



Contribution ID: 130

Type: Poster

C2Po1C-01: Helium inventory and losses in DALS after several cooldowns

Tuesday 20 May 2025 09:15 (1h 45m)

The Dalian Advanced Light Source (DALs) test facility has completed the commissioning of the cold box in June 2024, and the first cooldown of the distribution system began in September of that year. The whole cryogenic system requires helium inventory of 1.4 tons. For a more rational use of this helium, the helium distribution and the total inventory in the system are monitored, and a tool for monitoring the helium inventory is developed. With this tool, it is possible to understand the helium inventory changes intuitively and take effective measures to prevent the helium loss. In this paper, we analyze the changes in the helium inventory of the system after several cooldowns, and propose specific measures to reduce the helium loss.

Author: Mr SHENG, He (Institute of Advanced Science Facilities, Shenzhen)

Co-authors: Ms WANG, Yaqiong (Institute of Advanced Science Facilities, Shenzhen); Ms XU, Lei (Dalian Institute of Chemical Physics, Chinese Academy of Sciences); Mr CUI, Guanglong (Institute of Advanced Science Facilities, Shenzhen); Mr SHI, Xu (Dalian Institute of Chemical Physics, Chinese Academy of Sciences); Mr WANG, Xilong (Dalian Institute of Chemical Physics, Chinese Academy of Sciences)

Presenter: Mr SHENG, He (Institute of Advanced Science Facilities, Shenzhen)

Session Classification: C2Po1C - Helium Management and Processing