



INSTITUTE OF NANO SCIENCE AND TECHNOLOGY, MOHALI

(An autonomous Research Institute of Department of Science and Technology,
Government of India)

Habitat Centre, Sec-64, Phase X, Mohali – 160062, PUNJAB

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Ref No. INST/12(268)/2017-Pur

Date: 09/01/2018

Reference to the presentation given by the bidders attended pre-bid meeting held on 01st January 2018 at 1100Hrs for purchase of equipment: **CLOSED CYCLE CRYOGEN FREE OPTICAL CRYOSTAT ADAPTED LOW TEMPERATURE MEASUREMENT IN HELIOS FIRE SPECTROMETER WITH ACCESSORIES** and after discussion with pre-bid committee following technical specification of the tender has been modified. All bidders are requested to read the below modified specs before participating in the tender.

S. NO	PRESENT TENDER SPECIFICATIONS	MODIFIED SPECIFICATIONS AFTER PRE-BID MEETING
1	Gifford-McMahon (GM) cooler based Closed Cycle Cryostat	NO Modification
2	Five optical access ports (4 radial and 1 axial) for demountable windows	Four (04) optical access ports- Quartz window for UV-VIS and optional (04)Spare window for THz spectroscopy
3	Optical access with clear view of 28mm diameter	Optical access with clear view of 28mm diameter or more
4	Sample in vacuum cooled by mechanical contact with heat exchanger	NO Modification
5	Sample space size 40mm diameter x 50mm tall	Sufficient sample space to accommodate Sample size ~ 10mm x 10mm
6	Sample holder and sample Puck for reflection & transmission pump probe spectroscopy measurement	Separate Sample holder interchangeable for reflection & transmission pump probe spectroscopy measurement
7	Loading & unloading tool for sample puck should be included.	Loading & unloading tool for sample holder for reflection & transmission sample holder
8	Heat exchanger fitted with heater and Cernox sensor	NO Modification
9	Vertical cryostat mounting including vibration isolation mounts	Vertical cryostat mounting including vibration isolation mounts on optical bread -board and optional separate cryostat mounting stand
10	Temperature controller configured with one sensor-heater PID loop	Temperature controller with Two independent input channels and Two independent heater output loops
11	Touch screen interface & software control	Touch screen interface or key pad interface & software control USB and GPIB interface with LabVIEW driver
12	Sample temperature range from ~ 5 K to 300 K (With windows)	NO Modification
13	Temperature stability ± 0.1 K	Temperature stability \pm 0.1 K or better



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14	Cooling power at 4.2K ~ 0.2 W	Cooling power at 4.2K ~ 0.2 W with Air cooled compressor, water cooled compressor quote as optional
15	Typical cool-down time from ambient to <5K: 200 minute or less	NO Modification
16	Typical cool-down time from ambient to <10K: 120 minute or less	NO Modification
17	Compressor unit with 3m long flexible gas lines	NO Modification
18	OVC pumping station including Turbo pump with rotary vane backing pump	Suitable Turbo pump with dry backing pump with vacuum gauge and pumping line
19	Necessary stage/adaptor for mounting the cryostat inside the Helios-Fire spectrometer should be included	NO Modification
20	Necessary cables, control electronics & power supplies should be included	NO Modification
21	1 year warranty	NO Modification
22	The Low temperature sample holder should be installed in Helios-Fire Spectrometer and measurements should be demonstrated.	NO Modification
23	Accessories and consumable	Accessories and consumable : Vacuum grease and compressor consumable kits should be quoted (New Added)

Terms and conditions of the tender are remain unchanged.

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C.F.A.O