

SUPPLEMENTAL/ BID BULLETIN
UNIVERSITY OF THE PHILIPPINES MANILA
The Health Sciences Center
BIDS AND AWARDS COMMITTEE 3

Bid Bulletin No. 1
24 May 2022

POSTPONEMENT OF PRE-BID CONFERENCE

Project Title: Supply of GC-MS/MS; GC-MS Triple Quadrupole GC-MS for Biochemical Laboratory
(Rebid)
(PR No. 15584)

1. Notice is hereby given to all interested supplier/prospective bidder of the following amendment/modification in the bidding documents for the above cited project:

Activity	Previous	New
Pre-Bid Conference	- 23 May 2022, 01:30 PM. via Zoom.	- 06 June 2022, 01:30 PM. via Zoom.
Date and Place of Dropping of Bids.	- 06 June 2022, 11:30 A.M at the UP Manila Procurement Office, Ground Floor Annex 1 CPH Building, Ermita, Manila.	- 20 June 2022, 11:30 A.M. at the UP Manila Procurement Office, 2 nd Floor Joaquin Gonzales Compound, Padre Faura St., Ermita, Manila.
Opening of Bids	- 06 June 2022, 01:30 PM. via Zoom.	- 20 June 2022, 01:30 PM. via Zoom.

2. Attached is Revised Technical Specification and Terms and Conditions dated 23 May 2022.
3. This is posted at PhilGEPS www.philgeps.gov.ph

For guidance and information of all concerned.



TRISTAN NATHANIEL C. RAMOS, DDM, MPH
Chair

Received by the bidder:

Company/Bidder:

Date: _____



INSTITUTE OF HUMAN GENETICS

National Institutes of Health, University of the Philippines Manila "The Health Sciences Center"



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23 May 2022

TRISTAN NATHANIEL C. RAMOS, MD
CHAIR
BIDS AND AWARDS COMMITTEE 3
University of the Philippines Manila

Dear Dr. Ramos,

We are respectfully endorsing the revised Terms of Reference under Purchase Request 15584 for the procurement of GC-MS/MS; GC-MS triple quadrupole GC-MS of the Institute of Human Genetics-National Institutes of Health which was discussed during the Pre-Bid Conference last May 23, 2022.

Thank you very much and we look forward to your continued support to the institute.

Sincerely yours,

MARIA MELANIE LIBERTY B. ALCAUSIN, MD FPPS
Director

REVISED TERMS OF REFERENCE
PURCHASE REQUEST 15584

1. GC-MS/MS; Triple Quadrupole GC tandem MS

A. Two Triple Quadrupole Mass Spectrometer (MS1/MS2) specification:

Ion Source: EI (standard) and CI (included)

Ion source material: with a shield that blocks radiant heat generated by the filament or equivalent

Ion source temperature: 140 to 350 °C or equivalent

Interface: 50 to 350 °C or equivalent

Filaments: Dual filaments for EI; automatic switching w/ shield

Detector: Secondary electron multiplier with overdrive Lens and conversion dynode 8×10^6 dynamic range or equivalent

Electron energy: 10 to 200 eV; selectable; or equivalent depending on manufacturer's brand

Mass filters (2): with pre-rods to achieve high-accuracy mass separation performance

Mass axis stability: $\leq \pm 0.10$ u over 48 hours (constant temperature)

Mass range: m/z 10 to 1090 or better

Resolution: Selectable, 0.4 to 3.0 Daltons or better

Scan rate: Up to 20,000 amu/s or better

Acquisition rate: 20scans/sec or better (m/z=50 to 500); 10 scans/sec or better (m/z 100 to 1000)

Tuning: Autotune or manual

MRM speed: 800 transitions/sec or better

Minimum MRM dwell: <0.5 msec

Collision cell: Hexapole; 0 to 60eV

Collision cell gas: Nitrogen with helium quench gas or Argon Gas

Collision energy: Selectable up to 60 eV

Vacuum system: Dual stage turbomolecular pump; 360 L/s (main pump); Oil rotary pump, 30 L/minute (60 Hz) (fore pump)

Software: Simultaneous SCAN/SIM measurement, data handling (quant/qual) or equivalent

EI scan sensitivity: Signal-to-noise (S/N) > 1,500 at m/z 272 for 1 pg octafluoronaphthalene (OFN) in EI scan. Higher sensitivity is preferred.

