# Improvements and limitations of Mie $\lambda$ -6 potential for prediction of saturated and compressed liquid viscosity

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#### Dear Editor,

We would greatly appreciate if you would consider the following paper for publication in *Fluid Phase Equilibria*. In this work, we demonstrate that the recent developments in state-of-the-art Mie  $\lambda$ -6 force fields provide considerable improvement for estimating saturated and compressed liquid viscosities. We also demonstrate some of the limitations, primarily at high densities/pressures. The primary importance of this study is that it quantifies the reliability of some common force fields for predicting liquid viscosity.

As this study provides a "comprehensive snapshot with respect to the prediction of thermophysical properties, including atomistic and coarse-grained force fields," we believe this manuscript fits the aims and scope of the *Special Issue of Fluid Phase Equilibria on Molecular Simulation*. We are willing to make any changes that may be required to make the manuscript publishable in *Fluid Phase Equilibria*.

Sincerely,

**Richard Messerly**