

# LAr R&D Progress Updates

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# Lab Safety and Space Management

## ▶ Ladder regulation

- Due to a recent incident, all yellow-tagged ladders are not allowed to be used for now
- We have one such ladder in highbay, the one on the top of the corner room of robotic testing station
- Kin already checked ladder and locked it up



# LN2 supply tank inquiry updates

▸ **We are in need of more LN2 portable dewars**

- The portable dewars are shared between us and CE test
  - We need 2x50Psi dewar when the system is running
  - CE robotic test require 1x 50Psi dewar for pressure maintaining, 1x 22 psi for LN2 supply
  - There will be conflict in use for both of us in operation mode
- The similar arrangement of getting rental/loaner dewars from Airgas is not longer available
- The additional dewars have to be purchase
- Airgas provided quote which is quite high
  - Price of a portable dewar was around 3k, but increased recently due to the tariffs
- I'm inquiring with other sources to look for better price
  - Found pricing from manufacturer and distributors
  - Princeton Cryo has the best online price(even better than direct from CHART), checking the actual availability

Supplier	Manufacturer	Capacity	Pressure Rating / Configuration	Notes	Price (USD)	Note
Airgas	CHART INC	230 L	22 psig or 50 psig (portable dewar)	Same cylinder with different relief valve	\$6,392	Limit in stock
Cryofab	CryoFab	230 L	22 psig only	Liquid-only dewar	\$4,379	Need to fabricate by order
Princeton Cryo	CHART INC	230 L	22 psig / 230 psig dual pressure relief	Adjustable pressure with LCCM valve	<del>\$6,624</del> \$4,768	Check stock
CHART INC	CHART INC	230L	22 psig / 230 psig dual pressure relief	Adjustable pressure with LCCM valve	\$5,342(round) \$5,765(flat)	2-3 week lead time

# 260L System Cryogenic Operation

## ▶ Sample for testing

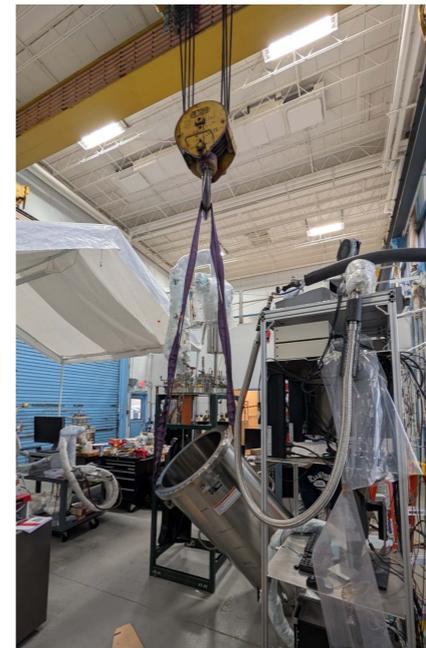
- Chose S8 and S18 for the test, both B33 substrate
- S18 with plasma cleaning, S8 is not
- Both sample mounted on the optical board with spring washer

## ▶ LAr ordering

- The quote was delayed to the holiday and personnel change at the vendor's side
- Significant price increase from \$688 to \$832.50 for a single 230L dewar
- PO has been put in the system, delivery expected next week

## ▶ Dewar cleaning

- Main dewar cleaned up before with minor dust found at the bottom



# 260L System Cryogenic Operation

## ▸ Top Flange assembly

- Top flange has been moved back to the main dewar
- Crane operation was smooth
- Some alignment issues, resolved by shifting the frame
- Reconnecting the plumbing and tightening up the seals now
- Expected to get the system pumped down and leak checked by tomorrow

