# JIWAJI UNIVERSITY, GWALIOR

No. JU/ZOOL/2017-18/ 140

Date 16.01.2018

# ONLINE e-TENDER NOTICE for purchase of Fluoroscence Microscope

Online tenders are invited in e-procurement system through www.mpeproc.gov.in from Manufacturer / Authorised distributor only, for supply of equipments.

Tender document containing terms, condition & specification of the items can be downloaded from the e-procurement website www.mpeproc.gov.in by paying Rs. 5000.00 online tender can also be seen at Universities website www.jiwaji.edu

# Terms:

- 1. Online tender can be purchased up to 5.00PM till 28.02.2018
- 2. Online price bid can be submitted up to 5.00PM till 01.03.2018
- Earnest money (EMD) and other documents can be submitted at Jiwaji University Stores through Speed Post / Regd Post up to 5.00PM till 05.03.2018
- Online technical bid will be opened on 06.03.2018
- 5. All terms and conditions of the tender can be seen on above websites
- Registrar Jiwaji University Gwalior reserve right to accept / reject / cancel any tender without stating any reason

Marahi -

REGISTRAR Registra Jiwaji University Gwalior (M.P.)

# जीवाजी विश्वविद्यालय, ग्वालियर

क्रमांक - JU/ZOOL/2017-18/140

दिनांक - 16.01.2018

# ऑनलाइन e निविदा आमंत्रण फ्लूरोसेंस माइक्रोस्कोप खरीदने हेतु

उपकरण खरीदने के लिए केवल निर्माता / अधिकृत विक्रेता से एम् पी इ-प्रोक्योरमेंट सिस्टम के तहत निविदा आमंत्रित की जाती हैं जो की www.mpeproc.gov.in से डाउनलोड की जा सकती है, इसके अतरिक्त विश्वविद्यालय की वेबसाइट www.jiwaji.edu पर भी देखी जा सकती है

निविदा प्रपत्र समस्त टर्म्स कंडीशन्स एवं तकनिकी विवरण सहित इ-प्रोक्योरमेनेट वेबसाइट पर Rs. 5000.00 की ऑनलाइन टेंडर फीस जमा करने पर डाउनलोड की जा सकती है

# टीप

- १. ऑनलाइन निविदा प्रपत्र क्रय करने की अंतिम तिथि 28.02.2018 सायं 5.00 बजे तक है
- २. ऑनलाइन बिड डालने का दिनांक 01.03.2018 सायं 5.00 बजे तक है
- 3. धरोहर राशि एवं अन्य दस्तावेज स्पीड पोस्ट /पंजीकृत पत्र के द्वारा जीवाजी विश्वविधयालय स्टोर में 05.03.2018 सायं 5.00 बजे तक प्राप्त की जाएगी
- ४. ऑनलाइन बिड खुलने का दिनांक 06.03.2018 निर्धारित है
- ५. निविदा के शेष समस्त जानकारी उपरोक्त दर्शायी गयी वेबसाइट्स पर देखी जा सकती है
- ६. कुलसचिव जीवाजी विश्वविद्यालय को बिना कोई कारण बताये निविदा स्वीकृत / अस्वीकृत / रद्दीकरण करने का अधिकार होगा

# Tender Form for supply of Instruments

SOS In Zoology, Jiwaji University, Gwalior 474011

Tender Form No. JU/Zool/2017-18/

Name of work: Supply of Fluoroscence Microscope

Last date for purchase of online Tenders

through www.mpeproc.gov.in

: 28.02.2018 up to 5.00p.m.

Last date for receiving online Tenders (Price

: 01.03.2018 up to 5.00p.m.

Last date for receiving EMD, Technical bid

And other document

: 05.03.2018 up to 5.00p.m.

Tender Cost : Rs. 5000/-

Earnest Money Deposit (EMD) : Rs. 1,00,000.00

E-Tenders are invited from Reputed Manufacturers or their Authorized Representatives for the supply of Instruments specification as mentioned in the enclosed list. Tenders will be considered subject to the following terms and conditions.

