

# International Conference on Radioactive Waste Management: Solutions for a Sustainable Future (CN-294)



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## Development of Mid and Long term Strategies for TRR Spent Fuels Dry Storage

There are significant numbers of produced spent fuels (SFs) eligible to take out from storage pool and transfer to store in dry condition due to more than 50 years operation of Tehran Research Reactor. A multi-phase plan was conceived, designed and has implemented to prepare an infrastructure and required equipment for converting the wet storage to dry for the first try in the country for TRR spent fuels. The plan is initiated with an in-site dry storage of sample SFs in lead-steel casks since 2014. Then, the design and fabrication of a DPC basket type made of alloy steel at 2018. The TRR-SFDPC is a B(U) type of radioactive container which could load 16 standard fuel elements (SFE) and is adopted for both transport and storage purposes. The loading examinations and pre-send preparations are accomplished successfully. The cask surface dosimetry shows acceptable dose values and the desiccation and leak tests are done well. The safety mechanical experiments are planned base on SSR-6 standard to get the exploitation license. A low and medium waste storage site is considered to retrofit and licensing for final destination of DPC cask. A mid-term inside cask storage and a long-term in concrete modules storage is upcoming stages of the SFs waste management plan.

### Do you wish to participate as a Young Professional?

Yes

### Speaker's title

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### Do you wish to be considered for a Young Professional grant?

Yes

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