



संत लौंगोवाल अभियांत्रिकी एवं प्रौद्योगिकी संस्थान
लौंगोवाल, जिला-संगरूर, पंजाब-148106
(भारत सरकार, मा.स.वि.म. के अधीन समविश्वविद्यालय)
Sant Longowal Institute of Engineering & Technology
Longowal, District-Sangrur, Punjab- 148106
(Deemed University under MHRD, Government of India)

संदर्भ सं/Ref.No. SLIET/PUR/09/16/871-892 REGISTERED

दिनांक/Date: 02/11/16

Incharge Website

Subject: Notice Re-inviting Quotation for AMC of different equipment of FET dept.

This institute intends to enter into Annual Maintenance Contract for different equipment of FET dept. as per "Annexure X". Interested Firms/Parties are requested to send quotation to the office of undersigned in a sealed cover duly super scribed "Quotation for AMC of Equipment of FET dept" so as to reach on or before 22.11.16.

Terms & Conditions are as under:

Note: It may be noted that quotation received only through REGISTERED/SPEED POST shall be considered. The institute is located in remote area and it takes 5 to 7 days to reach the mail, therefore, quotation be dispatched well in time to avoid any sort of delay.

N.B.:

1. Rate of Sales Tax/VAT/Service Tax, if extra must be mentioned clearly.
2. Price must be quoted at site of SLIET.
3. Quotation received later than due date is liable to be rejected.
4. Quotation addressed to the Director, SLIET must be sent to the Faculty I/c (Store & Purchase), SLIET, Longowal, Distt. Sangrur – 148106, Punjab.
5. We are not responsible for accidental opening of the cover if it is not properly super scribed and sealed
6. Duly signed Quotation must be submitted on letter head of the firm with all particulars, any other format will not be acceptable.
7. No correspondence regarding acceptance/rejection of a quotation will be entertained.
8. Other terms and conditions for submitting the quotation are given overleaf which must be read carefully before submitting the quotation.


Faculty I/c (Store & Purchase)

Terms & conditions of AMC

- 1) AMC will facilitate two preventive & two Breakdown visits as and when required in the year. Firm/contractor is required to specify the cost of extra visit, if any in their quotation separately.
- 2) The training of laboratory staff/faculty will be imparted during the visit of service engineer to overcome the minor maintenance.
- 3) AMC will be valid up to one year. However, if the party services are not found satisfactory, it will be liable to penalize as per decision of competent authority.
- 4) Party/firm will ensure the response within 3 working days after receiving the breakdown call/intimation.
- 5) AMC will include the visiting charges, however, cost of spare parts will be paid separately. Visit will be deemed to be completed only after satisfactory working of equipment.
- 6) 50% payment of AMC will be made after first preventive service in the first quarter of the year and remaining will be made in the fourth quarter of the year of contract.
- 7) Preventive services will include the general maintenance, troubleshooting, calibration of the equipment, training & application support etc, if required.


Faculty I/c (Store & Purchase)


Faculty I/c (Store & Purchase)

"Annexure-X"

S. No.	Name of equipment	Qty
1.	Gas chromatograph (Microprocessor based), Model: NUCON 5765 and accessories (Detailed specifications are as per "Annexure- A")	01
2.	Texture Analyzer, Model: TA.XT Plus with Exponent Lite software with accessories, Force Capacity: 50Kg.f (500N), Force resolution: 0.1g, Speed range- 0.01 – 40 mm/s	01
3.	Differential Scanning Calorimeter (DSC), N537-0212DSC4000, Make: Perkin Elmer (Detailed specifications are as per "Annexure- B")	01
4.	Fourier Infrared Spectrometer (FTIR) Model No. SP10S/W (Detailed specifications are as per "Annexure- C")	01
5.	Rheometer (Detailed specifications are as per "Annexure- D")	01
6.	Fermenter Bio Flo 115 3 Lt. (Detailed specifications are as per "Annexure- E")	01
7.	Fermenter Bio Flo 115 7.5 Lt. (Detailed specifications are as per "Annexure- F")	01
8.	Bomb Calorimeter, Model: IKA C2000 (SN50905-05) (Detailed specifications are as per "Annexure- G")	01
9.	UV-VIS Spectrophotometer, Double Beam, Model: UV-5704SS with Temperature controller & multi cell, Wavelength range: 190-1100nm, Silicon photo detector to cover entire range from 190-1100 nm, PC controlled, window based software, Automatic rapid scanning.	01

Annexure - A

S.No.	Name of Items	Qty.
1.	Microprocessor Based Gas Chromatograph Model NUCON 5765 Dual Flame Ionization Detector (FID) with Control Module Thermal Conductivity Detector (TCD) with control Module Recording Device Glass packed Column for analysis VFA's SS Column for the analysis of Esters of lactic & Org. Acid Hamilton Liquid Syringe 1 micro ltr. Cap. Hamilton Liquid Syringe 10 micro ltr. Cap. Hamilton Liquid Syringe 1 ml Cap. Nitrogen Gas Cylinders-47Ltr. Water capacity filled with ultra high purity gas double stage pressure regulator Servo Stabilizer suitable for Gas Chromatograph Silicon Rubber Septum's (One packet of 10 Nos.)	01 03

