

**2018 Mo-99 TOPICAL MEETING ON  
MOLYBDENUM-99 PRODUCTION TECHNOLOGY DEVELOPMENT**

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**Hot Test Production of Fission Mo-99 at HANARO**

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**ABSTRACT**

In Korea, new research reactor (KJRR) project has been launched in 2012, for the domestic and global supply of radioisotopes. In parallel, fission Mo-99 process development has been initiated for the KJRR project. Developed process was cold tested with unirradiated depleted uranium (DU) or low enriched uranium (LEU) targets.

Hot production test was performed in HANARO site. DU target plates were irradiated in HANARO. Dissolution and separation test were executed in the hot cells located in the Irradiated Material Examination Facility (IMEF) and Radioisotope Production Facility (RIPF) of KAERI. Hot and cold test data was utilized to support KJRR project for acquisition of construction permit from Korean Nuclear Safety and Security Commission.