

**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, (M.P.)  
(A Central University)**

Department of Chemistry  
Under **BRNS sponsored** project

**TENDER NOTICE**

Tender No. **R/CHEM/BRNS/2017**

Dated: **17-10-2017**

The university invites sealed Tenders from the Manufacturers/ authorized dealers for purchase of **Fluorescence Spectrometer.**

The complete technical details with specification of item(s), Eligibility, Tender, Document Fee, Address and Procedure of tender are available at the university website **www.dhsgsu.ac.in**. The last date for submission of tender on or before **17-11-2017** in the Department of Chemistry, Dr. Harisingh Gour Vishwavidyalaya, Sagar by Speed / Registered Post only.

Registrar

**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, (M.P.)**  
Department of Chemistry

TENDER FOR SUPPLY OF FLUORESCENCE SPETROMETER UNITS AND  
ACCESSORIES

Cost of tender: Rs 500/-  
(Non-Refundable)

**TENDER No: R/CHEM/BRNS/2017**

Dated: **17-10-2017**

- (1) Tender Closing Date : **17-11-2017**
- (2) Tender Opening : **22-11-2017**
- (3) Venue for Submission of Tender : Dr. Pushpal Ghosh  
PI. BRNS Sponsored project  
Department of Chemistry  
Dr. Harisingh Gour Vishwavidyalaya,  
Sagar-470003, (M.P.), India
- (4) Opening of Technical Bids : Venue: same as (3) above
- (5) Opening of Financial Bids : Will be communicated later
- (6) Maximum budget provision : Rs. 19 lakhs (Including Tax and all costs)

Changes if any, in schedule will be displayed on the website at **www.dhgsu.ac.in**. No intimation shall be sent individually. Bidders are requested to keep checking the website for any changes in Venue and time of opening of the bids.

**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, (M.P.)**  
**DEPARTMENT OF CHEMISTRY**

**1) Tender Notice**

The Department of Chemistry, Dr. Harisingh Gour Vishwavidyalaya, Sagar, (M.P.) invites sealed tenders from manufacturers/ suppliers for Fluorescence Spectrometer and accessories with onsite.

*(Dr. Harisingh Gour Vishwavidyalaya, Sagar, M.P. is an Autonomous Body under the Ministry of Human Resource Development, Govt. of India)*

The following document giving the full details are enclosed:-

- 1) Annexure-I- Details and Items required.
- 2) Annexure-II- General Terms and Conditions including eligibility conditions.
- 3) Annexure-III-Proforma for Technical Bid and Undertaking.
- 4) Annexure-IV-Proforma for Undertaking
- 5) Annexure-V-Proforma for Commercial / Finance Bid.

**2) Schedule:**

a) Due date and time of receipt of tender:

b) Address for submission of tender:

Dr. Pushpal Ghosh  
PI. BRNS Sponsored Project  
Department of Chemistry  
Dr. Harisingh Gour Vishwavidyalaya,  
Sagar-470003, (M.P.), India

c) Opening of Technical Bids:

Venue: same as (b) above

d) Opening of financial bid will be communicated later

**3) The tender document can only be downloaded from the website of the Vishwavidyalaya:**

**[www.dhsgsu.ac.in](http://www.dhsgsu.ac.in).**

**4) The tender, complete in all respect, must be received in the designated office before the due time and on or before the due date. The tenders received after the due date and time will not be considered. All tenders sent by registered speed post must received in the designated office due time on the due date. This office shall not be responsible for any kind of delay in submission of the tender.**

**5) The tender is not transferable. Only one tender shall be submitted by one Supplier.**

**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, M. P.  
DEPARTMENT OF CHEMISTRY**

**ANNEXURE I**

**DETAILS OF THE ITEM REQUIRED:**

**R/CHEM/BRNS/2017**

**SPECIFICATION FOR INSTRUMENT**

To guarantee compliance with minimum laboratory safety requirements, and to ensure that the Fluorescence Spectrometer with power units meets internationally-recognized safety norms and accessories.

