

Tenders are invited for setting up a large liquid nitrogen vessel and supply of liquid nitrogen. The details are listed below:

1. A Vacuum Insulated Vessel (VIV) of Capacity 3000 Liters (minimum) of liquid nitrogen designed to meet the standard safety requirements should be established in IISER Mohali.
2. The vendor will take the responsibility of erecting and installing the vessel at IISER Mohali. IISER Mohali will make the site ready as per the approved drawings provided by the vendor. The vendor will prepare the site drawing, take all necessary approvals and hand-over the approved drawing to IISER Mohali for necessary civil work.
3. Transporting the vessel to the site at IISER Mohali will be done by the vendor. IISER Mohali will not provide assistance (like manpower) for transporting and erecting/installing the vessel. The vendor will be responsible for the insurance of all equipment during transport.
4. The vendor is required to do a performance & acceptance test in presence of the IISER staffs and provide training to the IISER staff members for running the facility. The facility will be considered to have been installed only upon completion of the tests.
5. All the required instrumentation and automation will be done by the vendor. All necessary spare parts, cables, piping, tubing, flanges, clamps, nozzles, fittings, valves, regulators, pressure and temperature sensors with meters etc. are to be supplied by the vendor.
6. The VIV should be constructed of carbon steel (outer shell) and SS304 (inner shell).
7. The insulation of the VIV filling should be perlite or similar material.
8. All the required accessories including the ports and valves, safety devices, level monitors, hoses for filling liquid nitrogen to external containers and high-pressure dewars should be installed.
9. The VIV should be equipped with appropriate hard-ware for filling up high pressure liquid nitrogen dewars as well as regular nitrogen containers (capacity: 15 liters to 200 liters).
10. The VIV should be designed to tolerate the hot summer (temperature up to 50°C) and cold winter (temperature down to 0°C) of Mohali.

11. The vendor should also provide maintenance of the vessel on a regular basis and whenever required. The cost for 5 years of comprehensive on-site warranty should be quoted separately.

12. Initially all the required approvals and licenses for the installation of the VIV will have to be obtained by the vendor.

13. The vendors must have installed at least 5 systems of equal and higher capacity in India before the deadline of the submission of quotes. References of the installed systems should be provided in the technical quote.

IMPORTANT: The vendors must send quotations in two bid system: The technical bid and the price bid should be sent in **two separate sealed** envelopes. The respective sealed envelopes should be clearly labeled as “Liquid nitrogen vessel: Technical bid” and “Liquid nitrogen vessel: Financial bid”. The envelopment containing the technical bid must not have any statements that imply financial aspects, failing which the offer will be rejected.

The quotation should include the price of the VIV, its maintenance and the price of liquid nitrogen (per liter) including taxes and delivery charges (in case the vendor of the vessel also supplies liquid nitrogen). The vendors are encouraged to send multiple proposals for review. Selected vendors will be called for technical presentations before opening the financial bid.