EI MRM IDL: 4 fg or less OFN

EI MRM S/N ratio: > 18,000 for the transition from m/z 272 to m/z 222 for 100fg octafluoronaphthalene (OFN) in EI MRM Higher sensitivity is preferred.

Acquisition modes: Full scan, MS Product ion scan, Precursor ion scan, Selected ion monitoring (SIM); Multiple reaction monitoring (MRM), Simultaneous full scan and MRM, Product ion confirmation (PIC) mode: MRM acquisition acts as an automatic trigger for the acquisition of product ion spectra; combined full scan and SIR; Automated MRM optimization; pseudo multiple reaction monitoring or equivalent

B. Gas Chromatography (GC)

- GC must have a specification published for retention time repeatability of <0.008 % or <0.0008 minutes; area repeatability < 1% RSD

- System should have a technology that uses various control methods to control carrier gas flow to a constant flow speed, flow rate, or pressure.

- Four detectors can be installed simultaneously and individually temperature controlled.

- Compatibility of the unit to process analytical data derived from the laboratory's existing unit of single quadrupole GC-MS

- Interface must provide access to all of the following:
 - a. Connectivity to check status or run diagnostics from anywhere within your network
 - b. Built-in self-guided diagnostics and maintenance capabilities
 - c. Method and sequence editing without the need for a data system
 - d. Easy access to logs and complete user documentation
 - e. with password enable feature to limit access to authorized lab users only
 - f. with reliable error and warning system

- Pressure has typical control of ± 0.001 psi for the range of 0 to 150 psi. Pressure setpoints may be adjusted in increments of 0.001 for the range 0.000 to 99.999 psi, and 0.01 for the range 100.00 to 150.00 psi with integrated leak detector function

- with 7 pressure program ramps or better.

- System must have a split/splitless inlet (S/SL), 0-150 psi. Inlet sealing system is built in standard with each S/SL inlet for quick, easy, injector liner changes in under 30 seconds.

- System is capable of effluent splitting, back flushing, and column switching or multiple backflush configurations.

- The programmed rate setting range should be -250 to 250°C/ min. Temperature set point resolution: 0.1°C or better. The oven should be able to cool down in a maximum of 3.4 min or better from 450°C to 50°C; with highly precise oven control

- Possible to program 32 temperature ramps, with preset oven cooling rates

- Possible to use capillary columns of 50, 100, 250, 320 microns and above.

- The pressure set points should be adjustable by increments of 0.001 psi up to 150 psi. Maximum temperature attainable should be 450°C or more.

- Split ratio: up to 9999.9:1

- Touchscreen user interface
- System should be supplied with computer that has minimum 16Gb RAM, 480G Solid State Drive (SSD) and a software, which is based on Microsoft Windows 10 operating system for instrument control, data acquisition, data analysis, quantization, automation & customization with online and offline sessions provided.
- System should be designed and manufactured under ISO9001 and should comply with most of international regulatory, safety and electromagnetic compatibility requirement

Auto sampler

- Must be have a minimum of 16 vials auto sampler or better, for washing and other reagents for standard addition; must be able to accommodate a minimum of 150 samples per batch run
- Injection volume range:** 10nl to 200 uL
Injection Linearity: >0.999 coefficient of deviation
Maximum Run time: 9999.99 min.
Sample delivery precision: ≤1.00% RSD or better
Sample Carryover: <0.005% or 5ppm or better
Safety Mechanics: Leak Sensor (if applicable) and self-diagnosis function

Column and Column Oven

- Column:** 5Sil MS, 30m, 0.25mm, 0.25um or equivalent
Column Temperature Control: up to 450°C
Column Tracking: column history/ information tracking

C. SYSTEM SOFTWARE SPECIFICATIONS- for data acquisition, data handling (quantitative/qualitative)

with software platform to support data generation and processing:

- Availability of quantification methods database; up to 10 libraries configuration; installation of 3 libraries
- Automated MRM scheduling Dwell time, inter-channel delay time, and inter-scan delay time for individual (acquisition rate and rate assignment)
- should have capability of locking/ adjusting the retention time so that same retention time can be reproduced from system to system and the method should be electronically transferred.
- allows processing of data employing different quantification approaches: 1) multi-point calibration; 2) single point calibration; 3) standard addition procedure; 4) internal standard method; 5) surrogate calibration and others.
- includes automated workflow for setting up and starting of acquisition of samples batches and result generation and Laboratory Information Management System (LIMS) export
- remote access processing of data is possible

