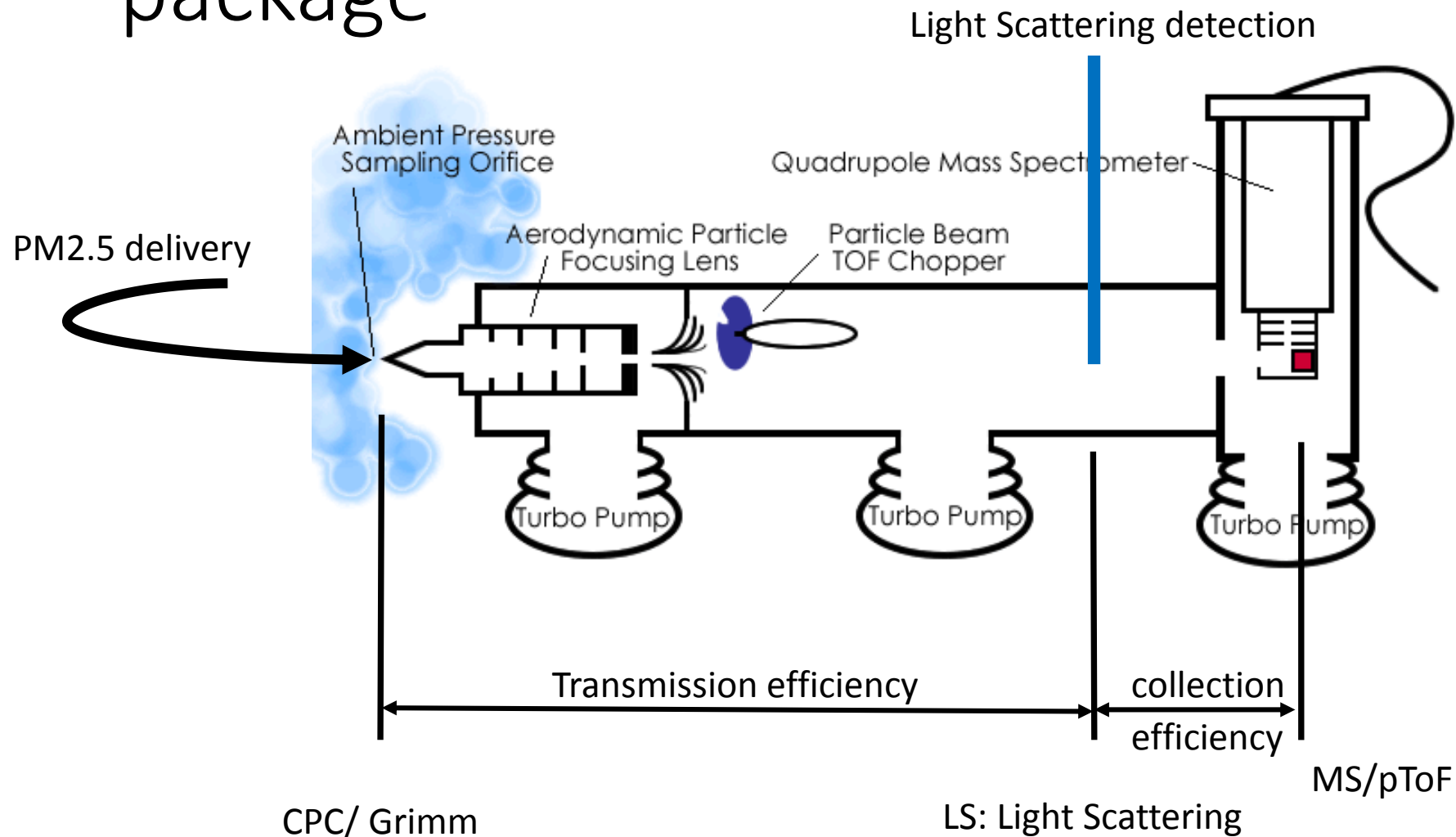


PM2.5 System

It's not just the lens!

