

# **Enabling Analysis of Trace Components in Solutions in Seconds Direct Ionization in Real Time**

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Determination of compounds in complex solutions often involves the use of chromatographic based technologies to first separate those compounds and then present them to LC/MS systems. The development of ambient pressure surface ionization has emerged in the last two years as a viable means to selectively desorb compounds from samples including solids, liquids, and even gases. Initial studies with direct analysis in real time (DART®)metastable-based ionization has enabled desorption from solids such as films, molded products, fabric, paper and building materials. While desorption can be achieved from all of these materials, the most uniform desorption ionisation tends to be observed when glass surfaces are utilized owing in part to the heating characteristics and physical characteristics of the material.

Utilizing a CTC Analytics HTC PAL laboratory robotic system and customized sampling devices we have enabled more efficient DART while improving both sensitivity and selectivity for the surface desorption experiment. The combination of a robotic presentation system and consumable enables high throughput analysis at unprecedented speed on complex mixtures ranging from foodstuffs to plasma in seconds.