



# CSIR - CENTRE FOR CELLULAR & MOLECULAR BIOLOGY

(COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH)

UPPAL ROAD, HYDERABAD 500 007, TELANGANA, INDIA

TELEPHONE: +91-40-27160222-41/27192681, FAX: +91-40-27160996/27160591, E-MAIL: SPO@CCMB.RES.IN

## PURCHASE ORDER

File No.	3169/081119/1741/EQPT	PURCHASE ORDER NO.	3169/081119/1741/EQPT/2266	DATE:	21.03.2020
SUPPLIER			INDIAN AGENTS/DISTRIBUTOR/OFFICE		
M/s Leica Mikrosysteme Vertrieb GmbH, Ernst-Leitz-Strasse 17-37, D-35578, Wetzlar, GERMANY			M/s DHR Holding India Pvt. Ltd. Leica Microsystems Division, Wolfpack Workspaces, # 39, 8 <sup>th</sup> Main Road, Vasanth Nagar, BENGALURU 560 052 KARNATAKA, INDIA. E-mail: <a href="mailto:Sujoy.Dey@leica-microsystems.com">Sujoy.Dey@leica-microsystems.com</a>		
Sub:	Supply of Leica Model TCS SP8 STED 3X Stimulated Emission Depletion (STED) based Super Resolution Microscope				
Ref:	Your Quotation / Price Bid No. Nil dated 06.01.2020 received from M/s DHR Holding India Pvt. Ltd / Leica Microsystems Division, Bengaluru, INDIA				

Dear Sirs,  
Please arrange to supply the following items as per details overleaf.

S.No.	Part No./Description	Qty	Unit Price	Total Price
1.	LEICA MODEL TCS SP8 STED 3X STIMULATED EMISSION DEPLETION (STED) BASED SUPER RESOLUTION MICROSCOPE SYSTEM WITH TUNEABLE PULSED WHITE LIGHT LASER ETC. AS PER ATTACHED LIST, ANNEXURE-I (TOTAL NUMBER OF ITEMS: 76)	AS PER LIST	€ 5,18,500.00	€ 5,18,500.00

TOTAL FCA PRICE GERMANY € 5,18,500.00

PLUS AIRFREIGHT & INSURANCE CHARGES: € 1,500.00

TOTAL CIP HYDERABAD: € 5,20,000.00

WARRANTY:	3-YEARS WARRANTY	PAYMENT TERM:	100% THROUGH LETTER OF CREDIT
DELIVERY PERIOD:	12 WEEKS	SHIPMENT TERM:	CIP, HYDERABAD
FREIGHT & INSURANCE	SELLER'S RESPONSIBILITY	FREIGHT FORWARDER	SELLER'S NOMINATED FREIGHT FORWARDER
CUSTOMS CLEARING AGENT OF CCMB:	M/S EAST WEST FREIGHT CARRIERS LIMITED, FLAT NO.S-11, ALLADIN MANSION, BEGUMPET, HYDERABAD 500016, TEL: +91-40-27765896 & 27765897, E-Mail: <a href="mailto:aioperationshyd@ewfcpl.com">aioperationshyd@ewfcpl.com</a> & <a href="mailto:custservicehyd@ewfcpl.com">custservicehyd@ewfcpl.com</a> & <a href="mailto:lssrinivas@ewfcpl.com">lssrinivas@ewfcpl.com</a> - FOR ARRANGING CUSTOMS CLEARANCE OF THE GOODS.		

