INDIANINSTITUTEOFTECHNOLOGY KHARAGPUR–721302

NOTICE INVITING TENDER

Tender No: **IIT/PHY/III YEAR/SD/EX5** Date: 10.08.2018

Sub: Procurement of **"Experimental setups for MSc students: Frank-Hertz, Balmer series, Electron diffraction, Inreference of Light, Helium Neon laser with basic set"**

Indian Institute of Technology, Kharagpur, invites sealed bids from reputed manufacturer or their authorised Distributor/Dealer (foreign firms or their Indian Representative company) who have adequate credential for supply, installation of **"Experimental setups of: Frank-Hertz, Balmer series, Electron diffraction, Inreference of Light, Helium Neon laser with basic set",** required for dedicated use in relevant research purposes, as per Annexure–I for **Department of Physics, Indian Institute of Technology, Kharagpur, India.**

Interested parties may submit their sealed bids under Two-Bids system as per **TechnicalSpecifications** given at **Annexure I**, and **General Terms & Conditions and Special instructions** given at **Annexure II and Annexure III**. Bidders are required to submit their **Details** in the format given at **Annexure IV** along with their technical bids. They are also required to submit a signed **Declaration** in format given at **Annexure V**. A **Checklist** and **Compliance statement** against each item of Annexures I thereon severally and individually shall also be submitted. Kindly refer to the Institute website **www.iitkgp.ac.in** [link: http://www1.iitkgp.ac.in/topfiles/tenders.php] for complete tender details. If any corrigendum/addendum shall only be published on Institute's Website and Central Public Procurement Portal.

The tender is to be sent in a sealed packet, containing two separate sealed envelopes (one each for **Technical Bid and Price Bid**) along with prescribed **tender fee and EMDduly superscripted with Tender Notice No. IIT/PHY/III YEAR/SD/EX5, dated 10/08/2018**to the Office of**the Head, Department of Physics, Indian Institute of Technology Kharagpur, P.O. Kharagpur Technology, PIN 721302, West Bengal, India. on or before 31/08/2018 by 4:00 PM.**

Copy to:

1. Institute website
2. Notice Board
3. Head, Department of Physics

Head, Dept. of Physics
For Director, IIT
Kharagpur

Annexure I

Specifications:

Franck-Hertz experiment with a Hg-tube

Complete experiment set to determine the excitation energy of Mercury by accelerating electrons in a Mercury-filled glass tube and measuring the electron current in dependence of a variable opposing electric field. The energy is determined by measuring distance between the current minima.

Necessary material:

1. Mercury tube:Tetrode in Mercury-filled glass tube, stable housing with viewing window and connection to operating unit for recording the Franck-Hertz curve with at least 12 excitations and direct observation of light emission in the visible range.
2. Control Unit: Compact operating unit for Franck-Hertz experiment to be used with Hg- or Ne-tubes with automatic detection of tube type and automatic limitation of tube parameter. Examination by direct reading of displayed values, oscilloscope or PC. heating voltage: 6.5 ± 0,5 V; acceleration voltage: 0...99 V; counter voltage: 0...12 V; emission voltage: 0...6 V; Heater voltage: 0...10 V; resolution (all voltages): 0.1 V; heater current: 400 mA; heater temperature: 0...999 °C; anode current: 0...50 nA; acceleration voltage: 0...10 V (10 V ~ 100 V); Voltage and anode current: 0...10 V (10 V ~ 50 nA); 4 operation modes: manually, automatic ramp, saw tooth (oscilloscope) and PC-control; power control for heater with safety socket (600 W) and type K socket for thermocouples.
3. Oven with viewing windows: electronically excited glowing layers of mercury vapour can be observed from the outside.
4. Easy to operate: no waiting time in case of gas discharge for a new equilibrium, no need for using a screwdriver potentiometer.
5. Data acquisition and analysis software: operating unit to be identified by the software automatically, pre-setting's for given experiment; multi-user license.
6. Nobel Prize experiment: Franck & Hertz (1925) can be proved.

All necessary connecting cables, support material, other auxiliary material and teachware to perform the experiment should be included.

A PC is not included in the complete set-up and is therefore additionally required!

