

“Relative humidity-dependent viscosities of isoprene-derived secondary organic material and atmospheric implications for isoprene-dominant forests” by M. Song et al.

B. Wang

Bingbing Wang

Environmental Molecular Sciences Laboratory,
Pacific Northwest National Laboratory

There are a limited number of studies investigating the viscosity of secondary organic materials (SOM) and their RH and temperature dependence. This paper by Song et al. presents a nice work on the viscosity of isoprene-derived secondary organic materials as a function of RH at 295 K. In Section 4.2 and Figure 8, the authors also discussed and compared the viscosity of isoprene SOM to alpha-pinene SOM from previous studies.

Through this comment, I would like to draw the attention to our recent work reporting a method to derive and estimate the viscosity of SOM as a function of atmospheric relevant temperature and RH (Wang et al., JPCA 2014). In that study, we applied a set of parameters to derive the viscosity of alpha-pinene SOM and the estimated viscosity are consistent with the experimental determined values by Renbaum-Wolff et al. (2013).

→ We thank Bingbing Wang for the suggestions. We have included the viscosity results for α -pinene SOM shown in Wang et al. 2014 in the revised manuscript.