- 1) All tenders must be accompanied by a Bank draft against EMD (as applicable) drawn in favor of Registrar, Jiwaji University, Gwalior for an amount mentioned above. Tenders received without earnest money will be liable to be rejected and may not be considered.
- 2) The tender document containing terms, conditions & specifications of the items can be downloaded from the MP Government e-procurement website www.mpeproc.gov.in by paying Rs. 5000/- online tenders can also be seen at Universities website www.jiwaji.edu.
- 3) The bidder should agree to submit a DD from a Nationalized Bank for up to 10% of the equipment, and should have validity for the entire Warranty Period.
- 4) The bidder should agree to execute an agreement for proper supply, installation and satisfactory working of the equipment exactly to the specifications mentioned.

- 5) The rates quoted should be FOR Gwalior. The prices should be exclusive of (without including) CST/VAT and other charges. However, the exact details of taxes should be given separately.
- 6) Being an Educational Institution, the University is entitles to issue concessional Sales Tax Certificate. No other sales tax form is issued. If concessional sales tax certificate is not acceptable to the supplier, the actual rate of sales tax to be charged must be clearly mentioned.
- 7) This institution is exempted from payment of Central Excise duty in terms of Govt. Notification No. 1097-Central Excise dated 01/03/1997 and modifications thereafter Copy of necessary certificate will be provided by the University.
- 8) For imported equipments: The institution is registered with Department of Science and Industrial Research (DSIR) Govt. of India vide Government Notification No. TU/V/RG-CDE(56)/2009, dated 26.11.2009 and is exempted from payment of custom duty.
  (Necessary certificate copy shall be provided by the University. The bidder shall be responsible for getting the consignment cleared and deliver the goods. The expenses on the same must be included in the cost of the equipment)
- 9) The transportation up to Jiwaji University should be undertaken by the supplier and prices should be included in the bid. All relevant documents shall be provided by the University
- 10) The manufacturer's name, their trademark and brand should invariably be mentioned in the tender and illustrated leaflets giving technical particulars/ details etc. should be attached with the quotation to facilitate consideration of the offer.
- 11) The Bidder should quote their best willing price which should be valid for the period of 120 days from the due date of tender.
- 12) The period of delivery of the equipment should be quoted.
- 13) The tender should avoid the use of vague terms such as "extra as applicable".
- 14) Printed conditions on the back of the offer submitted will not be binding unless separately mentioned
- 15) E-tender along with terms and conditions must be submitted separately so that for individual item separate comparative statements could be prepared.
- 16) Advance payment either direct or through bank will not be accepted under any circumstances. As per rule, full payment will be made after receipt of material, inspection thereof and after satisfactory installation and working of the entire equipment. Payment through LC is acceptable in case of imported equipment only.
- 17) The tenderer should clearly state regarding charges for maintenance, etc. of the equipment, if any. Installation should be done free of cost.
- 18) Offers received not according to our terms and conditions and within the time prescribed shall be rejected. Delay due to postal services of any kind will not be considered for acceptance of the tender.

Signature of the Bidder with seal

Gwalior (M.P.)

- 19) In all matters of dispute the decision of Registrar, Jiwaji University, Gwalior shall be final & binding on the Bidders
- 20) The address of Customer Care Centre for maintenance along with the list of well-reputed organizations that have purchased the same equipment or similar equipment should be provided
- 21) In case of an authorized dealer, a copy of the current Certificate from Manufacturer must be attached as proof.
- 22) The date and time of opening of tender is 06.03.2018 at 3.30pm in the presence of intending Bidders or their representative who may like to be present in the office of the registrar, Jiwaji University, Gwalior.
- 23) If any of the dates of the receipt /opening of Tender happen to be declared as holiday, the schedule will be shifted to the next working day automatically. The University reserves the right to change the date.
- The Sealed Tender envelope should contain two sealed envelopes.
  - A. The "First envelop should be Super scribed as 'Technical Bid this should contain the specifications of the equipment and terms & conditions of supply, and the questionnaires for terms of supply and the specification sheets (supplied by the University along with Tender document) duly checked yes/no etc. No price should be mentioned.
  - B. The 'Second' sealed envelope should be super scribed as 'EMD and should contain the Earnest money in original and receipt of Rs. 5000/- paid through www.mpeproc.gov.in.

The above two sealed envelopes must be placed in one sealed envelope and should be super scribed "Tender No, for (name of item), to be opened on ...... Only those tenders which fulfill the technical specifications shall be considered for opening of the commercial bid.

Financial bid to be submitted online only.

