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Dr. Hering is founder and president of Aerosol Dynamics Inc., a small research firm specializing in the development of measurement methods for fine, airborne particles. In collaboration with Dr. Mark Stolzenburg of Aerosol Dynamics Inc., she developed an automated system for the high-time resolution measurement of fine particulate nitrate and sulfate. Previously she designed a low-pressure impactor for size resolved aerosol sampling in the 0.05 to 4 μm size range, and a two-week integrated sampler for ambient and microenvironmental measurements of fine particle mass and ionic species. Her low-pressure impactor has been used for detailed submicrometer sulfur size distributions measurements in multiple field studies. Her two-week sampler is in use in an ongoing epidemiology study of school children in southern California. The automated systems have been deployed at several sites in California, Colorado and Texas.

Susanne Hering holds a doctorate in physics from the University of Washington (1974), with an experimental thesis in the field of low-temperature physics. She has served as a member of the board and as president of the American Association for Aerosol Research, and was coeditor of the eighth edition of *Air Sampling Instruments*, a reference book published by the American Conference of Governmental Industrial Hygienists. Currently she serves as one of two American delegates to the International Aerosol Research Association.

Selected Publications

- Turpin, B.J., J.J. Huntzicker and S.V. Hering, Investigation of organic aerosol sampling artifacts in the Los Angeles Basin, *Atmos. Environ.* 28:3061-3071 (1994).
- Allen, D.T., E.J. Palen, M. I. Haimov, S. V. Hering, Fourier transform infrared spectroscopy of aerosol collected in a low-pressure impactor (LPI/FTIR) - method development and field calibration, *Aerosol Sci and Technol* 21: 325-342 (1994)
- Hering, S.V. and M.R. Stolzenburg, On-line determination of single particle size and density in the nanometer size range, *Aerosol Sci. Technol.*, 23:155-173 (1995).
- Hering, S.V., Eldering, A., and Seinfeld, J. H., Bimodal character of accumulation mode aerosols in Southern California, accepted by *Atmos Environ* 31: 1-11 (1997).
- Miguel, A. H., Kirchstetter T. W., Harley, R. A. and Hering, S. V., On-road emissions of particulate polycyclic aromatic hydrocarbons and black carbon from gasoline and diesel vehicles, *Environ Sci Technol* 32, 450-455 (1998).
- Hering, S. V. and Stolzenburg, M. R., A new method for the automated high-time resolution measurement of PM_{2.5} nitrate, in *PM_{2.5}: a Fine Particle Standard*, J. Chow and P. Koutrakis editors, *J. Air Waste Manage Assoc*, pp 312-317 (1998).

Stolzenburg, M. R., Kreisberg, N. M., Hering, S. V., Atmospheric size distributions measured by differential mobility optical particle size spectrometry, *Aerosol Sci Technol* 29; 402-418. (1998)

Hering, S. V. and Cass G. R., The magnitude of bias in the measurement of PM_{2.5} arising from the volatilization of particulate nitrate from Teflon filters, *J. Air Waste Manage Assoc.* 49: 725-733 (1999).

Lin, D.Y., Prather, K. A., Hering, S.V., Variations in nitrate containing particles in Riverside California, submitted to *Aerosol Sci and Technol.*, (1999)

Stolzenburg, M. R. and Hering, S. V., A new method for the automated measurement of atmospheric fine particle nitrate, submitted to *Environ Sci and Technol.*, (1999)

Collaborators During the Past 48 Months (on projects and papers)

Rob Harley, Glen Cass, Kim Prather, Mark Stolzenburg (ADI), Nathan Kreisberg (ADI), Dave Ensor, Robert Vanderpool, Charles Rodes, Bill Chamiedes (Georgia Institute of Technology), Jim Meagher, Nancy Brown, and Judy Chow

Students Supervised: None

Graduate and Post-doctoral Supervisors: None