Progress in Establishment of Fission Mo Production Technology in Korea

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Research activities have been made in both the development of the fission Mo production process and the designing of the production facility that will be established at Kijang, Korea including a new research reactor in 2017. Progress in the process development for target preparation, target dissolution, Mo extraction, and purification has been made. It is also a great concern to minimize the radioactive wastes or at least to generate the wastes in readily treatable forms in the project. After series of cold experiments, the target dissolution and solution formulation for a column operation are optimized. Progress in the design of the production facility has been made. Two trains of hot cells including the waste storages have been proposed for the alternative operation of the facility. A radioisotope production facility is designed to locate next to the fission Mo production building to provide a simpler and easier handling pathway of the products.