Surface ionization detection of amine containing drugs in backgrounds of pharmaceuticals and extender materials

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Summary

This work is concerned with the development of a **miniaturized detection system for amine containing illicit drugs.** The detection involves **flash desorption of collected solid particles and surface ionization (SI) of the vaporized components.** In previous works we have shown that SI gas detection is very sensitive towards amines and relatively insensitive towards other hydrocarbon species and water vapour [1, 2]. In the present contribution we concentrate on the discrimination between illicit drugs, on the one hand, and extender materials and pharmaceuticals, on the other hand. In our presentation it will be demonstrated that SI detection is able to detect amine containing drugs in large backgrounds of pharmaceuticals and extender materials, which normally come along in street samples of illicit drugs.