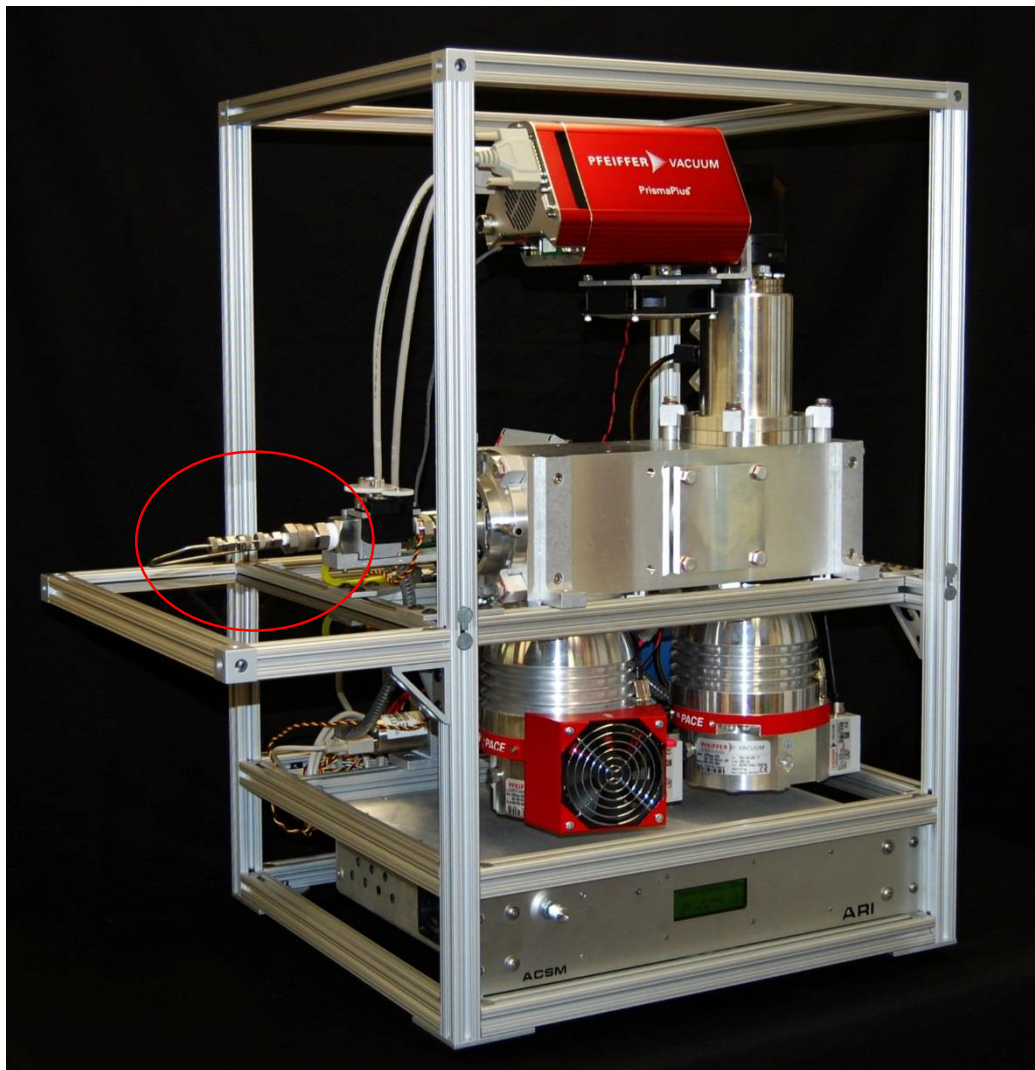
PM2.5 lens and capture vaporizer as a package



Requirements for PM2.5 Instrument

- Get the particles to the lens
 - Inlet plumbing
- Get the particles through the lens
 - PM2.5 Lens
- Detect the particle mass
 - Capture Vaporizer