D. COMPUTER SPECIFICATIONS:

- Manufacturer: Hewlett-Packard or equivalent
- Processor: Intel® Core i7-12800H
- Memory: 16GB (2x8GB) DDR4-2666 nECC RAM

- Storage: 1 TB 7200 RPM SATA Hard Drive
- Hard DriveGraphics: Intel UHD Graphics 630
- Communications: Integrated Intel I219LM PCIe GbE Controller; 2nd HP Serial Port Adapter
Optical Drive:9.5mm Slim DVD Writer
- Audio: Integrated Conexant CX20632 5.1 HDA codec; 1 audio line in; 1 audio line outPeripheral:
HP USB Optical Mouse / HP No Keyboard Option
- Expansion: 5 USB 3.0 (1 front, 4 rear), 3 USB 2.0 (1 front, 2 rear), HDMI port
- Dimensions: 100 x 338 x 381 mmWarranty: HP 3/3/3
- Network Switch: HP OfficeConnect 1420 Series JH329A Gigabit Network Switch (Orderable P/N
G1680-63721)
- HP 25es 25" flat, LCD monitor
- HP LaserJet colored printer that can print with a speed of 712.10 sec with a maximum resolution of
600 x 600 dpi for black & color; 800 MHz processor; maximum memory capacity of 128 MB DDR
to optimize the performance; has Hi-Speed USB 2.0 port; built-in Fast Ethernet 10/100Base-TX
network port & wireless for compatibility and one year of warranty facility.

Other inclusion:

- Start-up test kit/s, 300 pcs. Non pre-slit septa 2mL glass vial
- NIST MS Library (latest version), Wiley, Fiehn GC/S Metabolomics RTL Library and kit, SMART metabolite database or equivalent; relevant to pharmaceutical and biochemical compounds and comprehensive database for clinical biomarkers; include Tandem (MS/MS) libraries and GC methods/retention indices library with provision of free updating of the library up to three years from the date of delivery.
- Install Kit for GCs with Gas Purifiers; Gas filter and regulator for Gases
- Vial, screw, 2mL, amber, 100/pk and Blue screw caps, 100/pk and Column based on application
- **Spare** which include but not limited to: 1) syringe 10 uL for liquid injection, 2) supply of vacuum oil; 3) O-rings; 4) (1) additional analytical column of same specification; 5) vials for washing and waste solvent and 6) one (1) additional column for other clinical diagnosis of IEM applications of the GC-MS/MS; 7) (1) set of gas purifiers; 8) PM kit; 9) one unit 1 TB external hard drive for storage of analytical data (back up); 10) table for the unit; 11) equipment standards and tuning solutions
- Parallel-Redundant Uninterrupted Power Supply (1 unit) which will meet the demand of the required power back up support for the GCMSMS Unit.
- Vacuum pump with (1) free PM service
- Hands-on training will be conducted by factory trained engineers and application specialist to all BGL staff (local).
- Includes all expense paid, minimum of 1-month international training (which include round trip airfare, accommodations, travel and health insurance and cost of living allowance, meals, and other applicable incidental expenses) for two (2) BGL staff in an international clinical lab/ associate laboratory re: 1) utilizing the equipment for method development and validation in clinical diagnosis of IEM; and 2) routine analysis involving urinary organic acid analysis and/or analysis of other biomarkers both for urine and plasma for inborn errors of metabolism via GC-MS/MS.
- Provides analytical methods for analysis of metabolites in biological samples (blood, urine, intracellular materials) and acquisition method with fully optimized GC parameters.
- Warranty: 1 year for replacement of parts and 2 years for services with (2) free Preventive Maintenance service and (1) free Calibration service in line with ISO standards with calibration certificate

- Service support: factory trained service engineers with minimum of 5-year experience
- Should entitle the customer to corresponding discounts on service/ spare parts sale compared to the supplier's published rates (after 2-year service and 1 year-on parts, warranty)
- Certificate of Calibration from the Manufacturer (in accordance to ISO guidelines/standards)

E. Reinstallation and re-calibration of GCMS/MS or GC-MS triple quadrupole GC-MS to the New NIH Building with Gas Line

- a. Gas installation package: Gas line system for nitrogen, helium and argon including the tanks and restraints and gas housing (safety measure in case of earthquake); gas shut off valve; and gas purifiers and other applicable accessories
- b. Installation kit with gas purifiers
- c. Re-calibration service with Certificate of Calibration (ISO)
- d. Warranty: 1 year, replacement of parts and services, (2) PM service (semi-annual)

Delivery Period: Within 90-120 calendar days from the date of receipt of P.O.

