Postdoctoral Position in Aerosol Chemistry

Postdoctoral position is open in the area of Aerosol Chemistry. Qualified candidate will work in a group of Dr. A. Laskin on various projects focused on multi-modal chemical characterization of aerosol samples collected in field and laboratory experiments. Our research efforts are focused on: a) molecular-level understanding of the interactions of anthropogenic and natural emissions and their effects on the internal composition of individual particles and their physicochemical properties, b) understanding the origin, molecular composition and atmospheric transformations of light absorbing organic aerosols (aka 'brown carbon'), nano-plastic and metal-organic pollutants, c) understanding reaction mechanisms of atmospheric chemistry that result in increased viscosity and formation of glassy particles, understanding how these changes affect their atmospheric lifetime, heterogeneous reactions, optical and hygroscopic properties. The position is open for start in fall 2022.

Position requirements: Ph.D. in chemistry, chemical or environmental engineering, with solid background in analytical and environmental chemistry and technology. Strong publication record. Prior hands-on experience with analytical chemistry applications for molecular characterization of complex environmental mixtures (such as organic aerosols, dissolved organic matter, soil organic matter). Expertise with some of the advanced analytical techniques for molecular characterization, such as HR-MS interfaced with ESI, APPI, APCI sources, UP/HPLC; NMR and EPR spectroscopies. Experience with FTIR, Raman and UV-Vis spectroscopy, general aerosol instrumentation is advantageous. Additional requirements include practice with handling and interpretation of multi-modal data sets; complex data analysis, computer programming skills, experience in working in a research team environment, good oral and written communications, interpersonal skills, initiative, creative and innovative thinking.

For additional information send inquiries to:

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