### IMPORTANT CONDITIONS

- PLEASE SEND YOUR ORD.ACK/PRO.INV. IMMEDIATELY UPON RECEIPT OF THIS ORDER.
- WARRANTY: THE COMPLETE SYSTEM SHOULD CARRY ONSITE COMPREHENSIVE WARRANTY OF 36 MONTHS INCLUDING ALL LASERS FROM THE DATE OF SUCCESSFUL INSTALLATION, COMMISSIONING AND ACCEPTANCE OF LEICA TCS SP8 STED 3X SYSTEM.
- PAYMENT TERMS: 100% THROUGH LETTER OF CREDIT. OUT OF WHICH 90% PAYMENT WILL BE MADE AGAINST SHIPMENT SUBJECT TO SUBMISSION OF PERFORMANCE BANK GUARANTEE TOWARDS 10% OF THE ORDER VALUE. BALANCE 10% PAYMENT WILL BE RELEASED AFTER RECEIPT, INSTALLATION, COMMISSIONING AND ACCEPTANCE OF LEICA TCS SP8 STED 3X SYSTEM.
- SERVICE, MAINTENANCE & SPARE PARTS SUPPORT & RESPONSE TIME: THE SERVICE, MAINTENANCE AND SPARE PARTS SUPPORT SHOULD BE FOR A PERIOD OF 10 YEARS FROM THE DATE OF INSTALLATION, THE RESPONSE TIME FOR ATTENDING A CALL SHOULD BE WITHIN 24 HOURS BY FACTORY TRAINED SERVICE ENGINEER BASED IN HYDERABAD.
- INSTALLATION: INSTALLATION TO BE DONE BY FACTORY TRAINED ENGINEER OF M/S LEICA MICROSYSTEMS / DHR HOLDING INDIA PVT LTD.
- APPLICATIONS AND OPERATIONS TRAINING: APPLICATIONS AND OPERATION TRAINING ON THE COMPLETE SYSTEM (LEICA TCS SP8 STED 3X SYSTEM) AND SOFTWARE FUNCTIONS SHOULD BE ARRANGED IN CCMB FOR ONE WEEK BY APPLICATIONS SPECIALIST FOR FIVE CCMB OFFICIALS FREE OF COST.
- SOFTWARE UPGRADES: LATEST SOFTWARE UPGRADES SHOULD BE PROVIDED FREE OF COST FOR 03 YEARS.
- INSTALLATION & INTEGRATION: THE PRINCIPALS (LEICA MICROSYSTEMS CMS GMBH, GERMAN) / LOCAL AGENTS (LEICA MICROSYSTEMS / DHR HOLDINGS INDIA PVT LTD) ARE RESPONSIBLE FOR THE COMPLETE INSTALLATION, TESTING AND INTEGRATION OF THE SYSTEM.
- SUPPLY OF OPERATING MANUALS: ALL OPERATING MANUALS SHOULD BE SUPPLIED ALONG WITH THE LEICA TCS SP8 STED 3X SYSTEM.
- PERFORMANCE BANK GUARANTEE: PERFORMANCE BANK GUARANTEE FOR 10% OF THE ORDER VALUE WITH A VALIDITY OF 36 MONTHS (COVERING WARRANTY PERIOD) OF LEICA TCS SP8 STED 3X SYSTEM PLUS 60 DAYS TO BE SUBMITTED BY M/S LEICA MICROSYSTEMS - A DIVISION OF DHR HOLDING INDIA PVT. LTD. WITHIN 21 DAYS FROM THE DATE OF RECEIPT OF THIS ORDER FOR ESTABLISHING LETTER OF CREDIT.
- SUBMISSION OF CONTRACT AGREEMENT: M/S DHR HOLDING INDIA PVT LTD / LEICA MICROSYSTEMS INDIA HAVE TO SUBMIT CONTRACT AGREEMENT ON RS. 500/- NON-JUDICIAL STAMP PAPER WITHIN 21 DAYS FROM THE DATE OF RECEIPT OF THIS PURCHASE ORDER. FORMAT OF CONTRACT FORM AGREEMENT SHOULD BE AS PER CHAPTER-7 OF TENDER DOC.
- SHIPMENT SHOULD BE EFFECTED ON 'CIP' BASIS UP TO HYDERABAD.
- DESTINATION AIRPORT SHOULD BE HYDERABAD INTERNATIONAL AIRPORT ONLY.
- THE GOODS SHOULD BE SENT IN GOOD AIRWORTHY PACKING TO AVOID TRANSIT DAMAGES.

DHARMENDRA KUMAR

भंडार एवं क्रय अधिकारी/Stores & Purchase Officer  
सीएसआईआर-कोशिकीय एवं आणविक जीव-विज्ञान केन्द्र  
CSIR-Centre for Cellular & Molecular Biology  
उपपल रोड, हैदराबाद-500007 /Uppal Road, Hyderabad-500007

P.T.O.