**Instrument Name:                      Fluorescence Spectrometer**

**Specifications:**

Research Grade Fluorescence Spectrometer with following specification to be offered;

<b>S. No.</b>	<b>Parameters</b>	<b>Specification</b>
1.	Excitation Source	150 W or better ozone free Xe source with power supply unit should be offered.
2.	Excitation Wavelength Range	200-950 nm, Optimized in the UV
3.	Excitation Monochromator	Single Czerny-Turner excitation spectrometer or better design with 1200 g/mm gratings blazed at 300-350nm or better.
4.	Emission Wavelength Range	200-950nm, Optimized in the Visible
5.	Emission Monochromator	Single Czerny-Turner spectrometer or better design with 1200 g/mm blazed at 500-550nm for measuring emission up to 850 nm should be offered.
6.	Optics	All reflective for focusing at all wavelengths and precise imaging for micro samples i.e. the system should be mirror based system
7.	Bandpass	0-30 nm, continuously adjustable from computer
8.	Wavelength Accuracy	±0.5nm
9.	Scan speed	4800 nm/min
10.	Signal to Noise Ratio	16,000:1(RMS Method), 6000:1 (FSD Method) using water Raman signal at excitation at 350 nm, emission at 397nm, Bandpass 5nm and 1sec integration time

11.	Emission Detector	R928PMT photomultiplier tube detector, wavelength range 250 nm-850 nm operating in photon counting electronics mode
12.	Solid Sample Holder	Should be designed for viewing front-face fluorescence of thin films, powders, pellets, paper, fibers, or microscopic slides. Variable alignment angle
13.	Bandpass Filters	Central wavelengths at 320 and 340 nm with necessary holder and adapters.
14.	Order Sorting Filters	Vendor should quote set of filters (370, 399, 450, 500 and 550 nm) to remove second order spectrum
15.	Quartz Cuvette	4ml, 1cm x 1cm open top with cap
16.	Control and Analysis Software	Powerful software for data collection and system control. On start-up, the system automatically calibrates and presents itself for new experiments.
17.	Computer	The state-of-the art computer should be supplied with windows based operating system loaded with the system software.
18.	Others	<b>System should be upgradable to time resolved measurements with Time Correlated Single Photon Counting attachment with minimum dead time of 10ns. It is mandatory to highlight the dead time of TCSPC electronics in the manufactures' brochure as well as in the compliance statement.</b>
19.	Warranty	Two years from the date of installation
<b><u>Vendor should quote the following items as optional;</u></b>		
20.	Liquid Nitrogen dewar assembly	
21.	Automated Polarizers for doing anisotropy measurements	
22.	Integrating sphere for doing quantum yield measurements (80-120mm) with suitable neutral density filters	

**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, M. P.  
DEPARTMENT OF CHEMISTRY**

**ANNEXURE II**

**R/CHEM/BRNS/2017**

**GENERAL TERMS AND CONDITIONS INCLUDING ELIGIBILITY CONDITIONS**

**1) Parties:**

The parties to the Contract are the Tendering Firm and Registrar. Dr. Harisingh Gour Vishwavidyalaya. Sagar ( M.P.)

**2) Addresses:**

For all purposes of the contract including arbitration there under, the address of the firm mentioned in the tender shall be final unless the firm notifies a change of address by a separate letter sent by Speed Post/ registered Post with acknowledgement due. The firm shall be solely responsible for the consequences of any omission or error to notify change of address in the aforesaid manner.

**3) Preparation and Submission of Tender:**

The tender should be submitted in two parts viz. Technical Bid and Commercial Bid in the proforma given in Annexure-III and Annexure-IV respectively with each Bid kept in a separate sealed cover. Each cover must contain the address of the Bidder, and should be subscribed with the statement "Technical Bid" and "Commercial Bid" as the case may be. **These two covers should then be kept in another sealed cover addressed to:**

Dr. Pushpal Ghosh  
PI. BRNS Sponsored Project  
Department of Chemistry  
Dr. Harisingh Gour Vishwavidyalaya,  
Sagar-470003, (M.P.), India

**This sealed cover should be duly subscribed with the statement "Tender for Supply of Fluorescence Spectrometer and Accessories" at Dr. Harisingh Gour Vishwavidyalaya, Sagar, M. P." and TENDER No: R/CHEM/BRNS/2017**

**4) Signing of Tender:** Individual signing the tender or other documents connected with contract must specify whether he/she signs as:

- a) A "sole proprietor" of the firm or constituted attorney of such sole proprietor:
- b) A partner of the firm, if it be a partnership firm, in which case he must have authority to execute contracts on behalf of the firm and to refer to arbitration disputes concerning the business of the partnership either by virtue of the partnership agreement or by a power attorney duly executed by the partners of the firm.

