Recent Safety Assessment of a Reference Geological Disposal System for Radioactive Waste from Pyro-processing in Korea


< Geological Disposal System >
- for the radioactive wastes generated from the pyro-processing of spent nuclear fuel
  - low-level metal waste at 200 m depth
  - high-level ceramic waste at 500 m depth

< K-PAM: KAERI’s Performance Assessment Model >
- risk-based safety assessment of complex scenarios
  considering the long-term complementary impacts on the disposal system
  - scenario occurrence probability
  - improved computational efficiency
- external event characterization
  - Earthquake
  - Well intrusion
- Matlab & GoldSim coupling
  - Matlab: overall computing system
  - GoldSim: scenario assessment module

< Future Plan >
- TSPA model closer to the process model level