15. **FREIGHT FORWARDER'S DETAILS TOGETHER WITH THEIR LOCAL CONTACT OFFICE ADDRESS SHALL BE PROVIDED AFTER SHIPMENT IS EFFECTED FOR COLLECTING SHIPPING DOCUMENTS AND ARRANGING CUSTOMS CLEARANCE OF GOODS FROM HYDERABAD AIRPORT. PENALTIES OF LATE FILING AND DEMURRAGE CHARGES WILL BE TO THE ACCOUNT OF SUPPLIER OR THEIR INDIAN AGENTS DUE TO DELAY IN CUSTOMS CLEARANCE IN CASE IF THIS CONDITION IS NOT COMPLIED WITH. PRE-ALERT OF SHIPMENT TO CCMB, HYDERABAD (E-MAILS: spo@ccmb.res.in) WITH A COPY ENDORSED TO OUR CLEARING AGENT, M/S EAST WEST FREIGHT CARRIERS LIMITED (E-MAILS: airoperationshyd@ewfcpl.com, custservicehyd@ewfcpl.com & ls.srinivas@ewfcpl.com) IS MANDATORY.**
16. THE GOODS SHOULD BE SENT IN GOOD AIRWORTHY PACKING TO AVOID TRANSIT DAMAGES.
17. DIRECTOR, CCMB RESERVES THE RIGHT TO CANCEL THE PURCHASE ORDER WITHOUT ANY FINANCIAL REPERCUSSIONS ON EITHER SIDE AND WITHOUT SEEKING THE CONSENT OF THE SUPPLIER AT ANY STAGE OF PURCHASE PROCESSES.

<b>COPY TO:</b>	Accounts	Stores	<b>IO: Dr. P. Chandra Shekar</b>	Head, Inst. Divn.	Head, PME Divn.	Guard File	Spare copy	Office copy
<b>NOC AMOUNT:</b>	RS. 5,00,00,000/-			<b>BUDGET HEAD/PROJECT CODE:</b>		P5025203 (CAPITAL EQUIPMENT)		

P.T.O. for INSTRUCTIONS

Yours faithfully,

 21-03-2020

[Dharmendra Kumar]  
STORES & PURCHASE OFFICER  
FOR & ON BEHALF OF CSIR

धर्मन्द्र कुमार  
**DHARMENDRA KUMAR**  
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CSIR-Centre for Cellular & Molecular Biology  
उप्पल रोड, हैदराबाद-500007 /Uppal Road, Hyderabad-500007



## INSTRUCTIONS

1. Please send us a Proforma for Ex-works / FOB / FCA / CIP / CIF / C&F value along with an order acknowledgement to enable us to open a Letter of Credit or prepare Foreign Demand Draft. Alternatively, if Sight Draft payment is acceptable to you, please specify in the order acknowledgement. In this case all the Banker's charges outside India will be to your account.
2. Mode of dispatch: **AIRFREIGHT / SEAFREIGHT / COURIER.**
3. Please arrange **insurance coverage of goods / consignment up to CCMB Warehouse**
4. The Import items referred to on pre-page is being made under Open General License of Import Policy for 2015-2020 of the Import Control Order which allows imports without any import license by Technical & Research Institutions recognized by the Department of Science & Technology, Government of India, New Delhi for their own use. Centre for Cellular and Molecular Biology, Hyderabad is one of such Research Institute under the Council of Scientific & Industrial Research.
5. The following shipping documents may be sent to our bankers viz. **M/s State Bank of India, Trade Finance Central Processing Centre (TFCPC), R.P. Road, Secunderabad 500 003, TS, INDIA (E-mail: [tfcpc.hyd@sbi.co.in](mailto:tfcpc.hyd@sbi.co.in)) and simultaneously a duplicate set of the shipping documents may also be sent directly to us in case of L/C shipments.** This will enable us to arrange prompt clearance of the shipping documents from the bank. The original Invoice and other dispatch documents must be sent to CCMB by Courier immediately in case of Advance payment shipments.

(a) **Airway Bill/Bill of Lading**

(b) Original Invoice with 4 copies showing Exworks / FCA / FOB / CIP / CIF / C&F value

Please ensure that the commission payable to your agents in India, if any, is specifically shown in your Invoice and excluded from the total amount payable to you. As per statutory regulations of the Government of India, the agency commission to your Indian Agents is payable only in Indian Rupees and the same will be remitted by us directly to your agents in India in Indian currency, after receipt of their bill. Hence, you may ask your Indian Agents to send their Agency Commission bill in triplicate, duly pre-receipted on a revenue stamp affixed on the original copy. (Please note that agency commission payable to your agents in India is included in the cost of the stores for the purpose of arriving at the total cost of the stores).