- 25) Sealed envelops should reach the Registrar, Jiwaji University, Gwalior -474011 on or before 05.03.2018, by 5.00p.m. by Speed Post / Registered Post only
- 26) The prices charged for the items supplied by successful Tenderer shall in no event exceed the lowest price at which the successful Tenderer sells the same items to any other persons during the period of supply to the University.
- 27) If any time, during the period of supply, the tenderer reduces the sales price chargeable for any item, he shall forthwith notify such reduction to the Registrar, Jiwaji University, Gwalior, and the price payable for the items supplied after the date of coming into force of such reduction or sale shall stand corresponding reduced.

Signature of the Bidder with seal

Gwalior (M.P.)

- 28) All the accessories are to be treated as one unit and separate tenders are not required for each accessory. The cost of Essential Accessories will have to be included in the total cost of the equipment.
- 29) Performance reports and List of organizations in India (along with phone numbers of users) who have been supplied the same (or similar) model of the equipment should be provided.
- 30) Canvassing for support in any form for the acceptance of any tender is strictly prohibited. Any tenderer doing so will tender himself liable to the penalties, which may include removing of his name from the register of approved Suppliers.
- 31) The bidder shall forfeit the EMD if we find the bidder providing any false information and no further communication in this respect shall be entertained.

Registrar iwaji University

I/We accept the terms and conditions of the tender and understand the decision of the University shall be final and acceptable to me /us

3

Signature and Seal of the Tenderer With Date

# Jiwaji University, Gwalior

Annexure-1 (To be enclosed with the Technical Bid)

Tender for Fluoroscence Microscope	
Tender Form No. JU/Zool/2017-18	Date:
the Tender	
	A
To The Registrar Jiwaji University Gwalior 474 011, MP, India	+1, V
Dear Sir,	
I/We hereby submit our tender for :	
<ol> <li>I/We am/are enclosing herewith DD No.         drawn in favour of the "The Registrar, Jiwaji University, Gw 5000/- towards tender fee paid through www.mpeoproc.gov.ir WITH THE TECHNICAL BID SHALL BE SUMMARILY REJ.</li> </ol>	alior" towards EMD, and Receipt dated
3. I/We have gone through all terms and conditions of the tender do	ocuments before submitting the same.
<ol> <li>I/We hereby agree to all the terms and conditions, stipulated to warranty, penalty, etc. Quotations for each item are being submitted value.</li> </ol>	by the Jiwaji University, in this connection including delivery, ed under separate covers, and shall be considered on their face
5. I/We have noted that overwritten entries shall be deleted unless of	luly cut & re-written and initialed.
6. Tenders are duly signed (No thumb impression should be affixed	d)
<ol> <li>I/We undertake to sign the contract/agreement, if required, wi acceptance, failing which our/my earnest money deposited may suppliers at Jiwaji University, Gwalior.</li> </ol>	ithin 15 (Fifteen days) from the date of issue of the letter of be forfeited and our/my name may be removed from the list of
	Yours faithfully,

Signature of Tender(s) with full Address.

Jiwaji University Gwalior (M.P.)

## CHECK LIST FOR TERMS AND CONDITIONS

Check list for Terms and Conditions (To be filled by the bidder and submitted along with the technical bid). Supporting documents must be numbered serially and the same must be indicated here on this page. These documents should be placed inside the envelope containing technical bid.

1.	Certificate of Manufacturer / Indian Subsidiary of the Manufacturer / Authorized Representative in India, enclosed.
2.	List of organizations supplied with the equipment or similar equipment (at least 03 in India)
3.	Whether the quoted price is – FOR Gwalior:
4.	Whether rates are quoted as per tender's specifications
5.	Quotation being submitted directly by the manufacturer or authorized representative
6.	Quality assurance certificate like ISI, ISO 9002, IP/BP or any other, please specify
7.	Proof of tendering firm having filled IT Return for FY 2014-15, 2015-16 & 2016-17 attached
8.	EMD is enclosed
9.	Copy of GST registration attached
10.	Tender fee Receipt of MP Online enclosed
11.	Literature of original catalogue of the product and accessories are attached for reference
12	Comprehensive Guarantee/Warranty for a period not less than three years: YES/NO.

(SIGNATURE OF THE BIDDER WITH NAME & SEAL)

Jiwaji University Gwalior (M.P.)