**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, M. P.**  
**DEPARTMENT OF CHEMISTRY**

- c) Director or a principal officer duly authorized by the Board or Director of the Company, if it is a company.
- d) A person signing the tender form or any documents forming part of the tender on behalf of another person should have an authority to bind such other person and if on enquiry it appears that the persons so signing had no authority to do so. Department of Chemistry of the Dr. Harisingh Gour Vishwavidyalaya shall, without prejudice, cancel the contract and hold the signatory liable for all costs. Consequences and damages under the civil and criminal remedied available.
- e) The tenderer should sign and affix his/her firm's stamp at each page of the tender and all its Annexure as the acceptance of the offer made by the tenderer will be deemed as a contract and a formal agreement will also be drawn regarding the contract.

**4) Technical Bid**

The Technical bid should be submitted in form given in Annexure-III.

All columns of the proforma should be filled and accompanied by DDs towards Earnest Money Deposit, cost of tender paper and documentary evidence/brochure etc. in support of the information provided against different columns, failing which the Bid would be liable for cancellation.

**5) Commercial Bid:**

- 6.1** The Commercial Bid should be submitted in form given in Annexure-IV. The Commercial Bids of only those bidders who are short-listed after evaluation of Technical Bids will be opened. A Committee constituted by the Vice-Chancellor will evaluate the Technical Bids and Commercial bids.
- 6.2** A consolidated price should be quoted for the item along with its break up showing different items of charge. The consolidated price quoted shall be firm and final and payable for the goods delivered, installed and commissioned at the location communicated by the Vishwavidyalaya. No payments other than the amount shown as consolidated price shall be made by the Vishwavidyalaya. If any statutory levy is found applicable, the same shall be borne by the tendering firm. The only deviation to the preceding statement could be the levies revised upward or introduced by State or Central Government after the submission of the tender by the bidder, in which case the Bidder shall produce documentary evidence. The total consolidated price quoted shall be the basis for determining L-1.
- 6.3** At the time of payment of bills, the Income Tax, if any, shall be deducted at source as per Government Rules and guidelines as may be prevailing at the time of payment.

**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, M. P.  
DEPARTMENT OF CHEMISTRY**

6) **Validity:** The bids shall be valid for a period of **90 days** from the date of opening of tender.

7) **Opening of Tender:** The Technical bids shall be opened on..... at **3:30 PM** in the Department of Chemistry, Dr. Harisingh Gour Vishwavidyalaya. The tenderer is at liberty to attend either himself or authorize not more than one representative to be present at the opening of the tender. The representative attending the opening of the tender on behalf of the tenderer should bring with him a letter or authority from the tenderer and a proof of identification. Those who will qualify in Technical Bid evaluation shall be intimated on phone by fax/by e-mail.

8) **Criterion for Evaluation of Tenders:**

*1. Subject to the fulfillment of technical specifications mentioned in the tender document*

The Commercial Bid of only those forms are found eligible based on technical parameters and eligibility conditions will be opened. Any interference drawn by the tenderer or their representative during the opening of the Technical Bid will be their own view and The Registrar, Dr. Harisingh Gour Vishwavidyalaya will not be responsible and required to abide by the same. **The reasons for selection or rejection of a particular tender will not be disclosed.**

9) **Right of Acceptance:**

10.1 Department of Chemistry, Dr. Harisingh Gour Vishwavidyalaya reserves all rights to reject any tender including of those bidders who fail to comply with the instructions without assigning any reason whatsoever and does not bind itself to accept the lowest or any specific tender. The decision of the Vishwavidyalaya in this regard shall be final and binding.

10.2 Any failure on the part of the bidder to observe the prescribed procedure and any attempt to canvas for the purchase order will prejudice the firm's quotation.

10) **Communication of Acceptance:**

Successful bidder will be informed of the acceptance or his bid by speed post/ fax/on phone/email.

11) **Time Schedule for supply of SYSTEM:**

The supply must be completed within **30 (Thirty)** days of receipt of the Purchase Order. Part supply will be allowed.

12) **Penalty:**

In the event of the firm failing to:

(i) Observe or perform any of the conditions of the Purchase order as set out herein: or

(ii) Execute the order in good condition to the satisfaction of Department of Chemistry, Dr. Harisingh Gour Vishwavidyalaya, Sagar.



