

## Mobile Mass Spectrometer in Daily Use – Experiences Made by Non-Scientific Operators

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E<sup>2</sup>M (Enhanced Environmental Mass Spectrometer) is a compact robust quadrupole mass filter with a membrane inlet, designed for mobile application. The ruggedized instrument can be installed on a vehicle and run from the vehicles power supply. Typical applications are environmental protection, mobile on-site analysis, event monitoring, first responders or homeland defence. The instrument affords reliable identification of organic compounds in solid, liquid or gaseous samples. The almost direct inlet via an air/surface probe provides fast results in monitoring modes. Even though combined with a gas chromatograph over the complete E<sup>2</sup>M system delivers a versatile field deployable GC/MS capability. Non-complicated controls and data acquisition enhance the instruments ease of operation. Data evaluation is fully automated.

The effective use of the system by any kind of first responders will be shown. Successful integrations in different types of vehicles and the use in a ship air monitoring system will be demonstrated. Also data resulting from the typical use of customers are presented. Several representative examples for the useful application of the system e.g. the identification and localisation of an agent at a poison attack in a pub or the contamination of an open water recreation area made by fire fighters or other first responders will be shown. Additionally recent enhancements and new applications will be presented.