

Abstract Submitted
for the TSF21 Meeting of
The American Physical Society

Molten Salt Reactors: A Paradigm Shift in Nuclear Energy Technologies TIMOTHY HEAD, Abilene Christian University, NEXTRA (NUCLEAR ENERGY EXPERIMENTAL TESTING RESEARCH ALLIANCE) COLLABORATION — Molten-salt cooled, liquid-fueled reactors have the potential to be the clean energy source of the future while also solving some of the world's most pressing problems. The Nuclear Energy eXperimental Testing Research Alliance (NEXTRA) consisting of team members from Abilene Christian University, Georgia Institute of Technology, Texas A&M University, and University of Texas is working toward a molten salt research reactor design with planned construction permit submission to the Nuclear Regulatory Commission in 2022, and a plan to have the reactor built and go critical in 2025. The research and development program at ACU is furthering understanding of molten salt handling and measurement techniques while providing cross-disciplinary learning opportunities to students and faculty to solve the problems required to implement a new take on this old technology.

Timothy Head
Abilene Christian University

Date submitted: 10 Sep 2021

Electronic form version 1.4