Balmer series/ determination of Rydberg's constant

Complete experiment set to examine spectral lines of hydrogen and mercury by diffraction grating, to determine the grating constant and to measure the wave lengths of the visible lines of the Balmer series of hydrogen consisting of:

- High voltage power supply with a maximum voltage of at least 10,000 volts, at least 3 adjustable DC voltages, short circuit-proof, smoothed output, input at least 20 VA, with LED display
- Hydrogen and mercury spectrum tubes with spectrum tube holders and cover tube for spectral tubes
- Exactly 600 lines/mm diffraction grating with object holder
- Meter scale of at least 1000 mm to which a pair of cursors can be attached
- wo insulating supports to which the spectrum tubes can be attached with the spectrum tube holders

All connecting cables, support material, other auxiliary material and teachware to perform the experiment are to be included.

Electron diffraction

Complete experiment set to determine the interplanar spacing in graphite from the diameter of the rings and the accerating voltage when fast electrons are diffracted consisting of:

- Electron diffraction tube: heating voltage at least 6 V AC, maximum anode voltage of at least 5000 V, anode current no less than 0.1 mA at 4000 V, lattice constant of graphite: d10 with no more than 0.25 nm and d11 with no more than 0.13 nm
- Tube holder: to hold the electron tube using 4 mm safety plugs
- Control unit: with at least 3-digit LED display, temperature-controlled fan, generates potential-free high-voltage of between 0 and at least 5000 V DC, heating voltage at least 6 V AC

All connecting cables, support material, other auxiliary material and teachware to perform the experiment are to be included.

Interference of light

Complete experiment set to produce interference by dividing the wave-front of a beam of light at the Fresnel mirror and the Fresnel biprism and to determine the wavelength from the interference patterns. The complete experiment has to consist of:

• **Laser:** Linearly polarised He-Ne-Laser in extra short housing. Welded glass tube assures a very long lifetime; key switch; anodised aluminium casing with integrated mains power supply, screw in holding stem, signal light and required warnings printed on both sides, fixed mains connecting cable 140 cm; Wavelength: 632.8 nm; optical output power: 1.0 mW; beam diameter 0.5 mm; beam divergence < 2 mrad; minimum polarisation 500:1; max drift over 8 hours: ± 2.5%; oscillating mode: TEM00; lifetime > 18000 h; power requirements 35 VA.

• **Fresnel mirror:** on agate bearings; with protective frame on a stem and mounted protective cap; tilt angle adjustable by fine drive, mirror areas (mm): 56 x 42.

• **Fresnel biprism:** angle: 0,75° dimensions: (mm): 40 x 30 x 4.

• **Optical bench:** profile-bench; Length: 1000 mm; material: Al-Mo-Si-alloy; cross-section 81 x 32 mm

• **Achromatic lens:**plano-convex glass lens with focal length written on the plug-in socket for the lens holder; focal length: +300 mm; diameter: 40 mm. f = +300 mm.

• **Additional optical components and objects:** adjustable base for optical bench; Prism table with holder; swinging arm; Slide mount for optical bench, h = 80 and h = 30 mm; lens holder; mounted lens, f = +20 mm; measuring tape, length: 2 m.
All necessary connecting cables, support material, other auxiliary material and teachware to perform the experiment should be included.

Helium Neon laser, basic set

Complete experiment set to investigate

- Set up the He-Ne laser. Adjust the resonator mirrors by use of the pilotlaser. (left mirror: VIS, HR, plane; right mirror: VIS, HR, R = 700 mm)
- Check on the stability condition of a hemispherical resonator.
- Measure the integral relative output power as a function of the laser tube's position within the hemispherical resonator.
- Measure the beam diameter within the hemispherical resonator right and left of the laser tube.
- Determine the divergence of the laser beam.
- Measure the integral relative output power as a function of the tube current.