## (To be enclosed with the Technical Bid)

1	Reputed manufactures of equipment (specified in the tender notice) or their Authorized agents with well established sales and services facilities only need to respond to the tender notice.	Confirm / do not confirm to Requirement
2	Separate quotation must be submitted for each item specified in the tender notice. Taxes, duties, packing & forwarding charges, transport and insurance charges may be separately indicated where applicable	Complied/ Not compiled
3	The make model no. detailed specifications, illustrative pamphlets must accompany the quotation without which the quotation are liable to be rejected.	Complied/ Not compiled
4	In case the bidder is an authorized agent, documentary proof to this effect must be enclosed with the quotation.	Enclosed / not Enclosed
5	Bidders detailed company profile, information on after sales/ service and test facilities available along with address and telephone no. of sales office and service centre catering to Gwalior must be given along with the quotation. Details of product & application support available may also be indicated.	Information enclosed / not enclosed
6	The bidder must indicate whether he is willing to supply complete circuit diagram, wiring diagram component layout diagram, service manual and component identification catalogue along with the equipment free of charge in case an order is placed with him. The supply of this literature will be considered as part of supply of equipment offered.	Will be supplied/ Cannot supply
7	The bidder must furnish a list of customers to whom the equipment quoted has been supplied preferably in Central/Northern India. Name and contact telephone no. of the customers may be furnished.	
8	Quotation must be furnished in sealed envelopes separately for each item quoted under the tender. The name of the item quoted and tender notice particulars should be clearly indicated on top of the envelope	Complied/ Not compiled
9	Bidders are requested to carefully go through the specifications given in the tender and quote only when they are sure they have product specified to offer.	Complied / not complied
10	Warranty details and terms and conditions of warranty must be given. If any component of the equipment quoted is not covered by the warranty, the same must be specified.	Complied / not complied
1	The bidder will furnish a test certificate along with complete test result and the test conditions for the equipment specifications offered in case an order is placed.	Agreeable / Not agreeable
2	<ul><li>(a) If an order is placed with the bidder, the bidder will install and test the equipment to its specifications at site of installation free of charge.</li><li>(b) If it is not possible to test some specifications, the same may be indicated.</li></ul>	Agreeable / Not agreeable Agreeable / Not agreeable
13	Performance guarantee: In case the Purchase Order is placed, 10% of the equipment value has to be submitted as performance security deposit in the form of bank Guarante till the completion of warranty period.	Agreeable / Not agreeable
4	The bidder(s) must carry validation test at the site of installation at their own cost.	Yes/No

# Note:

1) Unless the questionnaire is completely filled in and detailed information provided as required, your offer is liable to be rejected.

2) Complete questionnaire should be signed by the bidder and sent along with the quotation in the Technical Bid.





#### Further Instructions

- The Technical bid and EMD should be enclosed separately in sealed covers and both the envelopes must be
  placed together (along with the EMD cover) in another outer cover which should be sealed. This is to ensure
  that if the technical bid qualifies with the laid down specifications and configurations, only then the price bid
  will be opened. The envelopes should be carefully super scribed as has been mentioned earlier.
- 2. EMD and Tender Fee Receipt should be kept (together) in a separate Sealed Cover (EMD cover)

3. The technical bid must have the following enclosures:

True copy of technical bid. All items quoted must be clearly indicated.

- Detailed literature, illustrative pamphlets, company profile, customers list & questionnaire duly filled and tender form along with Annexure 1-3 duly signed.
- The two sealed envelopes (i. Technical bid and ii. EMD) should be kept in the outer sealed cover.
- 5. Authorized dealers should submit a copy of valid dealership certificate along with quotation.
- The last date for submitting e- tender is 01.03.2018 by 5.000P.M.
- Late/delayed offers will not be accepted.
- In event of any date indicated above is a declared holiday the next working day shall become operative for the respective Purpose mentioned therein.
- 9. The technical bids will be opened in the presence of the bidders or their authorized representatives on 06.03.2018 at 3.30 pm, in the University Office, Jiwaji University, Gwalior. It is the responsibility of the bidders to present themselves at the time of opening of the technical bids.
- The Registrar of Jiwaji University reserves to accept or reject any offer in part or whole without assigning any reasons whatsoever.
- 11. The tender document can be downloaded from the website www.mpeproc.gov.in The download tenders should be accompanied by receipt of Rs. 5000/- paid through www.mpeproc.gov.in towards the tender fee.

Signature of the Bidder

Gwalior (M.P.