**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, M. P.**  
**DEPARTMENT OF CHEMISTRY**

- (a) It shall be lawful for Department of Chemistry, Dr. Harisingh Gour Vishwavidyalaya, Sagar in its discretion, in the former event to remove or withhold any part of the order until such times as it may be satisfied that firm is able to do and will duly observe the said conditions and in the latter event to reject or remove as the case may require any order executed otherwise than in a good condition and to the satisfaction of Department of Chemistry, Dr. Harisingh Gour Vishwavidyalaya, Sagar and by the time fixed by it and in both or either of the events aforesaid to make such arrangements as it may think fit for the execution of the order so removed or order in lieu of that so rejected or removed as aforesaid on account and at the risk of the firm.
- (b) Provided further that if in either event any excess cost be incurred by reason of the difference between the prices paid and the accepted rates, Department of Chemistry of the Vishwavidyalaya may charge the amount of such excess cost to the firm and the same may at any time thereafter be deducted from any amount that may become due to the firm under this or any other contract or may be demanded of him to be paid within seven days to the credit of the Vishwavidyalaya.
- (c) In the event of discovery of any error or defect due to the fault of the firm/vendor at any time after the delivery of goods ordered, the firm/vendor shall be bound, if called upon to do so, to rectify such error or defect at his own cost to the satisfaction of and within the time fixed by the Vishwavidyalaya. In the event of the delivery of any defective work, which owing to urgency or for any other reason cannot be wholly rejected, the Vishwavidyalaya shall have the power to deduct from any payment due to the firm such sum as it may deem expedient. In the event of work being wholly rejected, Department of Chemistry, Dr. Harisingh Gour Vishwavidyalaya, Sagar may at its discretion either:

The Vishwavidyalaya may:

- (i) Permit the firm/vendor to re-do the same within such time as it may specify at firm's own cost of all sorts i.e. materials, labour, equipments, overheads, transportation etc: or
- (ii) Arrange to get the additional work done elsewhere and by any other person or from any other source than the firm vendor in which case the amount of extra cost, if any, shall be recovered from the contractor in the manner provided in sub-clause (b) of this clause.

**14) Breach of Terms and Conditions:**

In case of breach of any of terms and conditions mentioned above, the Competent Authority will have the right to cancel the work order without assigning any reason thereof and nothing will be payable by the Vishwavidyalaya in that event.

**15) Tolerance Clause:**

- a. Dr. Harisingh Gour Vishwavidyalaya, the purchaser reserves the right to place the orders on the successful tenderer for any additional quantity at the same rates quoted by the bidder. At the option of the purchaser the quantity can also be reduced when felt necessary.
- b. The tenderers are found to accept the orders for additional/less quantity under this clause if orders are issued at the time of placement of contract or during the currency of the contract.
- c. The withdrawal of any slab rates after opening of tender will render entire tender invalid and invite action which may result banning of business dealing with firms/suppliers including in such practices. Besides forfeiture of the Earnest Money Deposits.

**16) Terms of Payment:**

- a. Material is to be supplied by the tenderer F.O.R at Dr. Harisingh Gour Vishwavidyalaya, Sagar (MP) on specified address.
- b. All payments shall be made by TT mode only after satisfactory supply and certification from Department of Chemistry. **You are to furnish your bank A/c full details viz, Name of Bank, Type of A/c, A/c No. IFSC Code, etc.**
- c. Department of Chemistry. Dr. Harisingh Gour Vishwavidyalaya, Sagar shall be at liberty to withhold any of the payments in full or in part subject to recovery of taxes including TDS as applicable and recovery of penalties mentioned in preceding para.
- d. The term “payment” mentioned in this part includes all types of payments due to the firm/vendor arising on account of this contract.
- e. Payment from Purchaser shall be made by electronic fund transfer to the supplier’s account by NEFT or RTGS for which purpose suppliers are expected to submit their complete bank details as under:-

1.	Name of Bank	
2.	Address of the Branch	
3.	RTGS/IFS Code	
4.	Bank A/c No.	
5.	Type of A/c	
6.	MCIR code	

7.	Mobile No	
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**17) Eligibility conditions:**

- The supplier must be either itself a manufacturer or authorized vendor of the manufacturer
- The Tenderer must have PAN/TIN No. and VAT Registration No. and must submit eligible attested copies of PAN/TIN No. and VAT Registration No. with Technical Bid. Technical Bid not accompanied by these documents would be summarily rejected. The bidder / registrar dealer of the bidder should not have any dispute pending with the University at any level.

**General:**

17.1 The manufacturer must submit pre-receipted Bill for payment after satisfactory supply and installation of the product at the locations Ordered.