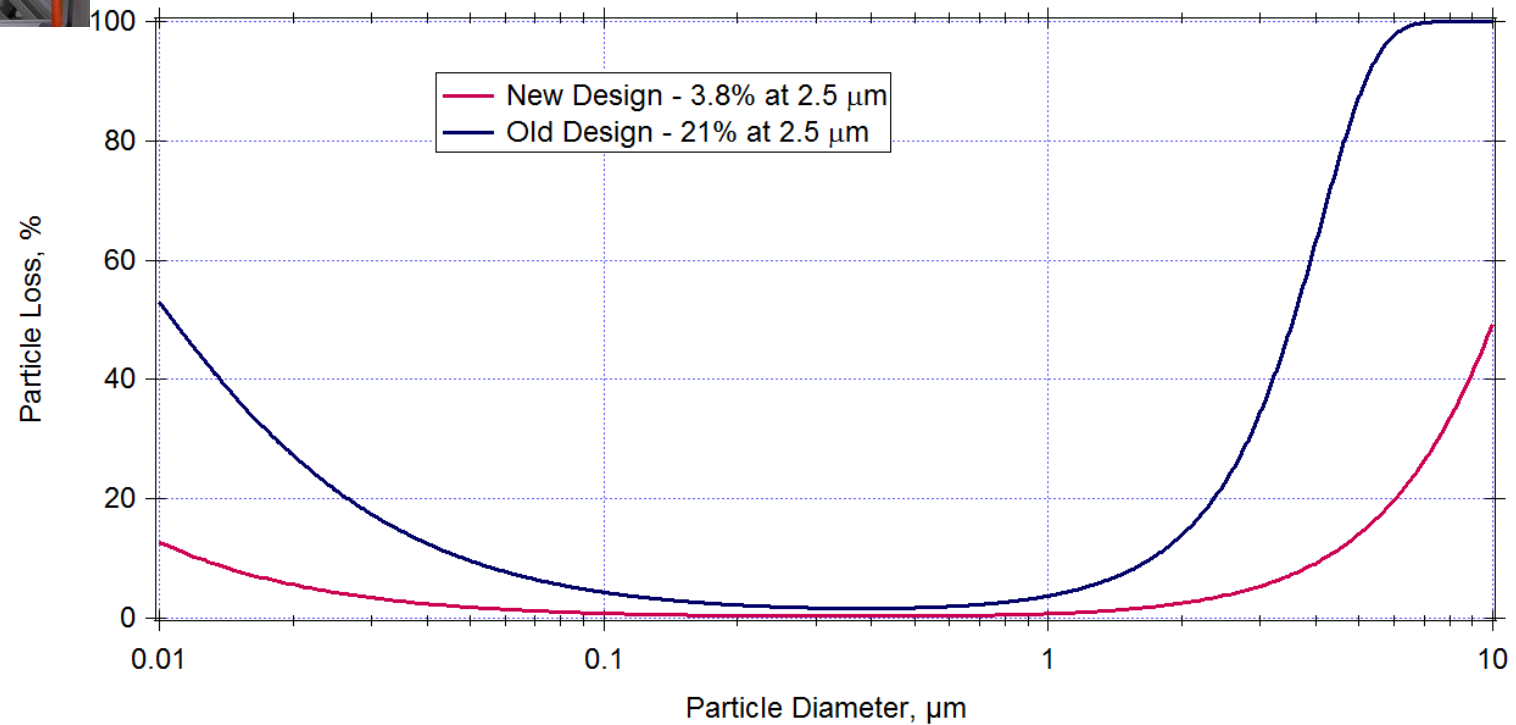
Old Inlet Style



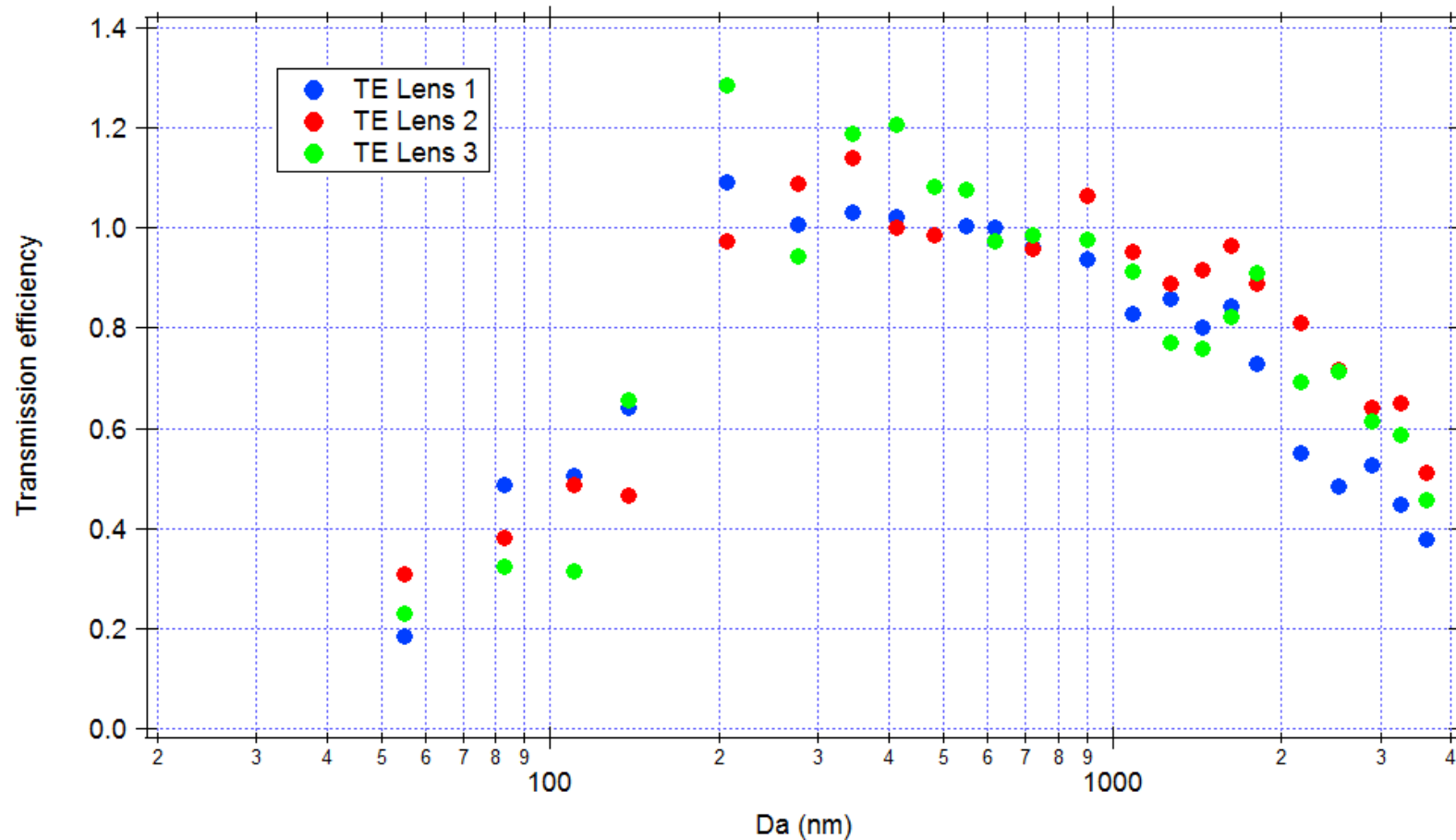
ACSM Inlet for PM2.5

- Switch to straight path for filter valve
- Eliminate bends in 1/8" tube
- Minimize length of 1/8" Tube

