**MISSION:** To provide the foundational work necessary to accurately model and ultimately control electron- and phonon-mediated thermal transport in 5f electron materials in extreme irradiation environments.

**RESEARCH PLAN**

Thermal energy transport under irradiation is directly related to reactor efficiency as well as reactor safety. The aim of TETI is to develop a first principles understanding of electron and phonon transport in advanced nuclear fuels that will provide the necessary tools to enhance thermal transport by tailoring defects and microstructure.

https://teti.inl.gov/