17.2 Any violation of the terms and condition or supply of inferior quality of material shall result in total rejection of the items apart from taking appropriate remedial action at the risk and cost of the bidder.

17.3 The receipt of the Purchase Order should be acknowledged by return post.

17.4 The decision of competent authority i.e. Registrar, Dr. Harisingh Gour Vishwavidyalaya, Sagar (MP) in any matter of dispute shall be final and binding.

**19) Earnest Money Deposit (ENID):**

The Technical Bid must be accompanied by Earnest Money Deposit of Rs. 20.000 (Rupees twenty thousand only) submitted in the Form of Demand Draft drawn on any Scheduled Bank in favour of “Registrar, Dr. Harisingh Gour Vishwavidyalaya, Sagar and payable at “Sagar (MP)”. While the EMD of other vendors would be returned immediately after a decision on identification of a vendor is completed. The EMD of the selected vendor shall be returned after the Vendor has supplied and installed the materials at the locations indicated in the Purchase Order or adjusted in the **Performance Security**. **No interest will be payable on the EMD.**

**20) Performance Security:**

The vendor selected would be required to furnish a Performance Security equal to 5% of Purchase Order (P.O) of total cost in the firm of Demand Draft/FDR/Bank Guarantee from any Nationalized Bank in favour of “Registrar, Dr. Harisingh Gour Vishwavidyalaya Sagar” payable at “Sagar. MP”. In case the Performance Security is submitted in the Form

of Bank Guarantee the same should be valid for a period of 2 (two) months beyond the date of expiry of Warranty Period of the equipment.

### **21) Cost of tender document:**

The bidders will be required to deposited cost of Tender amounting Rs. 500 (Rupees five hundred Only) to be placed in the “Technical Bid” in the shape of separate DD in favour of “Registrar, Dr. Harisingh Gour Vishwavidyalaya Sagar” payable at “Sagar. MP”. This amount is non-refundable.

Tender documents can be downloaded from website of the University i.e. [www.dhgsu.ac.in](http://www.dhgsu.ac.in). Documents downloaded from website shall be accompanied by DD as mentioned in point no (23). Documents should be completed in all aspects. Incomplete documents will be rejected.

### **22) Liquidated damages:**

If a firm accepts an offer and fails to execute the same, in full or part, as per the terms and conditions stipulated therein, it will be open to this institute to recover liquidated damages from the firm @ 1% of the value of undelivered stores per week or part thereof subject to a maximum of 5% of the value of the undelivered stores. It will also be open to this institute alternatively, to arrange procurement of the required stores from any other source at the risk and expense of the firm which accepted and then failed to execute the order according to stipulation agreed upon.

### **23) Warranty:**

- (i)** Equipment covered under this tender, when purchased and installed, shall be warranted for the quality, workmanship, trouble free operation and performance for a period of **at least 24 months including company's own warranty period from the date of putting the system into operation at the University**. If any item warranty fails, the same shall be replaced free of cost including the applicable charges including Transportation cost both ways. However, it shall be obligatory on the part of OEM/ Bidder to extend the support for at least next five years after the warranty period.
- (ii)** Complete technical specifications and literature including process flow to be included with the quotation. Manufactures of various major parts/equipment must be mentioned explicitly.
- (iii)** A clear statement regarding availability of after sales service and availability of spare parts for next 5 to 10 years should be enclosed.

- (iv) A recent customer list along with their authorized representation with contact details including email address is to be submitted with technical bid.
- (v) If an order is placed with the firm, the purchase shall be governed by an arrangement as per the GFR University rules in force at the time.
- (vi) To safe guard the interests of the University/GFR, additional terms & conditions will be incorporated in the purchase order if needed.
- (vii) **Dispute** - In case of any dispute in respect of the tender, all legal matters shall be instituted within the jurisdiction of the place where the purchaser ordinarily resides.

