

II. Sensor & System Applications

(A) Analysis & Detection Methodologies for Threat-Agent Samples & Targets

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A critical, but often overlooked technical hurdle in realizing real world, robust sensor technologies is target collection, concentration, recovery and presentation to a sensor platform. This session seeks to identify new concepts, modifications of existing techniques or technologies, and small collection and recovery systems aligned with small sensor systems or generic modules that can be used with a variety of sensor platforms. Target capture from aerosol, water, and surfaces are relevant. Some example areas include new concepts utilizing micro total analysis systems, physicochemical transducer or transducing microsystem (optical, electrochemical, thermometric, acoustic, piezoelectric, magnetic or micromechanical, novel new materials that provide interesting surface interactions or competitive separations, nano-structured surface enhancements, sensor integration and analysis methods and the use of novel mathematical approaches for collection sampling and sample analysis.