(c) Certificate of Origin - with 2 copies

(d) Packing List - with 2 copies

(e) Guarantee Certificate - with 2 copies

(The Stores, in question should cover a "GUARANTEE" for a period of **36 months** against all manufacturing defects)

(f) Two copies of Inspection Certificates regarding the stores in question after having been inspected by your qualified Engineer and packed in accordance with the terms and conditions of this order.

6. Kindly ensure that all packages are suitable numbered and the packing slips are placed in polythene covers and pasted/stapled on the package itself. The material should be well packed and suitably cushioned to withstand rigors of its transport from warehouse to warehouse by Air.
7. **Liquidated Damages:** Timely supply is the essence of the purchase order as our requirements are connected with time targeted research work. Non compliance with the delivery schedule will leave the Director CCMB at liberty not to accept the delivery either in part or in full or cancel the purchase order and, to claim the liquidated damages at the rate of 1% per week subject to the maximum of 10% per cent of the total value of the purchase order and such money will be deducted from any money due or which may become due to the supplier in future.
8. Kindly ensure to dispatch the material within the delivery period mentioned in your offer (i.e. \_\_\_\_\_). In case you are not in a position to do so, please intimate to us the date by which the order can be executed.
9. All the packages should bear the following marks.

Purchase Order No. 3169/081119/1741/EQPT/ 2266


DATED 21.03.2020

SIZE:

CONSIGNEE: THE DIRECTOR, CSIR-CCMB, HYDERABAD

NET WEIGHT \_\_\_\_\_ GROSS WEIGHT \_\_\_\_\_

"HANDLE WITH UTMOST CARE – DELICATE SCIENTIFIC MATERIAL"

  
21.03.2020

धर्मेंद्र कुमार

**DHARMENDRA KUMAR**

भंडार एवं क्रय अधिकारी/Stores & Purchase Officer

सीएसआईआर-कोशिकीय एवं आणविक जीव-विज्ञान केन्द्र

CSIR-Centre for Cellular & Molecular Biology

उप्पाल रोड, हैदराबाद-500007 /Uppal Road, Hyderabad-500007

10. Kindly acknowledge receipt of this order and confirm the likely date of dispatch of Stores. Intimation regarding shipment should be given well in advance to us.





File no. 3169/081119/1741/EQPT

Leica TCS SP8 STED 3X with tuneable pulsed White light laser:

Item	Material	Description	Qty	Price (EURO)
1		<b>Microscope</b>		
2	155933652	<b>Inverted research microscope</b> based on the DMI8 series with <b>motorized objective revolver</b> . Prepared for confocal scanning. -Binocular Ergo tubus - <b>Motorized Fluorescence Turret with 6 positions</b> for filter cubes and motorized shutter - Motorized transmission axis for optional TLD photomultiplier (software-controlled) -Suitable for Objectives 1,25x - 100x -Microscope controller CTR Box Advanced -SmartMove for easy control in xy and z -Fluorescence Intensity-Manager -All microscope parameters shown on <b>LCD screen</b> -Fast switching between coarse and fine focus - <b>Motorized 6-fold Objective revolver</b> - Camera-Port (prepared) on right-hand side -Condenser S1/S28 - <b>Condenser head S28/0.55</b> -Eyepieces HC PLAN 10/25 BR M - Lamp mount, straight for DMI - Immersion oil F -Confocal mounting kit -Laser safety equipment	1	
3	15889074	<b>Motorized focus drive for DMI8 with AFC</b> (Adaptive Focus Control). Adaptive focus control maintains a user-specified focus plane constant over time.	1	
4	158001500	Chiller for use with 158001501.	1	
5	158001501	Water cooling for motorized objective turret of DMI8.	1	
6	158000636	Optical outfit for inverted stand DMI8 CS and DMI8 CEL Advanced with brightfield light source, and differential interference contrast (ICT) prepared for confocal microscopy. It consists of: - LED brightfield light source with TTL shutter - Motorized ICT objective prism turret - Filter cube Analyzer for ICT imaging - Motorized Polarizer	1	
7	158004201	<b>Transmitted light detector (TLD)</b> for acquisition of transmitted light images with interference contrast or bright field illumination (with laser scanning) Contains -Photomultiplier tube - Motorized shutter -Software controlled switching to TLD detection	1	
8	15600234	<b>Universal Mounting frame invers</b> Frame to fix different cultivation vessels (petri dishes with 24-68 mm diameter) and glass slides (with 24-120 mm length) with two moveable brackets with a variable clamping range.	1	
9	158004141	<b>Motorised Scanning Stage</b> for DMI8 and DMI 6000 Travel range: 127 x 83mm.	1	
10	15500332	Extension cable for Scanning stages which are operated by CTR 6500.	1	



