

**2017 Mo-99 TOPICAL MEETING ON
MOLYBDENUM-99 PRODUCTION TECHNOLOGY DEVELOPMENT**

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**Development of Fission Mo-99 Production System and
Facility for the KJRR of Korea**

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ABSTRACT

In 2012, new research reactor (KJRR) project has been launched in Korea to establish 15 MW thermal power reactor dedicated for the radioisotope production, as well as neutron transmutation doping (NTD), in conjunction with the construction of Mo-99 production facility. Simultaneously, KAERI (Korea Atomic Energy Research Institute) is developing own LEU target and process for Mo-99 production to be implemented in the KJRR. Cold test runs for the developed fission Mo-99 process have been achieved in full-scale production system mock-up. Hot production test in 30 MW HANARO reactor is on standby, waiting for the resume of HANARO. In early 2018, procurement process for the Mo-99 production system will start. The project schedule is aiming for acquisition of the construction permit from Korean Nuclear Safety and Security Commission by the end of this year. Then, the construction of the KJRR with the Mo-99 production facility will start in the first quarter of 2018.