

# CS DEFINITION AND DESIGN

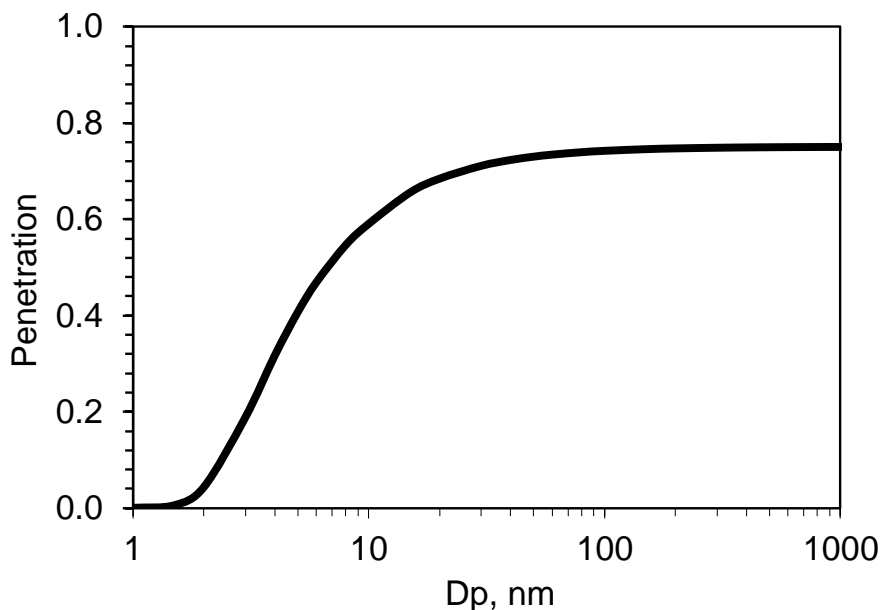
## APPLICATION NOTE CI-0001

A heated catalytic element used to remove the particle and gas phase semi-volatile fraction of an aerosol. It is typically used for diesel exhaust measurements but many other applications

Typical components and characteristics [2]:

- Ceramic monolith
- Alumina washcoat
- Known precious metal coating
- Cell density 300 – 600/in<sup>2</sup>
- Tolerant to sulfur poisoning
- Constant operating temperature of 300 - 400°C
- Flowrate 0.3 to 25 L/min or more

Predictable solid particle loss characteristics as shown below.



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