Supplement

When calibrated properly, the device can be used to analyse a mixture of any microorganisms; directly, when the signals do not overlap or when their overlapping is limited. This is also possible in the case of substantial overlap if the shape parameters are sufficiently different. This can be done by analysing the amplitude at an appropriate retention time or by a more complex deconvolution of the signal being measured. Identification takes place on a database formed during calibration. The final accuracy depends on the method of elaboration of the results. The procedure is similar to chemical analysis using chromatography techniques (HPLC, GC). Further studies are in progress, including advanced analysis of complex mixtures for practical applications. One can easily identify a dominant component in a very complex mixture, such as crude water from a river, which has accidentally or intentionally been infected.