTALLATION AND COMMISSIONING

9. **PAYMENT TERMS FOR FOREIGN FIRMS**

The offer will be made on a single currency and only one PO will be issued for the entire scope of the supply.

A) 90% PAYMENT THROUGH SIGHTDRAFT/FORIGN DEMAND DRAFT/LC (EXCEPTIONAL CASES)/SWIFT TELE TRANSFER AFTER RECEIPT OF STORE IN GOOD ORDER AND CONDITION AND 10% AFTER SUCCESSFUL INSTALLATION & COMMISSIONING.

B) BANK CHARGES ON LC/SD (WITHIN INDIA APPLICANT ACCOUNT AND OUTSIDE INDIA TO BENEFICIARY ACCOUNT).

PAYMENT TERMS FOR INDIAN FIRMS

A) 100% PAYMENT THROUGH CROSSED ACCOUNT PAYEE CHEQUE / ELECTRONIC TRANSFER AFTER RECEIPT OF STORE IN GOOD ORDER & CONDITION AND SUCCESSFUL INSTALLATION & COMMISSIONING.

B) ENSURE MENTIONING

i) BANK DETAILS OF THE BENEFICIARY, GST NO. AND PAN NUMBER

ii) FULL NAME AND ADDRESS OF THE BENEFICIARY ON WHOM ORDER HAS TO BE PLACED

10. WHETHER ANY EXPORT LICENCE IS REQUIRED FROM YOUR GOVERNMENT, IF SO, PLEASE CONFIRM WITH DETAILS.

11. COUNTRY OF ORIGIN OF THE GOODS IS TO BE MENTIONED.

12. THE INSTITUTE SHALL PROVIDE THE CONCESSIONAL CUSTOMS DUTY AND EXCISE DUTY EXEMPTION CERTIFICATE AS PER GOVT. NOTIFICATION NO. 51/96 CUSTOMS DATED: 23.07.1996 AND CENTRAL EXCISE DUTY EXEMPTION IN TERMS OF GOVT. NOTIFICATION NO. 10/97 – CENTRAL EXCISE DATED: 01.03.1997 AS AMENDED FROM TIME TO TIME.

13. **LIQUIDATED DAMAGES:** THE STORES SHOULD BE DELIVERED / DISPATCHED TO DESTINATION AND READY FOR OPERATION NOT LATER THAN THE DELIVERY DATE SPECIFIED. IF THE SUPPLIER FAILS TO DELIVER ANY OR ALL THE STORES OR PERFORM THE SERVICE BY THE SPECIFIED DATE, LIQUIDATED DAMAGES AT 1% PER MONTH OR PART THEREOF IN RESPECT OF THE VALUE OF STORES WILL BE DEDUCTED FROM THE CONTRACT PRICE SUBJECT TO A MAXIMUM OF 5%. ALTERNATIVELY, THE ORDER WILL BE CANCELLED AND THE UNDELIVERED STORES PURCHASED FROM ELSEWHERE AT THE RISK AND EXPENSE OF SUPPLIER.

14. **PATENT RIGHTS:** THE SUPPLIER SHALL INDEMNIFY THE PURCHASE AGAINST ALL THIRD PARTY CLAIMS OF INFRINGEMENT OF PATENT, TRADEMARK OR INDUSTRIAL DESIGN RIGHTS ARISING FROM USE OF THE GOODS OR ANY PART THEREOF IN INDIA.

15. ONLY THOSE BIDDERS WHO'S BIDS HAVE BEEN TECHNICALLY FOUND ACCEPTABLE WILL ONLY BE INVITED FOR PARTICIPATION IN THE PRICE BID.

16. THOSE BIDDERS WHO DO NOT RECEIVE ANY COMMUNICATION FOR PARTICIPATION IN PRICE BID OPENING MEETING MAY PRESUME THAT THEIR BID HAS NOT BEEN ACCEPTED BY THE INSTITUTE.
17. CONDITIONAL OFFER WILL NOT BE ACCEPTED.

18. LATE TENDERS I.E. TENDER RECEIVED AFTER THE DUE DATE AND TIME OF SUBMISSION AS MENTIONED ABOVE SHALL NOT BE ACCEPTED.

19. BIDDERS TO ENCLOSE THE FOLLOWING DOCUMENTS:-

A) INCOME TAX RETURN (3 YRS) AND LATEST SALES TAX RETURN (GST No.), AND PAN NO.

B) BANKER'S SOLVENCY CERTIFICATE

C) SUMMARY OF AUDITED STATEMENT OF ACCOUNTS FOR THE LAST THREE YEARS TO BE ENCLOSED AND FINANCIAL HIGHLIGHTS AND THE KEY PERFORMANCE DURING THE LAST THREE QUARTERS TO BE ENCLOSED AS PER FORMAT:-

COMPANY'S KEY PERFORMANCE

DESCRIPTION	JAN. TO MARCH	APRIL TO JUNE	JULY TO SEPT.
GROSS REVENUE			
PROFIT BEFORE TAX			
PROFIT AFTER TAX			
RETURN ON INVESTED			
CAPITAL (ROIC)			

D) CUSTOMER SATISFACTION CERTIFICATE FROM ONE SUCH ORGANIZATION IS TO BE ATTACHED WITH THE TECHNICAL BID AND PRICE BID.

E) NAME AND ADDRESS OF MINIMUM THREE CLIENTS TO WHOM SUCH EQUIPMENT HAVE BEEN SUPPLIED SHOULD BE MENTIONED.

20. **WARRANTY / GUARANTEE:** THIS COMPREHENSIVE WARRANTY / GUARANTEE SHALL REMAIN VALID FOR **36 MONTHS** AFTER THE GOODS (OR ANY PORTION THEREOF AS THE CASE MAY BE) HAVE BEEN DELIVERED AND COMMISSIONED TO THE FINAL DESTINATION.

21. THE INSTITUTE DOES NOT BIND ITSELF TO OFFER ANY EXPLANATION TO THOSE BIDDERS WHO'S TECHNICAL BID HAS NOT BEEN FOUND ACCEPTABLE BY THE EVALUATION COMMITTEE OF THE INSTITUTE.

22. ALL TENDERS (UNLESS OTHERWISE SPECIFIED) ARE TO BE SUBMITTED / HANDED OVER TO **PROF. SIDDHARTHA MUKHOPADHYAY, PROFESSOR, DEPARTMENT OF ELECTRICAL ENGINEERING, INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR - 721 302** AND ACKNOWLEDGEMENT TO BE OBTAINED.

IMPORTANT

1. IIT Kharagpur authority may accept or reject any or all the bids in part or in full without assigning any reason and does not bind itself to accept the lowest bid. The Institute at its discretion may change the quantity / upgrade the criteria / drop any item or part thereof at any time before placing the Purchase Order.
2. Promptly make arrangements for repair and / or replacement of any damaged item (s) irrespective of settlement of claim.
3. In case of any dispute, the decision of the Institute authority shall be final and binding on the bidders.
4. For any query pertaining to this bid document correspondence may be addressed to **Prof. Sreeraj Puravankara**, at the address mentioned above.

LAST DATE FOR SUBMISSION OF SEALED BIDS: 25.07.2018

- 1) Please Note that the Institute remains closed during Saturdays & Sundays and all specified government holidays.
 - 2) Fax, e-mail Tender will not be accepted.
 - 3) The General Terms and Conditions as stated above relate to supply of stores / equipment /assets etc. and for specific service other terms and conditions of the Institute will apply.
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