Necessary material:

1. Experimental Set-Helium-Neon Laser

- 6 mW-HeNe-capillary discharge tube with two 55.5 °-Brewsterwindows ballast resistor and HV connectors
- 2 xy-variable holders on slide-mounts for laser tube
- variable power supply 2...8 mA for laser tube withÂ display for tube current
- 2 xy-adjustable holders for opt.components
- 2 holders for laser mirrors
- Set of 4 laser mirrors with dielectric HR-surfaces: HR-plano/plano, HR-R = 1000 mm/plano, HR- R = 1400 mm/plano ,OC- R = 1400 mm/plano, diam. 12.7/ 25.4 mm
- 1 mW green diode pumped frequency doubledÂ Yttrium-Vanadat (Nd:YVO4) alignment laser
- holder for alignment laser xy-adjustable, on slide mounts for optical profile bench
- 3 slide mounts for optical profile bench for rods of diameter 10-13 mm
- Stabilized optical profile bench

2. Acessories (should be included)

- Slide mount for optical bench expert
- Diffraction grating, 600 lines/mm
- Protection glasses HeNe-laser
- sliding device, horizontal
- Photoelement
- Acetone, chemical pure, 250 ml
- Resistors 1 kOhm, 10 kOhm, 100 kOhm, (1W, G1); 10 Ohm, 100 Ohm 2W
- Plate holder, Scale, l = 750 mm, on rod, Vernier calliper stainless steel 0-160 mm, 1/20
- DMM, auto range, NiCr-Ni thermocouple

All necessary connecting cables, support material, other auxiliary material and teachware to perform the experiment should be included.

Annexure II

GENERAL TERMS & CONDITIONS

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

1. TENDER 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.

1.3 PLEASE ENCLOSE THE DOCUMENT(S) RELATED TO THE ENLISTMENT OF THE INDIAN AGENT WITH DIRECTOR GENERAL OF SUPPLIES & DISPOSALS (DGS & R) UNDER THE COMPULSORY REGISTRATION SCHEME OF MINISTRY OF FINANCE.

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 BIDSFOR INDIAN FIRMS: PRICES ARE TO BE QUOTED ON F.O.R., IIT KHARAGPUR, ON DOOR DELIVERY BASISCLEARLY 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 EXCEMPTION IN TERMS OF GOVT. NOTOFICATION 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. IT 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) CURRENT INCOME TAX AND SALES TAX CLEARANCE CERTIFICATES (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 **12 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 **DR. SAJAL DHARA, DEPARTMENT OF PHYSICS, INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR - 721 302**AND ACKNOWLEDGEMENT TO BE OBTAINED.

Tender Reference	IIT/PHY/III YEAR/SD/EX5**, Dated: 07.08.2018**
Price of Tender Document	**NIL**
Last Date and Time for submitting the tender document	**31.08.2018 at 16:00Hrs (Indian time)**
Time and Date of Opening of Technical Bids	**02.09.2017 at 11:00 Hrs (Indian time)**
Place of Opening Tender	**Department of Physics,** **Indian Institute of Technology** **Kharagpur – 721 302, West Bengal, India**
Address of Communication	**As stated above**
Contact Telephone Numbers	**+91- 3222 - 30**4856
E-mail	**sajaldhara@phy.iitkgp.ac.in**

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 **DR. SAJAL DHARA**, at the address mentioned above.

LAST DATE FOR SUBMISSION OF SEALED BIDS: 31.08.2018

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.

Annexure III

INSTRUCTIONS & SPECIAL CONDITIONS

(To be returned by Tenderer along with the Tender duly signed)

1. GENERAL:
Tenderer(s), who are Indian Agents of OEMs should furnish a clear declaration as follows: We declare that I am/we are Accredited Agents of the suppliers aboard;

2. DEVIATION FROM SPECIFICATIONS:
It is in the interest of the tenderer to study the specifications in the tender schedule thoroughly before quoting so that, if the tenderer makes any deviations, the same are prominently brought out in the body of the tender. If you need to add any optional items to your system in order to meet our specifications, you are requested to quote for the total including the option required to suit our requirements; otherwise, your tender will not be considered at all.

3. PRICE:
For imported items both F.O.B. & C.I.F. Kolkata price by Air to be quoted. The price should be without Customs Duty and Excise Duty since IIT Kharagpur is exempted from the payment of Customs & Excise Duties. The Institute if required will provide certificates for Import Items: The order acknowledgement should be issued by Fax within 3 days, and the item should be airlifted within 30 days from the date of receipt of the Letter of Credit copy / copy of DD, as the case may be.

1. (i) Agency Commission, if any will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances.
2. (ii) The unit prices should be for the same unit as indicated in the Schedule to tender enquiry and not for any other unit.
3. (iii) Prices quoted should be for supply, installation and commissioning at I.I.T. Kharagpur.
4. (iv) Discount, if any, should be indicated separately / prominently.
5. (v) Offers should normally be on fixed and firm price basis. Any clause making price variation

   will not be acceptable.