Price is VAT Inclusive

TERMS AND CONDITIONS FOR THE PROCUREMENT OF EQUIPMENT

NOTE: End-user shall accomplish and sign this form.

**Name of Project/Contract: Supply of 1 unit GC-MS/MS; GC-MS Triple Quadrupole GC-MS
(as per PR No. 15584)**

1. Indicate brand, model and country of origin.
2. Notarized certificate that the product is brand new, not reconditioned/refurbished including parts and accessories and year of manufacture/ model was first commercialized.
3. Delivery and installation should be done within **90-120 calendar days from the date of receipt of Purchase Order** commencing on the date of receipt of Purchase Order and Notice to Proceed. Notification by email and acknowledged by the supplier constitutes date of acceptance. The equipment must be delivered ready to use. Cables, connectors, adapters and accessories even not specified but are essential for the unit to function must be provided free by the winning bidder.
4. Certification from at least one (1) government and /or private agencies within Metro Manila or the Philippines that they have been supplied with the same brand being offered.
5. Undertaking to provide product orientation and operations training for end-user and troubleshooting training for technicians/research staff (local) and application training in a related-laboratory abroad for a minimum of one month for 2 staff of the Biochemical Genetics Laboratory ((1) Unit Head (Chief Chemist) and (1) Senior Chemist).
6. Warranty should include **2 years for services, 1 year for parts, 2 x Preventive Maintenance service (Semi-Annual) and 1x Calibration Service.**
7. Warranty period shall commence from the date of acceptance by the end-user, testing and commissioning.
8. Provide regular quarterly preventive maintenance and calibration during the warranty period in compliance with ISO standards.
9. A notarized document from the manufacturer that the bidder is an authorized distributor of the equipment or a certified distributorship agreement between the bidder and manufacturer or any valid (legal document) proof of distributorship.
10. A notarized document from the manufacturer and local distributor that in the event of a change of local distributor, preventive maintenance, warranty and services agreed here upon will be honored by the principal manufacturer or any equivalent certified document.
11. Notarized Certification that the local distributor and the manufacturer have been in business relationship of providing that said equipment for at least five (5) years.
12. Notarized certification accompanied with proof that the bidder is in the business of supplying the unit/item for the last five (5) years.
13. Guarantee letter or certificate from the manufacturer and local distributor to ensure the availability of parts, supplies and accessories and will not be discontinued for the next ten (10) years.
14. Provide separate quotation for maintenance, repair and replacement of parts after warranty period.
15. Provide operator's & service manual (in English Language) upon delivery.
16. The bidder must submit certification that they have a capability for corrective and preventive maintenance of the unit or have a service center within Metro Manila, adhering to ISO standards for testing and calibration.
17. Must guarantee that diagnostic technician will be able to assess the unit within 24 hours from time of notification (in case of need for checking/troubleshooting).
18. Automatic provision of a functioning service unit (same model or higher) in case repair of more than 3 days/pull out of the purchased unit during the warranty period.
19. The winning bidder will be responsible for all fees pertinent to performance testing, delivery, installation and commissioning the unit (if applicable).
20. Specific Place of Delivery: **Institute of Human Genetics-National Institutes of Health, University of the Philippines Manila.** In case of large equipment, the end-user should issue a certification, noted by the Dean/Director, that the identified space is available.

21. Terms of payment: Payment must only be made after the appropriate inspection and acceptance procedures, as mandated by existing government rules and regulations, have been complied with by the Procuring Entity.
22. A Notarized Manufacturer's Certificate of Compliance to include supporting test results showing the physical and chemical test values meeting applicable specifications.

Discussed and agreed during the Pre-Procurement Conference conducted on _____

End-user (Probational member): Princess B. De la Cruz and Dahlia C. Apodaca, PhD

Technical Working Group: _____

BAC 3 Chairman: _____

(NOTE: This forms part of the bidding documents).