11	15525226	XY advanced board for scanning stage	1	
12	158000633	Baseplate DMi8 for SP8 systems installed on non-Leica microscope tables.	1	
13	158005666	<b>Actively damped optical table</b> to minimize vibration, for TCS SP8, TCS SPE and TCS LSI Stationary pressure air socket or air compressor 158002540 is required.	1	
14	158002600	<b>Ultra-quiet portable air compressor</b> - Maximal air pressure 7.0 kg/cm <sup>2</sup> - For 220 V only	1	
15	158004116	<b>Super Z Galvo Stage Type H</b>	1	
16	158004115	For use with Super Z stage Type H, Insert universal which can be adapted to different types of specimen, e.g. glass slides, petri dishes or labtek chambers.	1	
17	158004420	For use with Super Z stage type H to fit multwell plates to the Super Z	1	
18		<b>Fluorescence Visualization:</b>		
19	158000672	<b>Alignment-free light source EL 6000</b> (LQ-HXP 120 LEJ) with fast shutter and typical bulb lifetime of 2000 h - Liquid light guide for thermal and mechanical insulation of light source from stand	1	
20	15525304	<b>Filter cube DAPI</b> bandpass Size: for DMi8 Excitation: BP 350/50 Emission: BP 460/50	1	
21	15525310	<b>Filter cube Texas Red</b> bandpass Size: for DMi8 Excitation: BP 560/40 Emission: BP 630/75	1	
22	15525312	<b>Filter cube Y5</b> bandpass Size: for DMi8 Excitation: BP 620/60 Emission: BP 700/75	1	
23	15525314	<b>Filter cube GFP</b> bandpass Size: for DMi8 Excitation: BP 470/40 Emission: BP 525/50	1	

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24		<b>Objectives &amp; DIC Accessories:</b>	
25	15506407	<b>Objective HC PL APO 10x/0.40 CS2</b> Plan apochromatic objective with superior color correction CS2, optimized for confocal scanning applications. This objective is ideal for simultaneous use of 405 nm and visible excitation with the TCS SP8. For use with 0.17 mm coverglass. Air immersion. Free working distance: 2.2 mm.	1
26	15506517	<b>Obj. HC PL APO 20x/0.75 CS2;</b> Plan apochromatic objective with superior color correction, optimized for confocal scanning applications. For use with 0.17 mm coverglass, no immersion. Free working distance: 0.62 mm.	1
27	15506414	<b>HC PL APO 40x/0.95 CORR;</b> Plan apochromatic objective for confocal applications. This objective is not specified for use with 405 nm excitation at the TCS SP8. Correction collar for use with 0.11-0.23 mm cover glass, no immersion. Free working distance: 0.17 mm.	1
28	15506350	<b>Obj. HC PL APO 63x/1.40 OIL CS2;</b> Plan apochromat oil immersion objective with superior color correction, optimized for confocal scanning applications. Free working distance: 0.14 mm.	1
29	15506346	<b>Obj. HC PL APO 63x/1.20 W CORR CS2;</b> Plan apochromatic water immersion objective with superior color correction and high NA, optimized for confocal scanning applications and fluorescence correlation spectroscopy (FCS). Free working distance: 0.30 mm. Correction collar for use with 0.14-0.18 mm coverglass, water and saltwater immersion	1
30	15555006	IC Prism A	1
31	15522038	IC-prism C1 for objectives	1
32	15555009	IC Prism C	1
33	15555046	IC Prism E	1
34	15555017	IC Condenser Prism K3	1
35	15521521	ICT condenser prism K 6	1
36	15521524	ICT condenser prism K 10	1

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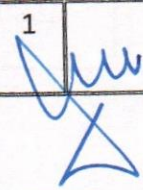


