



॥ सा विद्या या विमुक्तये ॥

भारतीय प्रौद्योगिकी संस्थान धारवाड
Indian Institute of Technology Dharwad

EXPRESSION OF INTEREST

No. IITDh/GA/CRF/2018-2019/08

**EXPRESSION OF INTEREST (Eoi) FOR PROCUREMENT
of
DIGITAL FULLY AUTOMATED Inverted FLUORESCENCE MICROSCOPE
WITH HIGH-SPEED COLOR CCD CAMERA AND SW FOR
MULTICHANNEL AND IMAGE ANALYSIS**

1. Introduction

IIT Dharwad is an Institute of National Importance created by an Act of Parliament in 2016. IIT Dharwad has been steadily establishing its operations in its transit campus. Simultaneously, the institute is employing bright young and accomplished faculty. A number of unique research and development programs are on the anvil. The institute now needs to raise the levels of the capacity with the best of the facilities and infrastructure. This will provide highly talented and accomplished faculty to pursue not only their research but also think of innovative way of introducing instructional/teaching/learning solutions to practical problem of the students.

2. Objective

The objective of this invitation of Expression of Interest (Eoi) is to seek responses from eligible Vendors for SUPPLY, INSTALLATION, COMMISSIONING, DEMONSTRATION and TRAINING OF **Digital fully automated Inverted Fluorescence Microscope with High-speed Color CCD camera and SW for multichannel and Image Analysis as per Annexure-I**

3. Timelines

3.1 Major activities in the procurement process will be as given below: -

SI No	Activity	Remarks
(a)	Pre-Bid Meeting	<input type="checkbox"/> To clarify the issues/ queries raised by interested firms facilitate submission of bids.
(b)	Deadline for submission of Eoi	<input type="checkbox"/> Till 12.00 Hrs on 12/11/2018
(b)	Issue of Tender Document	<input type="checkbox"/> Only to the vendors who submit the response to the Eoi. The tender document to such vendors will be sent via e-mail
(c)	Submission of Tender Documents	<input type="checkbox"/> Deadline for bid submission: Till 16.30 hrs on 03/12/2018(Tentative). Based on updated specifications and tender document
(d)	Evaluation of Technical Bids	About 3 weeks (Tentative)
(e)	Opening of Commercial Bids	<input type="checkbox"/> The shortlisted bidders will be intimated by e-mail the schedule of opening of the commercial bids
(f)	Award of Contract	<input type="checkbox"/> The selected vendor will be awarded the contract.

4. MATERIAL DESCRIPTION

Digital fully automated Inverted Fluorescence Microscope with High-speed Color CCD camera and SW for multichannel and Image Analysis as per specifications described below in Annexure-I

4.1

Annexure-I:

Specification for Digital fully automated Inverted Fluorescence Microscope with High-speed Color CCD camera and SW for multichannel and Image Analysis

Stand	Motorized Z focus drive, fully automated transmitted light axis with perfectly integrated LED illumination for a constant color temperature. The integrated Illumination Manager automatically sets the optimal settings for best image quality as well as for fast and reproducible results. The automated condenser head ensures more convenient and faster work.
Smart Touch Screen	To control all automated microscope functions conveniently and intuitively.
Function keys	To customized operation of the microscope as per user need.
External control box	LED supply unit including integrated power supply for LED illumination and control of the motorized microscope functions.
Stand Top	Stand top with coded 7-fold objective nosepiece, including new 1" Fluorescence axis with motorized FIM (fluorescence intensity manager) and motorized field diaphragm disc, with motorized 5fold turret for fluorescence filter turret.
TL – Illumination	LED Lamp housing [Light Emitting Diode]
Condenser	Motorized condenser with motorized top lens, automatic Koehler illumination, for objectives 1.25x100x, for BF and POL contrast
Fluorescence Illumination	White Cool LED to cover intense, broad-spectrum for imaging most common fluorescent stains. Spectral coverage is from the UV (DAPI excitation) to the Red region (Cy5 excitation). Lifetime 25000 operating hours
Fluorescence Filters	BAND PASS Filter – DAPI, GFP/FITC,RFP, YFP
Stage	Motorized XY stage with 110° rotation & multi-functional specimen holder
Objectives	5x/0.12 , 10x/0.25, 20x/0.40, 40x/0.65, 100x/1.25
Eyepiece	10x/22 BR M
Observation tube	Trinocular with viewing angle 20° beam splitter 0/100%
High-Speed Camera	Cooled fluorescence color camera with USB3.0 interface. Ideally suited for both low light fluorescence application and bright field imaging with superb color reproduction. Based on SONY® ICX674AQG color CCD or equivalent sensor with Ex-View HAD 2 technology high speed of acquisition combined with high sensitivity even in the near infrared region. The camera offers 5 Mega pixel, 4.54 μm x 4.54 μm pixel size. Max. Frames per second (color)*: 1x1 (1920 x 1440) 40 fps Turbo Scan (1280 x 1024) 50 fps 3x3 binning ~90 fps 16 bit A/D converter with 12 bit and 8-bit digitization mode.
Camera Mont	0.7X

Live Cell Incubator	Onstage active CO2 incubator along with necessary temperature controller and CO2 controller.
SOFTWARE	Dongle protected, Multi-Channel Acquisition Definition of up to 8 acquisition channels per experiment. Each acquisition channel can be defined with different contrasting techniques and with different acquisition parameters. Measurements software module designed to simplify the manual tasks involved in generating measurement parameters such as length, distance, area, perimeter, diameter, and angles. All measurements are displayed in an interactive table and can be exported to excel or used to generate reports.
Note	Microscope, Camera, and SW all must be from the same manufacturer. The microscope should come with all the required accessories to make it functional for brightfield and fluorescence applications.
PC Hardware	Core i7 processor, minimum 8 GB RAM, 1TB HDD, 2GB graphics card with USB 3.0 and minimum 21" LED monitor.

DETAILS OF PRE-BID MEETING

To clarify the issues/queries raised by interested firms and to facilitate in submission of bids, the pre-bid meeting would be held as follows:

Place	Time	Date
Board Room, Admin Building, IIT Dharwad	12.00 Hrs	12/11/2018

PROCEDURE FOR SUBMISSION OF RESPONSE TO THE EoI

The response to the EoI should reach IIT Dharwad on or before 12/11/2018 by 12.00 hrs on the following address:

The Assistant Registrar
IIT Dharwad
P.B. Road, Near High Court, Dharwad-580011

Or can be forwarded by e-mail at pro@iitdh.ac.in on or before 12/11/2018 by 12.00 hrs.

For any queries, you may reach us at 0836-2212839

Please acknowledge the receipt of this invitation for EoI

Sd/-
Assistant Registrar
IIT Dharwad