**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, M. P.  
DEPARTMENT OF CHEMISTRY**

**ANNEXURE III**

**R/CHEM/BRNS/2017**

**Technical Bid**

**TECHNICAL INFORMATION AND  
UNDERTAKING**

<b>1</b>	Name and Address including e-mail	.....	
	ID and Telephone contact details of Bidder/Concern	.....	
<b>2</b>	Nature of Concern (i.e. Proprietor or Partnership firm or a Company or State/Central Govt. Autonomous Body/PSU. etc.). Please enclose documentary evidence e.g. Registration/Incorporation Certificate etc.		
<b>3</b>	Whether each page of Tender Document and its Annexures have been signed and enclosed	.....	YES/NO
<b>4</b>	Whether ready to supply the material within the period given by institute	.....	YES/NO
<b>5</b>	Whether the tenderer is black listed for supplying any items by Vishwavidyalaya or any of the Central /State Government Department/ Institution of otherwise penalized.	.....	YES/NO
<b>6</b>	Whether any dispute is pending with the tenderer in any of the Department or in any court. If yes, give the status of the dispute/case	.....	YES/NO
<b>7</b>	Whether evidence to slum that the		YES/NO

	manufacturer/supplier has been in business of supplying UV-Vis spectrophotometer for at least 5 years is attached with the technical bid	.....	
8	Whether supplier is the manufacturer himself	.....	
9	Whether self attested legible copies of their PAN/TIN No. and VAT attached with the technical bid	.....	YES/NO
6	Whether undertake to respond to service calls within two working days		YES/NO
7	Details of EMD submitted	.....	YES/NO
	DD No:	.....	
	Date:	.....	
	Bank Name:	.....	
	Amount: Rs.....		
	In Favour of Payable at:	.....	
17	Details of Cost of Tender Fee submitted	.....	YES/NO
	DD No:	.....	
	Date:	.....	
	Bank Name:	.....	
	Amount: Rs.....		
	In Favour of Payable at:	.....	

Signature (with Stamp).....

Name.....

Designation.....

Company Seal.....

Date:

Place:

**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, M. P.  
DEPARTMENT OF CHEMISTRY**

**UNDERTAKING**

(To be printed on the letter-head of Tenderer)

**Annexure IV**

**R/CHEM/BRNS/2017**

1. I/We undertake that I/We have carefully studied all the terms and conditions and the proposed purchase order understood the parameters of Fluorescence Spectrometer and shall abide by them.
2. I/We also undertake that I/We have understood "Parameters and Technical Specifications terms and conditions for executing the Order" mentioned in this Tender, and shall conduct the work strictly as per these "Parameters and Technical Specifications".
3. I/We further undertake that the information given in this Tender are true and correct in all respect and we hold the responsibility for the same.
4. I/We also undertake that the materials to be supplied shall be in accordance with specifications given in the Annexure I to the Tender Document and I/We shall be responsible for rejection/cancellation of contract if the materials are not found up to the mark or for civil/criminal proceedings if the material supplied is found sub-standard. We also undertake to incur the costs necessary for the tests or any other certification required by the Vishwavidyalaya, to confirm the compliance of the product with the specifications cited in the Notice for Tender.

Signature (with Stamp).....

Name.....

Designation.....

Date:                      Place:

Company Seal.....



**DR. HARISINGH GOUR VISHWAVIDYALAYA, SAGAR, M. P.  
DEPARTMENT OF CHEMISTRY**

**ANNEXURE V**

**R/CHEM/34/14/27/2016-BRNS/34368/2017-18/01**

**Commercial Bid**

**SPECIFICATION FOR INSTRUMENT**

To guarantee compliance with minimum laboratory safety requirements, and to ensure that the Fluorescence Spectrometer meets internationally-recognized safety norms and accessories.

**Instrument Name: Fluorescence Spectrometer**

**Specifications:**

Research Grade Fluorescence Spectrometer with following specification to be offered;

<b>S. No.</b>	<b>Parameters</b>	<b>Specification</b>
1.	Excitation Source	150 W or better ozone free Xe source with power supply unit should be offered.
2.	Excitation Wavelength Range	200-950 nm, Optimized in the UV
3.	Excitation Monochromator	Single Czerny-Turner excitation spectrometer or better design with 1200 g/mm gratings blazed at 300-350nm or better.
4.	Emission Wavelength Range	200-950nm, Optimized in the Visible
5.	Emission Monochromator	Single Czerny-Turner spectrometer or better design with 1200 g/mm blazed at 500-550nm for measuring emission up to 850 nm should be offered.
6.	Optics	All reflective for focusing at all wavelengths and precise imaging for micro samples i.e. the system should be mirror based system
7.	Bandpass	0-30 nm, continuously adjustable from computer
8.	Wavelength Accuracy	±0.5nm
9.	Scan speed	4800 nm/min
10.	Signal to Noise Ratio	16,000:1(RMS Method), 6000:1 (FSD Method) using water Raman signal at excitation at 350 nm, emission at 397nm, Bandpass 5nm and 1sec integration time