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S.No	Items & specifications
1	<p>Differential Scanning Calorimeter (DSC) N537-0212 DSC4000 Make- Parkin Elmer Heat Flux measurement principle, Temperature range of 0°C to 450°C, Alumina coated aluminum furnace, Required controlled heating rate is 0.01 to 100 °C/min, Efficient, easy to clean nickel chromium plate. an Integrated mass flow controller, ability to switches easily between cooling accessories; Chiller, Intracooler and portable cooling device. Optional fast 45 position auto sampler for reliable unattended operation. Single furnace design. Alumina coated aluminum furnace. Thermocouple based sensor. Includes Pyris™ software, pyris player, Isothermal kinetics, scanning Kinetics, specific heat and purity software package.</p> <p><u>Calorimetric Performance</u> Dynamic range: ±175 mW, Precision: ±0.1% Indium height/width (mW/°C): 8 (Indium melting peak height/width at half-height. 1 mg Indium, 10 °C/min, nitrogen purge. No mathematical treatment to the data or correction applied.</p> <p><u>Temp. Performance.</u> Range: -100 °C to 450 °C, Accuracy: ±0.1 °C Precision: ±0.02 °C, Data points/sec: 10 Controlled heating rates: 0.1 to 100 °C/min Polyscience Chiller, Al Pans with covers pk/400 Standard Sample Pan Crimper Press, Suitable PC, printer, On line UPS with 30 min backup.& Gas cylinders with regulators for Nitrogen.</p>



2/2/2006

"Annexure - C"

Part No.	Description	Qty.
L160000A	Fourier infrared spectrometer (FTIR) Spectrum Two FT-IR/Sp10-S/W .Spectrum Two FTIR Spectrometer with Software.	01
	<p>Performance pack, Ge coated beam splitter ,Spectral range : 350-8300 cm^{-1} ,Resolution 0.5 cm^{-1} , 0.1cm^{-1} Wavelength accuracy ,Signal to noise ratio 50,000:1 peak to pea for 1 minute scan (performance pack),Improved & rugged Michelson Interferometer (Non-mechanical) with compensating dynamic alignment system for fast scanning, Completely Sealed and desiccated system with real time (AVC) Atmospheric vapor Compensation & correction to minimizes effect of atmospheric water and CO2.</p> <ul style="list-style-type: none"> • Communication: USB, wireless and TCP/IP interface allows direct connection with LAN. • Instruments can be configured with wireless router communication. • Patented Opticsguard™ technology based Sealed design for no moisture Interference (Ie Completely sealed Design) ; Vibration Isolated baseplate. • Automatic Recognized ATR/DRS and other accessories. • Error Trapping All sample spectra is checked for common spectroscopic and sampling problems. Key Instrument components are continuously monitored. • Component Checks Individual component checks under software control can be executed on-demand or automatically scheduled at preset times/intervals. 	
L1600233	Spectrum Two UPS Battery Pack for 7 Hr Battery backup	01
09991423	POWER CORD WEST ASIA/INDIA/SOUTH AFRICA	01
L1270986	UNIVERSAL DEMOUNTABLE CELL MOUNT	01
L1271192	RECTANGULAR KBR CELL WINDOW PK/2	01
04810949	POTASSIUM BROMIDE PELLET HOLDER	01
L1270421	ASSTD RECTANGULAR SPACERS PK/12	01
L1060351	ADJUSTABLE ADAPTOR	01
L1600113	SPECTRUM TWO HATR ACCY.5 bounce	01
L1360266	ZNSE TROUGH TOP-PLATE for liquid Samples	01
L1600111	Spectrum Two Diffuse Reflectance for powder	01
04974438	MAGNETIC FILM HOLDER-CIRCULAR	01
	NPN001 PC, Printer & UPS as per tender specifications, 2ml Syringe Luer Lock	01

[Signature]
8/8/2016

"Annexure - D"

Rheometer

S.No	Pos	Description	Qty
1.	000010	18318/90278017 / AT BASIC INSTRUMENT RHEOLABQC Consisting of: Rheometer electronics with power supply, Stand.	01
2.	000020	18658/90279050/AT C-LTD180/QC WITH Pt 100 TEMP.CONTROL SYSTEM WITH TEMP. PROBE Temp. range: -20 to +180 °C , Refrigerated Circulating Thermostat with Temp. range from -20 to 200°C	01
3.	000030	SOFTWARE 18385/85437090/DE RHEOPLUS R RHEOMETER SOFTWARE -full version . -incl. 1 device drive for rotational tests (flow-, creep-, relaxation test) -running under Microsoft Windows 2000/XP/Vista/7	01
4.	000040	Co- Axial Measuring System 20650/90279050/AT STANDARD MEASURING SYSTEM CC27/SS/QC-LTD Consisting of:- Measuring Cylinder B-CC27 Measuring Cup C-CC27/SS/QC-LTD	01
5.	000050	Vane Geometry 21015/90279050/AT STIRRER ST22-4V-40/113	01
6.	000060	Standard Fluid 301360/90279050/DE VISCOSITY STANDARD DKD 2000AW 100ML-1500/460/45 mpa.s	01

