Workshop on Radiation Effects in Superconducting Magnet Materials 2015 (RESMM'15)

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Progress of COMET Superconducting Solenoid System

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Content :

The COMET experiment (J-PARC E21) employs aluminum stabilized superconducting cable for the Pion Capture Solenoid, which will be exposed to severe radiation from the pion production target. Neutron irradiation could cause degradation of thermal conductivity of the coil structure. Effect of the irradiation on the coil temperature was estimated by using simplified model of a coil with aluminum strip in between coil layers for heat transfer. The calculated results will be shown in this presentation. Also status of the magnet construction at J-PARC will be reported.

Primary authors : Dr. YOSHIDA, Makoto (KEK)

Co-authors : Mr. YANG, Ye (Kyushu Univ.)

Presenter : Dr. YOSHIDA, Makoto (KEK)

Session classification : Session A: Superconducting Magnet Designs

Track classification : Design of Superconducting Magnets for High Radiation Environment **Type** : Abstract