11.	Emission Detector	R928PMT photomultiplier tube detector, wavelength range 250 nm-850 nm operating in photon counting electronics mode
12.	Solid Sample Holder	Should be designed for viewing front-face fluorescence of thin films, powders, pellets, paper, fibers, or microscopic slides. Variable alignment angle
13.	Bandpass Filters	Central wavelengths at 320 and 340 nm with necessary holder and adapters.
14.	Order Sorting Filters	Vendor should quote set of filters (370, 399, 450, 500 and 550 nm) to remove second order spectrum
15.	Quartz Cuvette	4ml, 1cm x 1cm open top with cap
16.	Control and Analysis Software	Powerful software for data collection and system control. On start-up, the system automatically calibrates and presents itself for new experiments.
17.	Computer	The state-of-the art computer should be supplied with windows based operating system loaded with the system software.
18.	Others	<b>System should be upgradable to time resolved measurements with Time Correlated Single Photon Counting attachment with minimum dead time of 10ns. It is mandatory to highlight the dead time of TCSPC electronics in the manufactures' brochure as well as in the compliance statement.</b>
19.	Warranty	Two years from the date of installation
<b><u>Vendor should quote the following items as optional;</u></b>		
20.	Liquid Nitrogen dewar assembly	
21.	Automated Polarizers for doing anisotropy measurements	
22.	Integrating sphere for doing quantum yield measurements (80-120mm) with suitable neutral density filters	

*Note: The price will be quoted including & else duty. transportation charge. installation*

1. Total consolidated price for each items inclusive of all levies and taxes. freight. insurance, installation. Commissioning and all other incidental charges quoted for the work as details given above will be R s ... .. ( i n

w o r d s ) ... .. only for three years.

2. The above rates are inclusive of delivery charges up to Dr. Harisingh Gour Vishwavidyalaya, Sagar (M.P.)
3. The bid will be valid for a period of 90 days from the date of acceptance of the tender by the Competent Authority.

Signature (with Stamp) .....

Name.....

Designation .....

Date:

Place:

**PROFORMA OF BANK FOR BID GUARANTEE FOR BID SECURITY BY AGENTS FOR  
AND ON BEHALF OF PRINCIPAL SUPPLIER**  
(To be stamped in accordance with relevant Act)

Ref:

Bank Guarantee No. ....

**Registrar,**  
Dr. Harisingh Gour Vishwavidyalaya,  
Sagar (M.P.),

Dear Sir,

In accordance with your NIT No. ....dated.....  
M/s ..... [The Principal Supplier] having its  
registered / Head office at through its agent M/s ..... [herein after  
called the "Bidder"] having its Registered/ Head office at  
.....wish to participate in the said bid by virtue of its Authority  
Letter/ Power of Attorney No. .... Dated .....  
issued by the Principal Supplier in favour of M/s ..... [Bidder]  
for .....

As an irrevocable Bank Guarantee against Bid Guarantee for an amount of\*  
..... valid up to \*\* ....., is required to be  
submitted by the bidder as a condition precedent for participation in the said bid, which  
amount is liable to be forfeited on the happening of any contingencies mentioned in the bid  
documents.

We, the ..... Bank at ..... having our head  
office at..... # ..... guarantee and undertake to pay  
immediately on demand by The Registrar, Dr. Harisingh Gour Vishwavidyalaya, Sagar  
(M.P.) the amount\*..... (in figures and words) without any  
reservation, protest, demur and recourse. Any Such demand made by said owner shall be  
conclusive and binding on us irrespective of any dispute or difference raised by the bidder.

This guarantee shall be irrevocable and shall remain valid up to  
..... . If any further extension of this guarantee is required, the  
same shall be extended to such required period (not exceeding one year) on receiving  
instruction from M/s ..... [The Bidder] on whose behalf guarantee  
is issued.

In witness whereof the Bank, through its authorized officer has set its hand stamped on this  
.....Day of ..... 2017 at .....

Witness

Signature .....

Name ..... Signature

.....  
Official Address .....

Name.....

Designation .....

Bank's Common Seal .....

Power of Attorney No. ....

**PROFORMA OF BANK FOR BID GUARANTEE FOR BID SECURITY BY  
PRINCIPAL SUPPLIER QUOTING DIRECTLY**  
(To be stamped in accordance with relevant Act)

Ref:

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