

NOTICE 1

No. CU/BOT/SERB/DM/Equip/02/2021-22

Quotations are invited from authorized vendors for supplying the following items in the SERB, GoI funded project, entitled “Systematics of the genus *Gentiana* L. (Gentianaceae) in Eastern Himalaya, India” (PI-Dr. D. Maity). Suppliers are hereby requested to submit their quotation along with the current trade license, current P Tax, GST registration, PAN No. and other relevant documents within 7 days from the publication of this notice. The quotations are to be given in sealed envelope addressed to the PI’s office. The authority reserves the right to accept/reject any quotation without showing any reason thereof.

Sl. No.	Manufacturer and Model	Description	Quantity
01	BIO-RAD, Model - 1640300	Mini-Sub Cell GT Horizontal Electrophoresis System and PowerPac Basic Power Supply	1
02	BIO-RAD, Model - 1861096	T100 Gradient PCR Thermal Cycler, 96-Well with Rotor	1
03	BIO-RAD, Model – 1660531EDU	UView Mini Transilluminator with moist heat sterilization	1
04	Leica, DM1000 LED	Upright Microscope Model DM1000 LED with FlexaCam Camera and LASX Software modules	1

Specifications:

01. Mini-Sub Cell GT Horizontal Electrophoresis System and PowerPac Basic Power Supply

Mini-Sub Cell GT Horizontal Electrophoresis System for fast, economical nucleic acid separations. The slim, small format system can run up to 30 samples simultaneously. Use the gel caster for hand casting gels in the tray.

- Cell size (W × L × H) 12 × 26 × 6.5 cm
- Gel tray sizes (OD) (W × L) 7 × 10 cm
- Ready Agarose gels accommodated Yes
- Sample throughput 8–30
- Base buffer volume ~270 ml
- Bromophenol blue migration 4.5 cm/hr (at 75 V)
- Quick Snap electrodes — easy to remove and simplify cleaning

- UV-transparent gel trays — with fluorescent ruler
- Longer tabs on base — easy removal of lid reduces buffer spillage, and lid cannot be incorrectly positioned
- Accessories — includes gel caster for tape-free casting, and the PowerPac Basic Power Supply
- Ready Agarose Precast Gels lock securely into the chamber — save time and get reproducible separations

Product Contents

- Buffer tank
- Lid with cables
- 7 × 10 cm tray
- Leveling bubble
- 8- and 15-well combs
- Gel caster
- PowerPac Basic Power Supply

Power Supply: Programmable power supply should be capable to operate four electrophoresis units simultaneously for four identical runs with graphic LED display. The output range should be 10-300 V, 0.4-400 mA, 1-75 W. Constant voltage, current or Power with Automatic crossover Memory storage: 9 programs, 9 steps, Timer Control: 99 hr, 59 min Automatic Power up after Power failure, Safety features: No-load detection; sudden load change detection.

02. T100 Gradient PCR Thermal Cycler, 96-Well with Rotor

- Highlights: A smart 96-well compact touch-screen PCR Thermal Cycler that makes running PCR easier than ever before.
- The intuitive touch screen makes it easy to create a protocol, start a run or manage files. 1
- Sample Capacity : 96 × 0.2 ml tubes, 0.2ml tube strips or 1 × 96 well plate
- Speed of ramping : Maximum: 4°C; Average: 2.5°C
- Temp range : 4-100°C
- Temp accuracy : +/- 0.5°C of programmed target
- Temp uniformity: +/- 0.5°C well-to-well within 30 sec of arrival at target temperature.
- Display : 5.7" VGA colour touch screen
- Programming Options: Step-based graphical
- Memory : 500 typical programs on board; unlimited with USB flash drive expansion
- Reporting: Exportable run logs, system logs
- Instant incubation: Yes
- Port: 1 USB A
- Thermal Gradient:
- Thermal Gradient accuracy : +/- 0.5 deg C of programmed temperature
- Row Uniformity: +/- 0.5°C well-to-well (within row) within 30 sec
- Gradient Range: 30-100°C
- Thermal Gradient differential range : 1 - 25°C
- Weight: 9 Kg (20Lb)