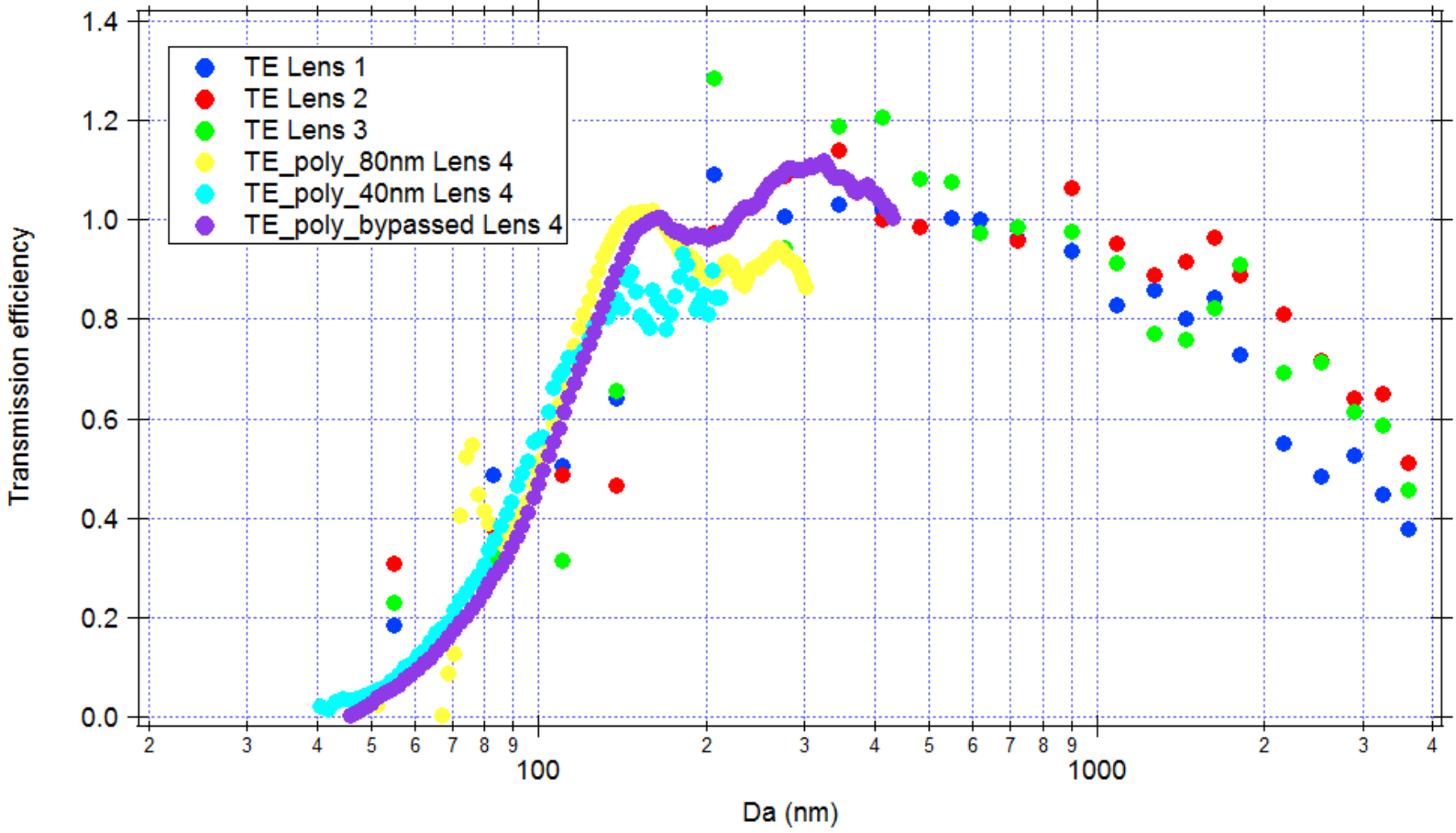
Loss in 1/8" Tube



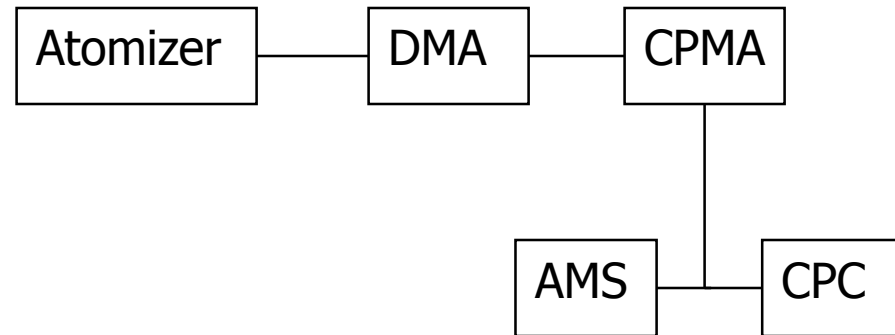
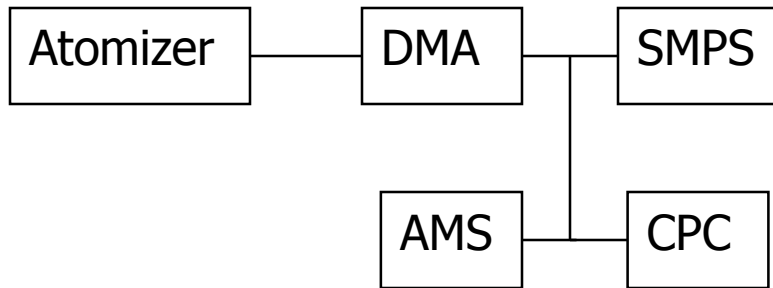
Multiple copies show similar transmission on large side



