

(A Government of Kerala Undertaking) Thycaud P.O, Thiruvananthapuram - 14, Kerala. Tel: 0471 - 2945600, 2337353, Fax: 0471 - 2945647 Email :ep.kmscl@kerala.gov.in CIN: U24233KL200TSGC021616, PAN : AADCK4029M, GSTIN : 32AADCK4029M1ZK

| Running Contract Details | | | | | | |
|--------------------------------|--|--|--|--|--|--|
| Equipment Name | Karyotyping and FISH Workstation | | | | | |
| Running Contract Valid Till | 07-07-2024 | | | | | |
| Tender Ref No | KMSCL/EP/T371/1530/2020 | | | | | |
| Tendered Quantity | 10 | | | | | |
| Supplier Name | M/s Scientific Medical Equipments (Kerala) Pvt Ltd | | | | | |
| GST No | 32AAKCS0527M1ZA | | | | | |
| Installation & Delivery Period | 12 Week(s) | | | | | |
| Up-time / PM vist | 95% & 4 Visits per year | | | | | |
| Warranty period | 3 Years | | | | | |

| Supplier`s Details | | | | | | | | |
|--|-----------------|-----------------------------|--|--|--|--|--|--|
| Address | Contact Details | | | | | | | |
| Eroor South | Contact Person | Bini | | | | | | |
| OPP. Kerala Water Authority Trippunithura | Phone | 0484- 2776582, 0484-2780675 | | | | | | |
| Cochin - 682 306 | Mobile No | 9020304422 | | | | | | |
| | Email | smekcochin@gmail.com | | | | | | |

| Item-wise Price Details | | | | | | | | | | | | |
|--|---|----------------------|----------------------|----------------------|---------------------------------------|----------------------|----------------------|-------------------|-----------------------|--|--|--|
| # | # Item Details | | | | Unit Rate (Incl.all taxes & charge | | | C | Grand Total | | | |
| 1 | 1 Karyotyping and FISH Workstation Model & Make : AXIO IMAGER 22/CarlZeiss | | | | 7670000 Incl.GST :18% | | 536900 | | 8206900 | | | |
| | | | | | 767000 |)0 | 536900 | 8206900 | | | | |
| Annual / Comprehensive Maintenance Charges (Exl.Tax) | | | | | | | | | | | | |
| Rate | : | 4 th Year | 5 th Year | 6 th Year | 7 th Year | 8 th Year | 9 th Year | | 10 th Year | | | |
| Karyotyping and FISH Workstation | | | | | | | | | | | | |
| Labou | r | 75,000.00 | 82,500.00 | 90,750.00 | 99,825.00 | 1,09,808.00 | 1,20,788.00 | | 1,32,867.00 | | | |
| Compi ve | rehensi | 1,50,000.00 | 1,65,000.00 | 1,81,500.00 | 1,99,650.00 | 2,19,615.00 | 2,41,58 | 80.00 2,65,750.00 | | | | |

Other terms & conditions

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).

2. The supplier shall submit performance security amounting to 5.00% of the value of the supply order.

3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.

4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).

5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

Technical Specification

Equipment :Karyotyping and FISH Workstation

- 1. 1. Advanced microscope, software and accessories system, should allow the study of karyotype and Fluorescent IN SITU Hybridization (FISH) from Human samples. Karyotype should help cytogeneticist to examine any structural change in the chromosomes. With the help of system, chromosome can be arranged in pairs according to size, position of the centromeres and banding pattern displayed and should gives an excellent morphology and quality in the chromosome band. Analysis module should contain FISH, should give the images captured using fluorescently labelled DNA probes and allow the confirmation of genetic or chromosome abnormalities such as trisomies, microdelections or some chromosome rearrangements from human patient samples. The system should provide a personalized final result report.
- 2. The system should contain Fully Motorized Upright Microscope stand with Apo chromatically corrected Fluorescence beam path and dedicated TFT/LCD display for convenient operation of the following motorized parts.
 - a. Motorized Z axis with step size 10nm.
 - b. Motorized Septuple / 7 position nosepiece
 - c. 10 position Motorized Reflector Turret for Fluorescence with shutter.
 - d. Eye piece10x/25mm
- 3. Fully Motorized Fluorescence illumination with 100 W Mercury lamp/ Metal halide lamp.
- 4. 10 position filter turret motorised with Filter sets for DAPI, FITC, Spectrum Orange, DEAC, Dual and triple pass.
- 5. High light transmittance objectives: 10x/0.25, 40x/0.75 and 60x/1.4 Oil
- 6. Camera: High Resolution Monochrome CCD camera 1.4 Pixels with minimum resolution of 1280x1024, 12 bit, pixel depth of 6.45μ.
- 7. Specifications for Cytogenetics softwares:
- 8. a. Karyotype software: Interactive and automated Karyotyping of Human, Animal and Plant species. Unlimited UNDO and log operations to overcome human errors with time and date record of every processing steps. Interactive and automated Real time background correction and Chromosome separation. Keyboard shortcut keys for several functions like Chromosome separation (in case of overlapping chromosomes), image enhancement, Background correction, contrast enhancement etc. Interactive and automatic Classification based on built-in classifiers for G-, Q- and R-banding. Ideograms according to ISCN standard for 400, 550, and 850 bands. Additional captures to encompass all chromosomes of widely spread metaphases in one karyotype, Upto 26

images can be incorporated into 1 to have one complete Karyogram in case of polyploids.

9. b. FISH Software: Image acquisition in up to 12 color channels with integrated microscope control for motorized microscopes. Extended focus image generation to have a very clear Fluorescence signal against clear dark background. User defined automatic processing functions significantly simplify the image enhancement immediately after the capture. Interactive and automatic integration time control for each color channel. Automatic and interactive background correction and thresholding for each color channel. Mask (exclude/include) function, Transient and permanent zoom, Presentation of individual colors, false colors, and gray levels, Annotation capabilities and Measurement functions. Provision to capture color images using RGB filters for stained samples/slides like H&E, Special Stains, IHC etc.

c. Report / Archiving Software: Dedicated software for Report generation, analysis, archiving and classifying with university logo or other related images. Scheduled backup and notifies if data is not getting saved. Dedicated software for Report or case data searching and sorting. Editing can be done for a work group or multiple cases. Provides security check so that unknown user can't modify data. User Defined report generation with graphic interface. Provision in software to extract statistical information of cases/reports like cases per year, results per year, samples per year etc

8. System should be upgradable for metaphase finding.

9. All the necessary items to make the equipment functional should be supplied along with the equipment.

10. Should have safety certificate from a competent authority CE issued by a notified body registered in European commission / FDA (US) / STQC CB certificate /STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid.

10. Accessories required

a. Computer system: A branded and suitable computer with high quality monitor (20' or higher, suitable for large view and with excellent resolution), key board, USB ports, mouse, 16 GB or more RAM, NVIDA Graphics Card 8 GB, Intel i7 chip set, High Speed network connection modules, minimum 2TB storage and with original genuine windows/ Mac suitable for the softwares (Karyotype and FISH), Original MS Office should be supplied along with the system.

b. UPS: Compatible branded UPS with minimum 1 hour backup with full load should be supplied along with equipment. It should be online UPS with maintenance free batteries, spike protection.

c. Printer: Should supply a high quality colour printer (Laserjet) to take print out of results, reports etc