

Ion Trap Mass Spectrometry of Individual Aerosol Particles

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We have developed a transportable ion trap mass spectrometer for real-time field analysis of individual airborne particles. The instrument has been adapted from off-the-shelf commercial technology so that it can rapidly be deployed. The use of this instrument for real-time detection of bacteria and other types of particles for threat analysis, its current capabilities and limitations, as well future directions for ion trap-based threat analysis will be discussed.

Research sponsored by U.S. Department of Energy, National Nuclear Security Administration, Office of Nonproliferation Research and Engineering. Oak Ridge National Laboratory is managed and operated by UT-Battelle, LLC, under contract DE-AC05-00OR22725 with the U.S. Department of Energy.