Contribution ID: **8** Type: **Poster**

Study of the heat flow due to the heat exchange gas in a shaft cryostat based on GM

Monday, 14 May 2018 19:15 (15 minutes)

On the basis of developments of top loading cryostats ([1], [2], [3]) a horizontal loading cryostat for cryomagnetic research at the diffractometer DN-12 of IBR-2 [4] had been developed. In this regard, it is necessary to study the value of the heat flow associated with the heat exchange gas in the horizontal shaft. For this purpose an express GM cryostat has been performed. This cryostat has a stainless tube shaft and a copper thermal bridge. The cryostat can be rotated 180 degrees relative to the vertical axis.
Heatinflow which is introduced by helium heat exchange gas in the shaft of the angle of inclination and pressure have been investigated.

`References`

[1] Chernikov A.N. et al 2010 Journal of Surface Investigation. X-ray, Synchrotron and Neutron Techniques 4 (6) p. 898-902
[2] Chernikov A.N. et al 2005 JINR Communication P8-2005-23
[3] Budagov, J.A. et al 2008 JINR Communication E13-2008-110
[4] Dobrin I et al 2016 IEEE Transactions on Applied Superconductivity 26 4500404

Primary authors: Mr CHERNIKOV, Aleksandr (JINR); Mr BUZDAVIN, Aleksandr (JINR)

Presenters: Mr CHERNIKOV, Aleksandr (JINR); Mr BUZDAVIN, Aleksandr (JINR)

Session Classification: Poster session