

**Mo-99 2016 TOPICAL MEETING ON
MOLYBDENUM-99 TECHNOLOGICAL DEVELOPMENT**

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IRE Ongoing Effort to Develop Reliable LEU Mo-99 Supply

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ABSTRACT

IRE is actively committed to reduce the proliferation risks through its medical radioisotope production conversion program to the use of low enriched uranium (LEU) based targets. In the meantime IRE must ensure its key role to the global ⁹⁹Mo supply as one of the worldwide major radioisotope producer.

The conversion program is moving forward and the main important milestones that have been achieved recently are discussed. The LEU target has been qualified in two European reactors and IRE is pursuing the target qualification program to guarantee the long term irradiation supply. Process development in the future production environment is on track despite several technical issues that have been overcome.

The new safety features such as the new radioxenon trapping system have been successfully tested, allowing the submission of the updated Safety File to the Belgian Nuclear Authorities. However, potential project risks have been identified and mitigation measures are discussed.