

Objective

To assess the molecular structures and chemistry that govern thermophysical properties and optical indicators of molten salt reactors (MSRs) and pyroprocessing schemes by establishing molten salt spectroscopic monitoring capabilities, developing and validating molecular dynamic (CMD) simulations, and leveraging them for Raman spectroscopic interpretation to develop online monitoring capabilities.

Overview

- proliferation risk minimization.



$$V(r_{ij}) = B_{ij}e^{-\alpha_{ij}r_{ij}} - f_{ij}^6(r_{ij})\frac{C_{6,ij}}{r_{ij}^6} - f_{ij}^8(r_{ij})\frac{C_{8,i}}{r_{ij}^8}$$



Investigation of Fission Product Influence on the UCI₃-LiCI-KCI Eutectic Jacob Tellez, David Wu, Jenifer Shafer **Colorado School of Mines** jtellez@mines.edu ETI Annual Workshop, February 8 - 9, 2023

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#16