Contribution ID: **345** Type: **Talk**

Hot commissioning of the accelerator driven compact neutron source "LvB"

Wednesday 22 March 2023 12:00 (15 minutes)

After completion of assembling the hot commissioning of the compact neutron source CANS facility "LvB" in Martonvásár will start in January 2023. The system consists of a 35 keV proton ion source, a 2.5 MeV RFQ proton accelerator a thin Li layer target, Pb reflector and bi-spectral thermal-cold low dimensional moderator, that can serve up to 8 neutron scattering instruments. In addition, a fast neutron beam will be available in the direction of continuation of the incoming proton beam. The first results of the hot commissioning work will be presented in the talk, with main emphasis on the observed characteristics of the extracted neutron beams. The concepts developed for funded plans of building up a second Lithium target for the potential of controlled irradiation capabilities for biological studies. Experience in hot commissioning shall also focus on potentials of efficiently building further similar, custom designed turnkey CANS facilities for collaborating customers.

Primary author: MEZEI, Ferenc (Mirrotron Ltd, Konkoly Thege u. 29-33, 1121 Budapest, Hungary)

Presenter: MEZEI, Ferenc (Mirrotron Ltd, Konkoly Thege u. 29-33, 1121 Budapest, Hungary)

Session Classification: Micro Symposium CANS 1

Track Classification: Micro-Symposium CANS