37		<b>Confocal Scan Head</b>		
38	158001108	<p><b>TCS SP8 confocal module with AOBS and AOBM</b> The TCS (true confocal scanner) is a patented true confocal point scanning system. It represents the highly sensitive, filter-free spectral detection design with computer controlled adjustable bandwidth for all fluorescence channels. Up to 4 different input ports for Laser incoupling are available, depending on the configuration. Includes the Leica patented <b>AOBS, Acousto-Optical-Beam-Splitter, which:</b> - Extends the possibilities and performances of the conventional dichroic beam splitter. - achieves <b>optimal flexibility</b>. All combinations of the excitation wavelengths are possible, with the highest efficiency. - provides unique selectivity between 0,6 and 2 nm - affords steep transmission cutoff of <math>\leq 5</math> nm between lines - allows the undistorted recording of emission spectra. - permits exquisite signal efficiency resulting in reduced toxicity or damage onto the specimen by less laser light - facilitates better long-term observation of living cells compared to dichroic beam splitters. Includes the Leica patented <b>AOBM, Acousto-Optical-Beam-Mixer, which:</b> - Achieves the "white confocal" approach in conjunction with the supercontinuum source WLL for full tuneability of excitation and emission of fluorescence. the Leica patented SP detector for - up to five spectral detectors (optionally up to four can be HyD) - maximal fluorescence detection because of patented prism design - equal brightness between channels due to highly efficient W-shaped slit design (patented) - permits excitation scans as well as unique excitation-emission ("lambda-square") scans for confocal spectroscopy applications Contains the Leica patented three-mirror scanner design for - parallax-free imaging - maximal field-of-view Supports - VISIR (with scan rotation) - STED - Superresolution by stimulated emission depletion - optional notch filters for additional reflection suppression - <b>Automatic and user friendly optimisation of the pinhole diameter</b>, manually adjustable for maintaining exact colocalisation of multi-color samples - Beam parking for local fluorescence photobleaching, laser ablation or (optional) fluorescence correlation spectroscopy</p>	1	
39	158001131	<p><b>The scan optics</b> module contains the complete scan optics for TCS SP8 with the following features: -Optical coating VISIR with high transmission of &gt; 99% throughout the visible and infrared spectrum ranging from 400-1300 nm -Low reflection at optical surfaces throughout the visible and infrared</p>	1	





		spectrum - Independent optical rotation of the scan field up to around 200° by a highly transparent Abbé-König rotator design		
40	158001123	<b>Field-of-View scanning system</b> for SP8 with adjustable speed - True confocal point scanner for highest axial image resolution -User adjustable speed 1 - 1800 Hz in steps of 1 Hz -X2Y-Scanner design for largest field of view -feedback monitoring of the scanner for constant image quality -actively cooled scanner -Linearized Scan, switchable between linearized and sinusoidal x-scan -Linearized scanner movement with constant, very long pixel dwell time and short duty cycle (< 15%) to ensure for a steady illumination time per pixel - <b>Up to 7 frames / second</b> , 512 x 512 -Up to 112 frames / second , 512 x 16 -Max. <b>Image resolution 8192 x 8192</b> or 64 Mpixels - Line frequency up to 3600 Lines / second -Very large <b>scanfield with 22 mm (SFZ) diagonal</b> in the intermediate image plane - Hardware zoom, stepless 0.75x - 48x -Optical scan field rotation: 200° (using optional Koenig-Rotator)	1	
41	158004510	Fluorifier Disc Standard incl. analyser	1	
42	158004503	Notchfilterset STED 3x	1	
43	158001440	<b>SP Channel 04</b>	1	
44	158001411	PMT SP confocal detector imaging pos 1	1	
45	158001422	HyD SP detector gated imaging pos 2	1	
46	158001413	PMT SP confocal detector imaging pos 3	1	
47	158001424	HyD SP detector gated imaging pos 4	1	
48	158001492	Adaptor kit HyD SP for Basic Module 158*	1	
49	158001502	Circuit for external cooling of the SP module.		
50	158001201	Laser Port UV/405	1	
51	158002301	<b>Laser 405 nm</b>	1	
52	158002173	<b>White light laser for AOBS system.</b> The WLL laser kit contains: - Supply Unit Flexible for WLL - Excitation lines from 470 to 670 nm, up to 8 can be used simultaneously - Freely tunable in steps of 1 nm - Each excitation line of the WLL. <b>Pulse frequency 80 MHz</b> - 8 channel AOTF (Acousto-Optical-Tunable-Filter) for rapid modulation of laser intensity, - Lightgate technology, a non-optical approach to removal of reflections for optimal contrast of fluorescence images	1	
53	158005689	Adaptor kit essential to enable STED on SP8 with DMi8 stand.	1	

