

ADDENDUM 03Tender no.2021-22/02

Based on the various queries / clarifications received from the bidders the following amendments are made:

Testing Equipments**1. 2021-22/02/01 CHNSO Analyser**

Sr No	Tender Specifications	Clarification
a	To provide Helium, Oxygen cylinders with regulators, PC and printer for operation of instrument	The supplier shall provide Helium, Oxygen cylinders with regulators & carry out Gas paneling. PC and printer for operation of instrument to be provided. PC shall have latest configuration of Windows operating system

2. 2021-22/02/08 GC-MS with Pyrolyzer and Headspace

SrNo	Tender Specificatio	Amended specifications
5	Data acquisition /operating system System should be capable of supporting three inlets and three detector ports simultaneously; should have electronic pneumatic/pressure controls for all the gases and should have Chromatography Data system which is based on Microsoft Windows operating system for instrument control, data acquisition, data analysis, quantization, automation & customization with online and offline sessions provided.	Data acquisition /operating system System should be capable of supporting two inlets and three detector ports simultaneously; should have electronic pneumatic/pressure controls for all the gases and should have Chromatography Data system which is based on Microsoft Windows operating system for instrument control, data acquisition, data analysis, quantization, automation & customization with online and offline sessions provided.
16	Head space vial Vial capacity 20 or more and upgradable to 70 or more vial capacity	Head space vial Vial capacity 12 or more and upgradable to 70 or more vial capacity
29	GC Detector Specifications (FID)	GC Detector Specifications (FID)

	Carrier gas head pressure setting - Should be more than 950KPa	Carrier gas head pressure setting - Should be more than 650KPa or more
33	Turbo Molecular Pump (TMP) 300L/sec or better capacity	Turbo Molecular Pump (TMP) 255 L/sec or better capacity
35	WorkStation Instrument Control Software Library search through Retention Index function should be provided as standard in the software	WorkStation Instrument Control Software NIST Library should be provided . Support to be provided for updation of library

3. 2021-22/02/10 Induction Coupled Plasma - Optical Emission Spectroscopy

Sr No	Tender Specification	Amended specificatios
3	Optical System The instrument shall be equipped with a high energy Echelle Cross Dispersion Spectrometer with focal length of less than 400mm & a "side by side" arrangement of prism and grating. Emission spectra shall be dispersed in both wavelength and order in a 2 dimensional array	Optical System The instrument shall be equipped with a high energy Echelle Cross Dispersion Spectrometer with focal length of less than 400mm & a "side by side" or suitable arrangement of prism and grating. Emission spectra shall be dispersed in both wavelength and order in a 2 dimensional array or in suitable mechanism
5	RF Generator The Solid state water cooled RF generator must run at a frequency of 40 / 27.12 MHz .	RF Generator The Solid State water cooled RF generator must run at a frequency of 40 / 27MHz or suitable frequency

12	<p>Plasma Viewing</p> <p>The torch orientation should be horizontal and plasma shall be viewed axially as well as radially. Auxiliary optics shall be available to provide a radial plasma view.</p>	<p>Plasma Viewing</p> <p>The Torch orientation should be horizontal or vertical and plasma shall be viewed axially as well as radially. Auxiliary optics or suitable mechanism shall be available to provide a radial plasma view.</p>
16	<p>Wavelength Range</p> <p>The instrument shall be able to operate over the minimum range of 166 to 840 nm.</p>	<p>Wavelength Range</p> <p>The instrument shall be able to operate over the minimum range of 166 to 785 nm or better</p>
7	<p>Plasma / Auxiliary / Nebulizer Gases</p>	<p>Plasma / Auxiliary / Nebulizer Gases</p> <p>ICP OES instrument should be equipped with 4 Software controlled variable Mass Flow/ Electronic Flow Controllers for Plasma, Nebulizer, Auxiliary and Make up Gas in order to handle all kind of sample matrices with excellent reproducibility</p>

4. 2021-22/02/12 Modulated Differential Scanning Calorimeter (MDSC)

Sr No	Tender Specifications	Amended specifications
16 & 32	Liquid Nitrogen (LN ₂) system with a Dewar of 50L capacity	Liquid Nitrogen (LN ₂) system with a Dewar of 50L capacity or suitable system in order to achieve the required temperature upto -150 °C and maintain the temperature during the test duration and over all comply with the other performance requirements.
24	Calorimetric precision based on the metal standard should be ± 0.08%	Calorimetric precision based on the metal standard should be ± 0.10% or better


 Principal Director (T)