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# // AFFIDAVIT//

# (To be Contained in Envelop I)

I/We						who is	/ are				(state	ne in
the	firm/cor	mpany)	and	competent	for	submission	of	the	affidavit	on	behalf	of
M/s do soler	nnly aff	îrm an oa	th and st	ate that:						*******	. (Contrac	ctor)
informa	tion in	n bid d	locument	s which a	re bei	ne certificates /	in r	esponse	e to notic	e invi	ting e-ter	nder
						(name of wo	ork) da	ated .		iss	sued by	the
I/we am	/are full	y respons	ible for t	he correctnes	s of foll	lowing self-cert	ified in	formati	on/document	and ce	rtificates:	
						en in the bid doo						
	2.	That:										
			a.	Demand d	raft dep	osited as earnes	t money	y, recei	pt for cost of	bid do	cument and	d
						ument provided						
			b. c.			ding financial quality ding various tec					correct.	
				mormatio	ii i egai (	anig various tec	illicai	quantica (uantica	ations is con	ect.		
	3.	No close	relative o	of the undersi	gned ar	nd our firm/com	pany is	workin	in the depart	artment		
					OR							
	4.	Following	g close re	elative are wo	rking ir	the departmen	t:					
Name				Post			P	resent I	Posting			
							Signa	ture wi	ith seal of th	e depo	nent (bidd	ler)
I/We						above			o hereby co	ertify th	hat the fa	icts
пенион	и ш ав	ove paras	1 to 4 all	CONTECT TO II	ie best (	n my knowiedg	e and b	ener.				
Verified	today			(Dated) at			(place)	r e				
									1			
								.03	~			

Signature with seal of the deponent (bidder)

Jiwaji University Gwalior (M.P.)

# JIWAJI UNIVERSITY, GWALIOR

# COMMERCIAL BID (ONLINE) FOR PURCHASE OF EQUIPMENT

1.	Name of the Firm :-		
	······································	P4 V	
2.	Address of the Firm :-		
3.	Name of the Proprietor / Partner / Director of the Firm :-		
4.	Telephone No. :-		
	Kindly read all the conditions given in tender form before filling the commention rates in below table (Leave it blank)	nercial bid cor	mpulsorily, do no

Sr. No.	Equipment	Rate / Item CURRENCY				
1	Fluoroscence Microscope	In Figure	In words			
1.	1 idoroscence inicroscope					
2.	Optional Accessories A. Item no. 1 B. Item no. 2					

(SIGNATURE OF THE BIDDER WITH NAME & SEAL)
Gwalior (M.P.)

# SPECIFICATIONS FOR FLUORESCENCE MICROSCOPE

(FULLY MOTORIZED UPRIGHT BRIGHT FIELD PHASE CONTRAST AND FLUORESCENCE MICROSCOPE WITH IMAGE ANALYSIS SYSTEM)

#### The system should have the following:

# 1. Microscope body:

- a) Fully motorized upright upgradable trinocular research microscope with Bright field, DIC, Phase contrast and Fluorescence unit.
- b) The microscope should have at least motorized 6-7 position nose piece.
- c) The stage should have X, Y and Z focus movement.
- d) Motorized field diaphragm disc, with motorized 5-6 field turret for fluorescence filter chamber and incident light reflection.
- e) Touchscreen controlled & programmable function keys.

#### 2. Optical System:

a) Infinity corrected optical system.

## 3. Transmmitted Light Illumination:

- a) Microscope should have atleast 12V-LED/Halogen transmitted light with 30000-50000 hrs life.
- b) Condenser: Motorized universal condenser with 6-8 positions for optical elements.
- c) Extra bulb.

#### 4. Eyepiece lens and eyepiece tube:

- a) It should be antifungal type trinocular tube with FOV 22-25mm or better with 3 way light path distribution (100:0, 20:80 and 0:100)
- b) The eyepieces should be of at least 10X magnification with diaptor for adjustment facility (field of view/F.O.V 22-25mm)

## 5. Nosepiece:

a) Nosepiece with 6 position with DIC slots.

#### 6. Stage & Specimen holder:

a) Mechanical stage which rotates to 110\`; multifunctional specimen holder (for two slides, etc) Maklr counting chamber.

# 7. Obectives: for bright field, phase contrast and fluroscence imaging:

a) Universal plan fluorite/Semi Apochromat/Plan flour, with higher NA & WD

4 or 5X (Numerical aperture 0.12-0.13 or better)

10X (Numerical aperture 0.25-0.30 or better)

20X (Numerical aperture 0.40-0.50 or better)

40X (Numerical aperture 0.75 or higher)

100X (Numerical aperture 1.25-1.30 or better)

b) Lens emersion oil, lens cleaner, brush, etc.