Verified
09/10/18

PART NO.	DESCRIPTION	QTY
M1369-1152	<p>New Brunswick Scientific's Fermentor BioFlo 115, Capacity 3.0 liter, 200-240V</p> <p>A 3.0 Liters (0.8 - 2.2 liter working volume) easy-to-use, entry level system with built-in controls for operation as a microbial fermentor. It can be upgraded for use as a mammalian / animal cell culture bioreactor. This versatility, coupled with its ability to control up to 3 independent reactors from a single control station, makes it ideally suited to use in R & D labs, universities, teaching facilities, testing labs. Etc.</p> <p>Applications: Microbes, Yeast, Insect, Plant or Mammalian cells in batch, fed-batch and continuous culture.</p> <p>System Includes:</p> <p>Sophisticated Control Station: Compact unit with powerful RPC (Reactor Process Controller) provides integrated control of process parameters in each reactor.</p> <p>Cost-saving utility stations are offered as an option for operation of 2nd and 3rd vessel.</p> <p>Includes : Bright, Easy-to-read, Industrial touch screen control interface, 8.4" (21.3 cm) colour display, 3 integrated pumps /Watsonmarlow. integrated water manifold,</p> <p>2 USB ports available in the system to connect PC & accelerating devisor & connector will be provided along with the recommended software, control of agitation, temperature, and manual gas mix control via 2 rotameters,</p> <p>pH Control / Sensor Mettler Ingold make/ DO Control/ Sensor mettler ingold make/, Foam / Level Control - NBS, Sparger - Ring Sparger ;Temperature Sensor :RTD Platinum probe.</p> <p>Advanced Fermentation vessel kit inclusive of Dish-Bottom autoclavable vessel made of borosilicate glass having stainless steel headplate upto 130 degree; vessel stand; Agitation motor (50 - 1200 rpm); Direct-Drive assembly; Heater Blanket; Immersion Cooling Coil; Thermowell; RTD Probe; Baffle Assembly;</p> <p>Impeller : Rushton type - Six Blade adjustable ;Exhaust Condensor; Tube / Assembly Sampler; Tri-Port Adapter; Septum Kit; Liquid Addition Tube and Headplate Adapter and Two Addition bottles and Tubing.</p>	1

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Annexure - F

PART NO.	DESCRIPTION	QTY
M1369-1155	<p>New Brunswick Scientific's Fermentor BioFlo 115, Capacity 7.5 liter, 200-240V</p> <p>A 7.5 Liters (2.0 - 5.6 liter working volume) easy-to-use, entry level system with built-in controls for operation as a microbial fermentor. It can be upgraded for use as a mammalian / animal cell culture bioreactor. This versatility, coupled with its ability to control up to 3 independent reactors from a single control station, makes it ideally suited to use in R & D labs, universities, teaching facilities, testing labs. Etc.</p> <p>Applications: Microbes, Yeast, Insect, Plant or Mammalian cells in batch, fed-batch and continuous culture.</p> <p>System Includes:</p> <p>Sophisticated Control Station: Compact unit with powerful RPC (Reactor Process Controller) provides integrated control of process parameters in each reactor. Cost-saving utility stations are offered as an option for operation of 2nd and 3rd vessel.</p> <p>Includes : Bright, Easy-to-read, Industrial touch screen control interface, 8.4" (21.3 cm) colour display, 3 integrated pumps, integrated water manifold, 2 USB ports, control of agitation, temperature, and manual gas mix control via 2 rotameters, pH / DO Control, Foam / Level Control,</p> <p>Advanced Fermentation vessel kit inclusive of Dish-Bottom autoclavable vessel made of borosilicate glass having stainless steel headplate; vessel stand; Agitation motor (50 - 1200 rpm); Direct-Drive assembly; Heater Blanket; Immersion Cooling Coil; Thermowell; RTD Probe; Baffle Assembly; Rushton Impellers (2); Exhaust Condensor; Tube / Assembly Sampler; Tri-Port Adapter; Septum Kit; Liquid Addition Tube and Headplate Adapter and Two Addition Bottles and Tubing.</p> <p>With BioCommand Track and Trend software</p>	1

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Model: IKA C200

Bomb Calorimeter

"Amnecure - G"

Input power: 120W; Rated voltage: 24VDC, 5A;
Max. on time continuous operation,
Range of measurement, 40.0 J; measuring mode/time,
isoperibolic (upto 17 min, dynamic up to 7min,
manual upto 17min and time-controlled up to 14min;
reproducibility 0.05%RSD;
operating oxygen pressure 30bar)

hrs