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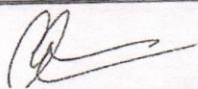
54		<b>STED Accessories with STED White Objective - 100x/1.40 OIL</b>		
55	158005642	<b>Gated STED (STimulated Emission Depletion) super resolution module for coupling to confocal scan module of TCS SP8. Gated STED requires the Leica WLL as excitation source and the internal Leica HyD for detection. Components: 1. STED Depletion Laser: Visible Fiber Gated Laser 592 - Emission wavelength: 592nm 2. STED Module; STED module consisting of: - Ultraprecise fibre in coupling optics for STED depletion laser with Vortex phase filter for resolution improvement (optimization of PSF zero). Ergonomic, software controlled automated beam positioning by motorized mirrors for optimal overlay of excitation and depletion beams using correlative algorithms. 3. STED White Objective - 100x/1.40 OIL for optimized overlay of excitation and STED beam. 4. 19" Laser Housing for the STED laser 5. STED Software - Fully integrated STED user interface into LAS X SP8 Control Software. - Smart STED Wizard for intuitive super resolution recordings (requires internal HyDs).</b>	1	
56	15555010	IC-Prism D f. objective for STED White Objective - 100x/1.40 OIL	1	
		<b>3D STED Module</b>		
57	158005677	<b>3D STED functionality; An additional light path inside the STED module with a phase mask generating a z donut PSF of STED light in the focus enables to increase resolution in xy and z. STED light can be freely allocated to the vortex path or the z donut path. This allows to engineer the PSF in xy and z. Resolution is specified according to the STED technology and laser available at your instrument. Full Width at Half Maximum (FWHM) is specified to be smaller than the values given below for the according technologies and STED lasers: - 592/660 gated STED, 775 pulsed STED</b>	1	
58	158005659	Upgrade of TCS SP8 STED 3X with Gated 775 STED laser: Emission wavelength: 775 nm.	1	





धमन्द्र कुमार  
**DHARMENDRA KUMAR**  
भंडार एवं क्रय अधिकारी/Stores & Purchase Officer  
सीएसआईआर-कोशिकीय एवं आणविक जीव-विज्ञान केन्द्र  
CSIR-Centre for Cellular & Molecular Biology  
उपपल रोड, हैदराबाद-500007 /Uppal Road, Hyderabad-500007



59		<b>Computer Workstation:</b>		
60	158003144	<b>High Power HPZ4G4 Workstation</b> with Windows 10 Professional (64 bit) operating system. A high-performance professional graphics card with advanced Pascal GPU architecture addresses the highest demands in 3D visualization and computing acceleration. The Pascal GPU is a parallel processor that serves as a computing accelerator for scientific research. - HP Z4G4 - INTEL XEONW-2133 3.6 6C - 64 GB RAM - NVIDIA Quadro P6000 24GB - 256 GB SATA SSD - 6TB Hard Disc - 1TB M.2 SSD - 9.5mm Slim Blu-ray Writer 1st ODD – Monitor, Keyboard and Mouse - Windows10 IoT Enterprise 2016 LTSB ePKEA The specification for the PC may change due to technical innovations.	1	
61	158004751	<b>Programmable control panel with 6 tuning knobs</b> and one LCD each for efficient real-time control of all relevant system parameters.	1	
62	158004700	Computer table for computer screen, input devices and controllers for TCS SP8	1	
63		<b>Software Packages:</b>		
64	158003200	<b>LAS X SP8 Control Software</b> - Leica LAS X system software for control of scan process and image processing - Control of motorized hardware - Multidimensional image acquisition - Processing, quantification and easy export of data - Extension of functionality with additional licenses - <b>Online software and hardware manual - Includes hardware dongle and installation CD - Mandatory for all confocal systems</b> - Wizard for <b>online data acquisition</b> - Fully automated "One-Click" functionality - Additional detection strategies for Low SNR & High SNR - Adaptive image quality determination and adaptive reconstruction in automatic mode - Elimination of boarder effects - 2D reconstruction - Time series - Channel-independent image reconstruction - High-performance GPU-based processing - LAS X Navigator Powerful LAS X Navigator package including the <b>LAS X Stitching, LAS X Mark and Find</b> as well as the control for the water immersion micro dispenser. A spiral scan can be used for a search in the vicinity of your current location. Overview images of any shape can be generated with a user defined region. Includes a choice of predefined sample carrier formats such as slides, petri dishes, chambered slides and well plates from different suppliers. The user interface shows all images in relation to an overview or the sample carrier for quick orientation. Images can be added to the overview no matter which magnification, camera,	1	