6. (vi) Where tenderer intends to quote in Indian Rupees, for imported items, the price should be

   quoted “FOR Destination” basis. Offer should be on “High Sea Sales” basis. No sales tax can be charged. Customs Duty applicable against **Declaration in Terms of Government of India Notification No.51/96-Customs dated 23.07.96 will be paid. Vendor will arrange payment of customs duty during clearance and the same will be reimbursed at actual against proper documents. Way Bill will be issued on request.** Seller has to undertake the responsibilities of customs clearance. All necessary supporting documents will be provided by the IIT Kharagpur. An agreement can be made in this regard, if the seller wishes, before customs clearance.

4. TRANSIT NSURANCE:
The Purchaser will not pay separately for Transit Insurance.

5. PAYMENT:

1. **i)** Payment for indigenous items quoted in Indian Rupees will be made only after

   completion of supply, installation and commissioning of the Systems to the entire satisfaction of the Purchaser. **No Advance Payment will be made for Indigenous Purchase.**

2. ii) Where items are imported and the payment is desired to be made to their foreign Principals directly, the same will be made against Irrevocable Letter of Credit only.

6. TENDERERS SHALL SUBMIT ALONG WITH THEIR TENDER:

1. i) Complete address and tele links for contact persons in principals and Indian agent offices dealing with this purchase.

2. ii) Name and full address of the OEM's Banker and their swift code.
3. iii) Proof of having ISO 9001 or other equivalent certification given by appropriate authorities.

7. EARNEST MONEY DEPOSIT: TENDERER MUST SUBMIT AN EMD OF RS. __**Rs. 50,000/-** _(_REFUNDABLE) IN THE FORM OF BANK DRAFT/BANK GUARANTEE IN FAVOUR OF "INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR". It should be placed in the cover containing of Technical Bid.

8. TENDER FEE: TENDER FEE OF TOTAL RS.___-NIL-____IN THE FORM OF BANK DRAFT MUST ACCOMPANY THE TENDER. It should be placed in the cover containing the Technical Bid.

9. PERFORMANCE BANK GUARANTEE:
On behalf of the Principal Indian Agent must be able to provide Performance Bank Guarantee of the amount equivalent to the 10% of the cost of equipment from any Nationalized Bank. The Performance Bank Guarantee is required for the entire period of Warranty. Performance Bank Guarantee must remain valid for a period sixty days beyond the expiry of the Warranty Period.

10. GUARANTEE:
The tenderer has to declare that the goods sold to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications.

11. JURISDICTION:
All questions, disputes, or differences arising under, out of or in connection with the contract, if concluded, shall be subject to the exclusive jurisdiction at the place from which the acceptance of Tender is issued i.e. Jurisdiction of KOLKATA HIGH COURT. Acceptance to this effect is also necessary at the time of opening of Technical Bid.

12. ACKNOWLEDMENT:
It is hereby acknowledged that we have gone through all the points listed under "Instructions & Special Conditions" outlined above, and those in the accompanying note on "Important Conditions", and we agree to abide by them under the penalty of permanent disqualification for Tender participation and for related penal actions for non-abidance of the conditions.

13. Interested vendors must be able to supply adequate spares and consumable during one year warranty. Vendor should also ensure trouble free service and performance for another two years beyond one year Comprehensive Warranty Period with adequate spares and accessories.

SIGNATURE OF TENDERER ALONG WITH SEAL OF THE COMPANY WITH DATE

NOTE: ONE AGENT CANNOT REPRESENT TWO SUPPLIERS OR QUOTE ON THEIR BEHALF AT ONE TIME. In case of import all the particulars required for opening Letter of Credit (L/C) should be furnished in clear terms. After opening of L/C, based on our tender, no more request for amendment of L/C will be entertained. Total price including supply, installation and commissioning at I.I.T., Kharagpur, should be quoted. The cost of items that may be supplied from indigenous resources and also installation part if installation is done by Indian Agents should be stated in Indian Rupees.

1. In case of Import, bidders are requested to quote FOB price mentioning Freight & Insurance charges separately. No Ex-Works pricing is considered.
2. Warranty should be valid for one year for all items including third party items.
3. Quotations should be submitted in Separate Sealed Cover (with Sealing Wax). The quotation should be in typed format. No manual entries are allowed and any manual entry will entail

   rejection at the opening stage itself.

