Recommendation of TSC on "Prebid meeting held on 19-11-2024 at CSIR-AMPRI, Bhopal"

A Prebid meeting was scheduled on 19-11-2024, 3.00 PM onwards, the following two firms has participated in the Prebid meeting held at CSIR-AMPRI, Bhopal.

1. Mr. Satish Khuntale; LCGC Bioanalytical Solutions, LLP, Pune
2. Mr. Digvijay Jaiswal; Quality Machine Tools Corp., Indore

After a detailed technical discussion, the following changes in the technical specification in the tender documents are requested.

S. No.	Tendered specification	Revised tendered specification	Reason for revision
I	**Main System**		
	• All operations must be in one instrument. The system must be **fully automatic** for all operations and controlled by a single software with a **2 years warranty** for the complete system. The system should allow standard operation from **-170°C to 500°C** and up to **200 bars** with a high-temperature sample holder. Holder volume should be 3-5ml. The system should allow the sorption gas of primarily Hydrogen. It should be compatible with other gases such as Deuterium, Methane, Ethane, Nitrogen, Oxygen, Carbon dioxide, Helium, Neon, Argon, Krypton, and Xenon.	• All operations must be in one instrument. The system must be **fully automatic** for all operations and controlled by a single software with a **2 years warranty** for the complete system. The system should allow standard operation from **-170°C to 500°C** and up to **200 bars** with a high-temperature sample holder. **Holder volume should be 7 ml or more.** The system should allow the sorption gas of primarily Hydrogen. It should be compatible with other gases such as Deuterium, Methane, Ethane, Nitrogen, Oxygen, Carbon dioxide, Helium, Neon, Argon, Krypton, and Xenon.	Holder volume extends for a wide range of sample analysis, change in the specification do not affect the end-use requirement of the product.
IV	**Pressure specifications**		
	Not mentioned in tender specifications	**Pipelines and Valves** •Pipelines: High-pressure stainless steel pipelines from Swagelok 1/4" OD/HP •Needle Valves: 2-way straight SS Needle valve with ¼" OD High-pressure end connection. •Fittings: High-grade corrosion-resistant stainless steel with High-pressure End connection •Pressure Locking system: Swagelok ferrule **Pressure sealing** •Vacuum sealing: Copper 'o' ring-based vacuum sealing at the base plate •Fittings: Swagelok SS316 fittings should be used throughout the system.	Specifications are added to clarify the system design, additions in the specification do not affect the end-use requirement of the product.

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VI	**Reactor assembly**		
3	**Volume of sample reactor** • The volume of the sample reactor must be able to load 50 mg to 10 g sample.	**Volume of sample reactor** • The volume of the sample reactor must be able to load 50 mg to 10 g sample **(7 ml or more)**.	To clarify sample reactor volume, clarification in the specification does not affect the end-use requirement of the product.
4	Dynamic flow configuration, with an integrated mass spectrometer for temperature-programmed desorption	Dynamic flow configuration, with an integrated mass spectrometer for **in-situ** temperature-programmed desorption **facility**	To clarify dynamic flow configuration program, which will not affect the end-use requirement of the product.
XVI	**Other compulsory items**		
	• **Working Bench for Installation**: Suitable anti-vibration tables with electric sockets and drawers should be provided by the vendor to accommodate the complete HSMA system including Computer, Printer etc. Dimensions of L-shape table: Height: 75 cm, Width: 75 cm, Length: 410 cm (225 cm plus 185 cm) or more as required for the complete system with two laboratory stools. • One auto cooling unit (2.0 ton) as per the requirement of the system • Compatible liquid nitrogen Dewar (3 nos.) • Gas pipeline: High-pressure stainless steel gas pipelines as per onsite requirement for running the instrument with a regulator. • Dehumidifiers - 20ltr/day covers an area of 250-300 sq ft (2 nos) • 99.999 % Hydrogen cylinder 7 cubic mtr (2 nos) • 99.99% Helium cylinder 7 cubic mtr • Cryocan 50kg capacity (2 nos) • Liq. Nitrogen Handling Gloves reusable (10 nos) • Liq. Nitrogen Handling Goggles (5 nos) • Liquid Nitrogen Dispenser (1 nos)	• **Working Bench for Installation**: Suitable anti-vibration tables with electric sockets and drawers should be provided by the vendor to accommodate the complete HSMA system including Computer, Printer etc. Dimensions of L-shape table: Height: 75 cm, Width: 75 cm, Length: 410 cm (225 cm plus 185 cm) or more as required for the complete system with two laboratory stools. • One auto cooling unit (2.0 ton) as per the requirement of the system • Compatible liquid nitrogen Dewar (3 nos.) • Gas pipeline: High-pressure stainless steel gas pipelines as per onsite requirement for running the instrument with a regulator. • **Drawer type (4 drawers) steel storage cabinet as per the requirement for spare parts storage.** • Dehumidifiers - 20ltr/day covers an area of 250-300 sq ft (2 nos) • 99.999 % Hydrogen cylinder 7 cubic mtr **with regulator** (2 nos) • 99.99% Helium cylinder 7 cubic mtr **with regulator (1 nos)** • Cryocan 50kg capacity (2 nos) • Liq. Nitrogen Handling Gloves reusable (10 nos) • Liq. Nitrogen Handling Goggles (5 nos)	Required for smooth operation of the system, changes in the specifications do not affect the end-use requirement of the product.

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		• Liquid Nitrogen Dispenser (1 nos) • **Regulator for nitrogen cylinder (1 nos)** • **All regulators should be good quality stainless steel**	
XVII	**Safety**		
	• Overpressure bursting disk permanently connected to the reactor, hardware and software overpressure protection, integrated alarm messaging, and automated leak check routine. • The system should have a safety arrangement with a Flammable gas detector, emergency vented cabinet, and burst disk. • Safety support with the life of the equipment should be provided by the company.	• Overpressure bursting disk permanently connected to the reactor, hardware and software overpressure protection, integrated alarm messaging, and automated leak check routine. • **Leak detection for hydrogen ≤100 ppm level.** • The system should have a safety arrangement with a Flammable gas detector, emergency vented cabinet, and burst disk. • Safety support with the life of the equipment should be provided by the company.	To extend more safety, addition in the specifications do not affect the end-use requirement of the product.

As per the above representation, from both firms viz. M/s LCGC Bioanalytical Solutions, LLP, Pune and M/s Quality Machine Tools Corp., Indore, and to strengthen the specifications and to enhance the competition the above modifications in the tendered specifications in chapter 4 are recommended. Rest specifications will remain unchanged.

We shall abide by the Code of Integrity and Conflict of Interest for Public Procurement as per para 3.2.1 of CSIR Manual 2019.

Pradip 19.11.2024
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Indenter

Singhai
Dr Sandeep Singhai
Member, TSC

19.11.2024
Dr Prabhat Baghel
Alternate Chairman & Member, TSC

19/11/2024
Dr. Surender Kumar
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19/11/2024
Dr. Manish Mudgal
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