- Dimension: (W×D×H): 26×47×23cm (10×18×9")
- Input Voltage: 100 - 240 V AC, 50 - 60 Hz, 400 W max.
- Rotor with 14,000 RPM

THE SYSTEM IS LICENSED FOR PCR

- Should have a sample capacity of 96×0.2ml tubes, 0.2ml tube strips or universal or standard 1x96-well plate of 8x12 format with six or more Peltier heating and cooling.
- System which are not capable of taking plates will not be considered.
- Should have true gradient capability with Dynamic ramping technology, other technologies apart from gradient will not be considered.
- Should have the feature of dynamic ramping with identical hold times for all the 8 rows of gradient.
- Should have a temperature differential range of 1-25degC across the rows.
- Should have intuitive 5.7" (14.5 cm) touch screen interface which can displays graphics in high resolution for easy programming.
- The touch screen should be responsive for both gloved and ungloved fingers.
- Should be capable of running reaction volumes from 1-100ul.
- Should have a maximum ramp rate of 4 degC/second.
- Should have a temperature range of 4-100 deg C
- Should have a gradient range of 30-100 deg C
- Should have a temperature accuracy and uniformity of ±0.5 deg C
- Should have a memory of >500 programs with further expansion through a USB Flash drive for transfer of files.
- Should have block and calculated temperature control modes.
- The software should be capable of exporting Run logs and system error logs
- Should have quick boot up time of not more than 1 min.
- Should be quiet in operation.
- System should have built in library of standard protocols for long PCR, fast PCR, reverse transcription PCR etc.
- Should have the feature of "Instant Incubation" to keep samples at constant temp for ligation and restriction digests.
- Should have power save mode.
- Should be compatible with all kind of plastic consumables and reagents specially reusable sealing Mats.
- The vendor supplying the Instrument should also have the capability of supplying cDNA Synthesis Kit, Hot Start Taq Polymerase, plastic ware, and horizontal electrophoresis system with power pack from the same Principal Company

03. UView Mini Transilluminator with moist heat sterilization

Compact long-wave transilluminator with auto safety shutoff; education use only

- Dimensions, mm: 247 × 132 × 48.5 (D × W × H)
- Viewing surface, mm: 150 × 80 (D × W)
- Wavelength, nm: 365

- UV tubes: T5 6 W UVA
- Power: 12 V, 1.5 A
- Weight, kg: 1.4
- Compatible gel type: mini gels Compatible gel size, mm: 50 x 60, 105 x 60, 125 x 60
- Temperature: operation 0~40°C,
- storage –10~70°C Humidity:
- operation 20~80%, storage 10~90%
- Transportation conditions: temperature –10~70°C, humidity 10~90°C, Altitude conditions: up to 2,000 m
- Pressure cooker type heat sterilization should be provided.

04. Upright Microscope Model DM1000 LED with FlexaCam Camera and LASX Software modules

Material ID	Material Description
11888842	Leica DM1000 LED
11888155	Koehler Kit for DM1000
11888134	Focus knobs for DM1000
11501071	Dust cover for DM1000, DM LS/LSP
11501231	Condenser lens CL/LS
11505197	Condenser CL/PH 0.90/1.25 Oil, S1, CC
11888185	ErgoStage with Ceramic Plate for DM1000
11505196	Slide holder one hand slide change
11505218	Object clamp for oil immersion
11888153	XY-stage control standard
11501598	Tube HC L2TU 4/5/7, binoc. phototube
11507801	Eyepiece HC PLAN 10x/20 BR.
11507802	Eyepiece HC PLAN 10x/20 BR.M
11506228	Obj. HI PLAN 10x/0.25
11506238	Obj. HI PLAN 100x/1.25 OIL
13614800	Immersion oil, 10ml
12730533	Flexacam C3 Camera
11541544	C-Mount HC 0.55x
11640599	LAS X Software Licence Container
11640878	LAS X Core
11640563	LAS X Live Image Builder Z

(Dr. Debabrata Maity)

PI

Assistant Professor

Department of Botany; University of Calcutta

35, B.C. Road, Kolkata 700 019