		detector or contrasting method is used. Mouse wheel allows swiftly to zoom in and out of the sample. An unlimited number of regions and positions can be defined for high resolution scans and multiwell projects.		
65	158003202	Separation of different fluorescent signals for <b>LAS X - Automatic, channel and spectral mode</b> - Online dye separation during image acquisition	1	
66	158003203	<b>LAS X 3D Visualisation</b> tool for reconstruction and processing of 3D data - Fast motion and processing by GPU-based algorithms - Various projection modes: Transparent, Maximum Intensity, and Depth Coding - Zoom, rotate and move 3D volumes via mouse buttons and mouse wheel - Individual settings for intensity, minimum and maximum grey level, gamma and opacity for each channel - User defined interactive shadow projection to emphasize three dimensional structures - Definition of viewing angle for better spatial perception - Auto motion function to emphasize the spatial effect of the 3D volume - Powerful clipping tool for channel specific user defined segmentations - Stereo images (cyan / magenta, horizontal and vertical shutter, quad- based) - Sophisticated Movie Editor for the generation of complex 3D animations - Orthogonal Sectioning tool, including rotatable section planes and 3D cropping capabilities - Annotation tool to add comments to a 3D volume that are saved with the data set	1	
67	158003204	<b>Colocalization analysis</b> of 2- and 3-channel images - Display of cytofluorogram (scatter diagram) in 2D and 3D - Histogram segmentation or masking to analyse intensity - Analysis in absolute or relative values	1	
68	158003219	<b>Measurements</b> is a <b>LAS X</b> 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.	1	
69	158003250	The <b>offline license package</b> includes: LAS X Basic license, Live Data Mode, Colocalization, FRET, FRAP, Dye Finder, Electrophysiology Requires Windows 7 64bit.	1	
70	158003143	<b>High Power HPZ4G4 Workstation</b> with Windows 10 Professional (64 bit) operating system. A high-performance professional graphics card with advanced Pascal GPU architecture addresses the highest demands in 3D visualization and computing acceleration. The Pascal GPU is a parallel processor that serves as a computing accelerator for scientific research. - HP Z4G4 - INTEL XEONW-2123 3.6 6C - 32 GB RAM - NVIDIA Quadro P4000 8GB - 256 GB SATA SSD - 6TB Hard Disc - 1TB M.2 SSD - 9.5mm Slim Blu-ray Writer 1st ODD - Monitor, Keyboard and Mouse - Windows10 IoT Enterprise 2016 LTSB	1	



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71	158003236	LAS X Lightning Expert	1	
72	158003238	LAS X Lightning STED Expert	1	
73	158003220	LAS X 3D Visualisation Stand-alone	1	
74	15000010000064	Test specimen gold beads	1	
75	158005611	STED sample 1	1	
76	11523051	Set Fluo-Beads for GSD 3D Calibr.	1	

	<b>Special Discounted Price FCA Germany</b>	<b>EURO 5,18,500</b>
	<b>Fright and Insurance charge</b>	<b>EURO 1,500</b>
	<b>Total CIP Value up to Hyderabad International Airport</b>	<b>EURO 5,20,000</b> (Five Lakh Twenty Thousand EURO Only)

#### Important terms and conditions:

- System and accessories should work with 220v @50 HZ.
- The complete system should carry on site comprehensive warranty for 3 years including all lasers.
- The service, maintenance and spares parts support should be for a period of 10 years from the date of installation, the response time for attending a call should be within 24 hours by factory trained service engineer based in Hyderabad.
- All operating manuals should be supplied along with the system.
- Applications and operations training on the complete system and software functions should be arranged in CCMB for one week by applications specialist.
- Latest software upgrades should be provided free of cost for 3 years.
- The principals/local agents are responsible for the complete installation, testing and integration of the system.




धर्मन्द्र कुमार

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