4. Before submitting vendor should ensure that they have submitted the following in the technical

   bid the documents as mentioned hereunder: Technical Literature, Specification documents, **Point-by-point Compliance Statement,** General Terms & Conditions, Acceptance of Kolkata High Court Jurisdiction, Name and address of 5 organizations of which 1 must be India where the OEM has installed 1 such equipment in the last 2 years and a copy of Price bid with prices masked.

The Commercial bid shall have all the commercial documents, agreements and Price bid. Prices should be given component wise to enable the Institute to decide the final configuration.

Important :

1. The institute may accept or reject any or all the bids in part or in full without assigning any reason and does not bind him 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. In case of any dispute, the decision of the Registrar of this Institute shall be final and binding on the Bidders.
3. For any query pertaining to this Bid document correspondence may be addressed to :-

   Professor Sajal Dhara, Department of Physics, Indian Institute of Technology, Kharagpur-

   721302 [Phone: +91-3222-304856]

   N.B.: **In case the due date for opening tender happens to be a holiday, the same will be opened on the next working day. The timings will however remain unchanged. Please Note that the Institute remains closed on Saturday & Sunday.**

Annexure IV

TECHNICAL BID DOCUMENT

Format to be filled by the manufacturers / indian agents (on behalf of their foreign principles) or their authorized country distributors/ representing dealers/ regional agencies, submitting tender for procurement of "**Experimental setups for MSc students: Frank-Hertz, Balmer series, Electron diffraction, Inreference of Light, Helium Neon laser with basic set**" for the department of Physics at IIT Kharagpur.

1. Name of the Tenderer **:**

2. Status of the Tenderer **:**
(attach documents, if registered
company/partnership/proprietyship)

3. Whether OEM/representing foreign principle **:**
(attach copy of certificate/authorization)

4. Details of key top official/authorized official
(attach details) Name **:**
Official E-Mail:
Mobile No : Alternate No :

5. Details of tie-ups for supply/services, if any **:**
(attach details, agreements, escalation matrix)

6. Income Tax and Service Tax returns of
previous three assessment year (copy) **:**

7. Financial status of bidder and/or his
associates including Annual Report & Balance
Sheet/Statement of Account
of past three years with Registration of
Companies (ROC) receipts duly authenticated
byChartered Accountant **:**

8. Current list/address of clients where similar material
has been supplied and successfully working **:**

9. Name of the vendor's three largest clients, to
:whom similar products and services were
extended & amountof transaction/annual bills to
such clients

10. Name and address of Vendor's bankers and

attach a Solvency Certificate from the Bank for a minimum amount of Rs.6.00 Lakh. :

1. Income Tax Permanent A/c No. (attach copy) **:**
2. **GST Registration No:**
3. Details of EMD/Bank Draft No
   Issuing Branch and date :

Certified that all above information are correct to the best of my/our information, knowledge and belief.

Date:

Signature & seal of the
Authorizedperson of OEM/Vendor

NOTE: **This is to be submitted in a separate sealed envelope** super scribing "TECHNICAL BID", Notice inviting **Tender No.IIT/PHY/III YEAR/SD/EX5/**2018 dt:**10.08.2018**and name of the bidder. All technical documents like literature, catalogues etc., are to be put in the same envelope. Price bid of that company/firm only will be opened which do technically qualify, for further consideration. **Attach all relevant documents in the same serial order as above, properly indexed, duly signed and sealed**.

ANNEXURE - V

DECLARATION

1. I, ---------- Son /Daughter of Shri ---------- ---------- Proprietor/Partner/CEO/MD/Director/ Authorized Signatory of M/s. ---------- am competent to sign this declaration and execute this tender document.

2. I have carefully read and understood all the terms and conditions of the tender and hereby convey my acceptance of the same.

3. The information/ documents furnished along with the above application are true and authentic to the best of my knowledge and belief.

4. I/ we/ am are well aware of the fact that furnishing of any false information/ fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.

5. Each page of the tender document and papers submitted by my Company is authenticated, sealed and signed, and I take full responsibility for the entire documents submitted.

Signature of the Authorized Person

Date : ----------
Place : ----------

Full Name : ----------
Company Seal : ----------

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