Corresponding Author

Benjamin Beeler

North Carolina State University

2500 Stinson Dr, Raleigh, NC 27607

919.515.3737

bwbeeler@ncsu.edu

Dear Editorial Board,

Journal of Nuclear Materials

On behalf of my co-authors and myself, I am hereby re-submitting our manuscript, entitled “*First-principles-derived transport properties of molten chloride salts.”*  This article provides a computational study of transport properties (i.e., diffusion coefficient, viscosity, isochoric heat capacity, and isobaric heat capacity) of molten salts. This work is the first to explore a timescale over 100 picoseconds (ps) via *ab initio*molecular dynamics for determining the transport properties of molten salts. This work serves to alleviate the current knowledge gap in the transport properties of molten chloride salts for application in fast-spectrum molten salt reactors.

All comments from the reviewers have been addressed. After revision, we believe that the manuscript has been improved sufficiently to warrant publication.

Sincerely,

Benjamin Beeler