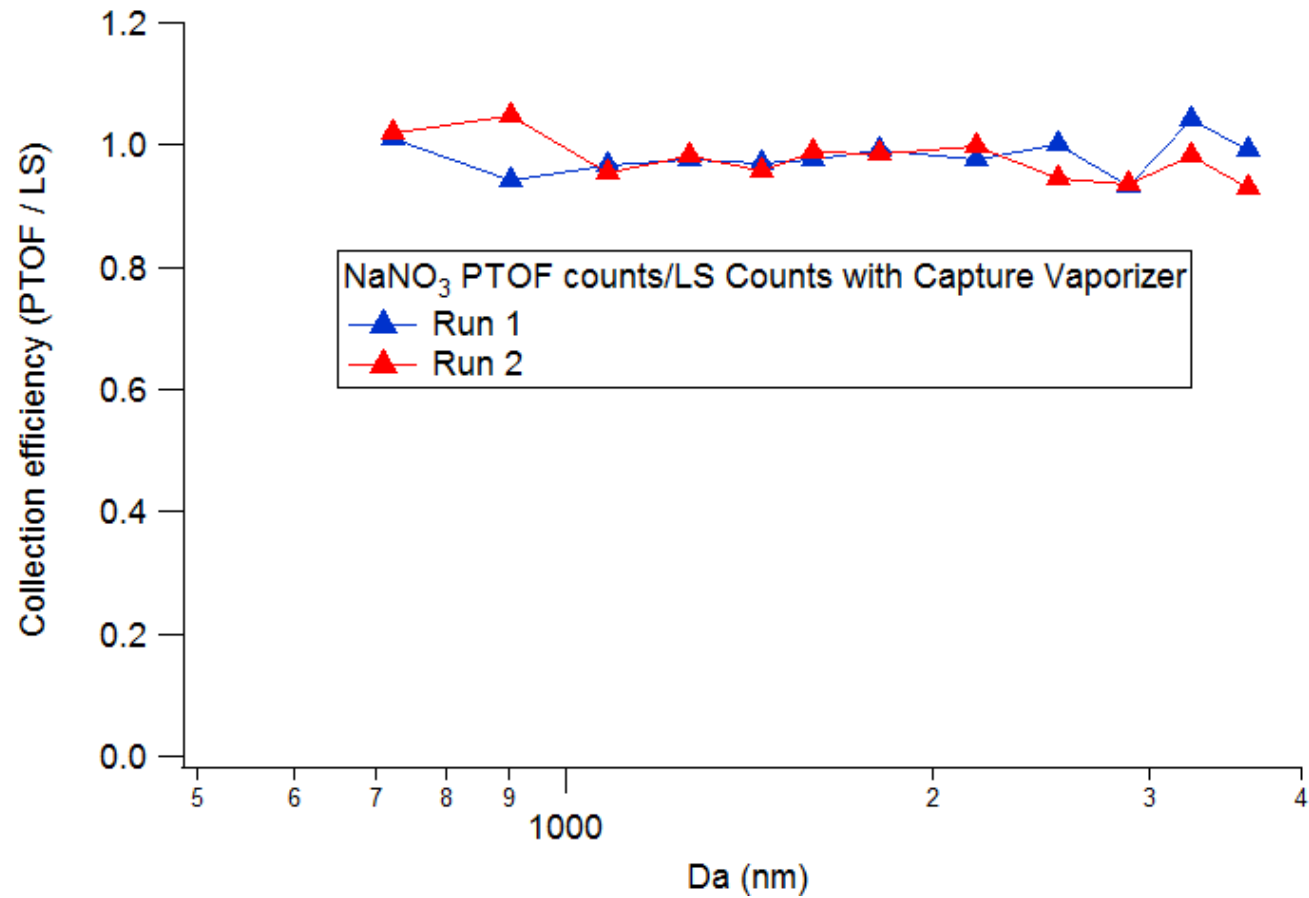
Measurements using polydisperse/detuned DMA particles



More and better measurements for the small side to come



Performance of Capture Vaporizer



Fragmentation pattern change toward more thermal decomposition

