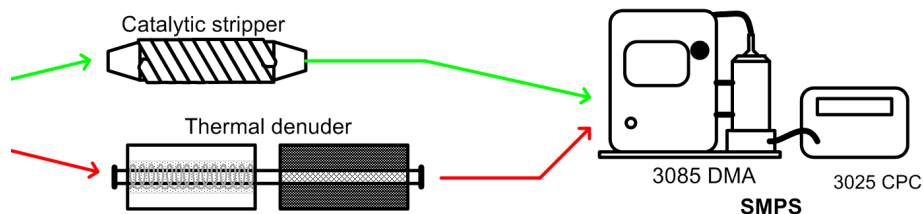
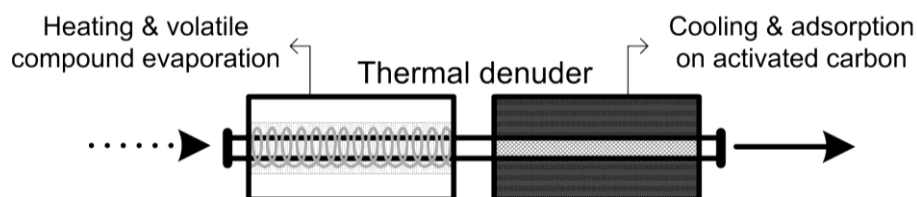
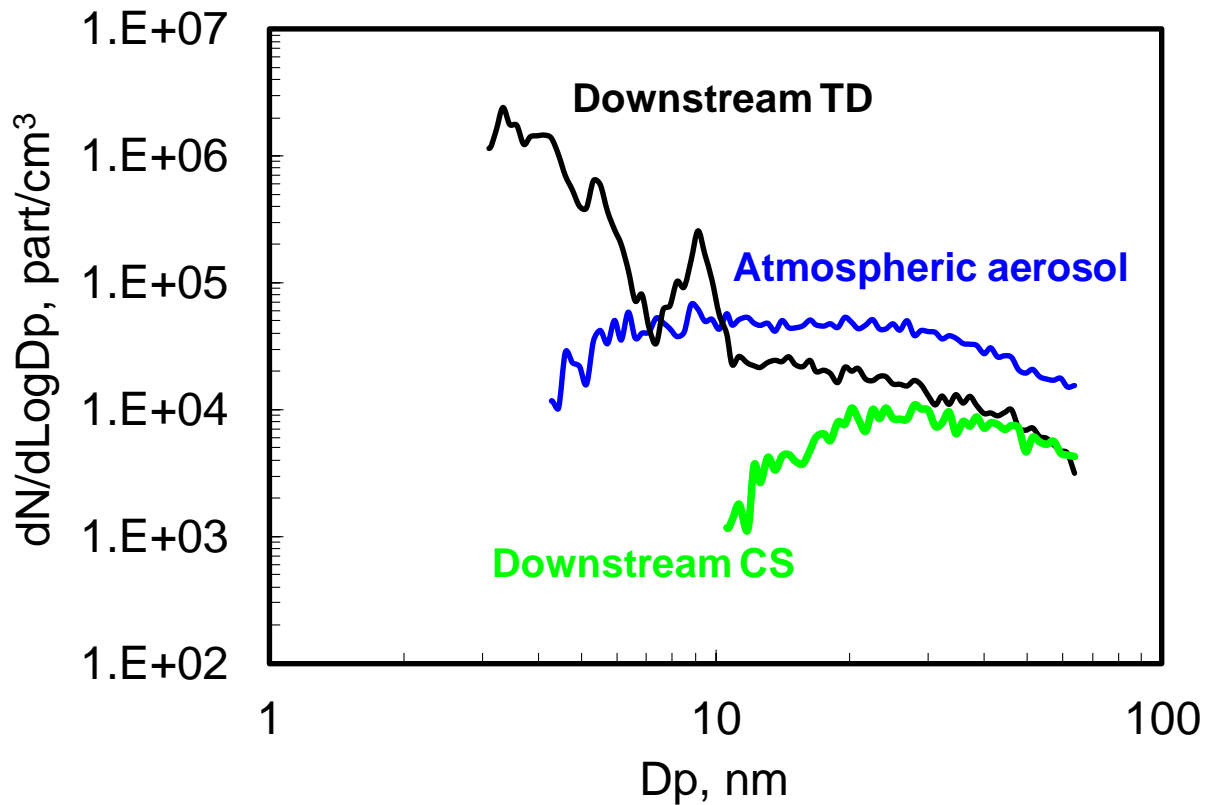


# CS AND TD COMPARISONS – ATMOSPHERIC AEROSOLS

APPLICATION NOTE CI-0002

Alternatives to the CS include the thermal denuder (TD), shown below, and heated evaporation tube. Experiments below show comparisons between these two approaches when challenged with aerosols containing solid and semi-volatile particles [2].





Challenge atmospheric aerosol properties

- ~ 50,000 particles/cm<sup>3</sup>
- ~ 2 µg/m<sup>3</sup>
- ~ 0.4 µg/m<sup>3</sup> solid particles (primarily elemental carbon)

[1] Swanson, J.; Kittelson, D. (2010). J. Aerosol Science, 41:12, 1113 – 1122.