

# A Race Against Time: Crystallization and Characterization of Berkelium and Californium Compounds

Prof Thomas Albrecht-Schoenart<sup>1</sup>

<sup>1</sup>*Colorado School of Mines*

*tschoenart@mines.edu*

Berkelium and californium are the last two elements in the periodic table for which milligram quantities can be synthesized, but neither possess long half-lives. In fact, Bk-249 has a half-life of only 330 days. This begs the question whether crystals can even be grown of compounds containing this element? This talk will detail the synthesis and characterization of such compounds and how their structures and properties inform us about how chemistry evolves in the outer reaches of the periodic table.