## 8. Fluorescence attachment:

- a) It should have motorized 6-8 position turret.
- b) The light source should have alignment –free life time centrable lamp mount for 120v or better; pre-centered mercury fiber illuminator (at least 2000 hrs. or max.) or metal helide/mercury arch lamp with focusable collector and heat protection filter. Should have liquid light guide & coupler.
- c) Narrow band pass filters should be interference type for <u>FITC/GFP</u> (e.g. <u>EX465-495</u>, DM505, BA 515-555), <u>ALEXA-488 YFP</u> (e.g. EX 490-500, DM-520-580, BA 520-570), <u>TRITC/ALEXA 546</u>, <u>DAPI/HOECHST</u> (for ex, EX 340-380, DM 400, BA 435-485 DAPI/UV/HOECHST), RHOD (EX-546/10, DM-560, BA-585/40), etc.
- d) There should not be any cross talk between these excitations.

# 9. Digital Camera:

- a) Digital monochrome cooled CMOS Camera and SW kit Should have about 15-20 million pixel resolution or better.
- b) Capable of requiring colour & monochrome images.
- c) Should have USB 3/fire wire port for transferring Camera onto Desktop/Laptop through single wire with suitable C-mount Camera adapter.

# 10. Image analysis software:

Should have.

- a) Fully compatible with bright field, DIC, phase contrast fluorescence imaging, analysis and image acquisition. There should not be a need of dongle.
- b) Overlay multiple images, document groups, for side by side images comparison.
- c) Time lapse imaging, manual multiple image alignment,
- d) Z-axis imaging, multiple image stitching.
- e) Phase analysis, auto measurement.
- f) Fluorescence channel merging and extraction.
- g) 2D/3D view. ND viewer.
- h) Report generator facility.
- i) Database, vector layer and multi dimensional file format.
- j) Region and line measurements.
- k) Touch count/ object count facility to count objects, mix several classes and name them and export to excel files or work books.
- 1) Documentation and collaboration. Automatic recording of experimental parameters for reference or reloading for sub-sequent expts.

Registrar
Jiwaji University

Gwalior

- m) Measurement of fluorescence density (Cellular, nuclear, cytoplasmic), commet assay length and area measurement, merge, crop & image arithmetic. Measurement of area intensity through image stacks.
- n) Microscope camera and software should be from same manufacturer.
- o) Online measurement whilst displaying a live image.
- p) Parallax correction.
- q) Possibility to add additional application modules, fully integrated to core application.

# PC workstation, Power back-up and Warranty:

- a) Compatible branded computer with i7 processor, Windows 7/10, USB3/ Fire wire port
- b) Data collection and processing unit: Branded computer with i7 processor, 8GB RAM, DVD writer, 1 TB or higher HDD, Keyboard, optical mouse, 24" TFT Color monitor or better alongwith multimedia kit, color laser printer & online 2KVA UPS with at least 30 min. back-up.
- c) 2 years additional warranty for training to the users and maintenance of the equipment (Total 3 year warranty)

## Optional item: (To be quoted separately)

- a) A 2/3" inch peltier cold (Ta-10°C) 12.5MP or better color scientific CCD Camera or CMOS Color Camera 1/1.8" CMOS, 5 mega-pixel or better (2880 X 2048) (at least)

  The camera should be capable of capturing 15 fps at full resolution and can go up to 30 fps. Easy USB-3 connectivity, C Mount 0.55X relay lens or better. Should have Q.E.>65%, USB 3.0 connectivity & option for One-time, Continuous & Manual exposure modes.
- b) A 2/3" inch 1360x1024 1.4MP, 6.45 micro meter pixel cooled (TA-10°C), 14bit monochrome camera cooled (Ta-10°c) for high sensitive fluorescence live cell imaging.

  The monochrome camera should be sensitive to collect both visible and NIR signals, such as auto Fluorescence and fluorescence signals.

Switching between the cameras should automatically be done through the software using prisms for 100% light distribution to one of the camera at a time. The super imposition of the images that is fluorescence/autofluorescence and H & E images should be done automatically in real time for comparison of the autofluorescence markers with the H & E stains Camera and all the motorized part of microscope and imaging software should be communicating for seamless multi dimensional applications.