

without previous screening of the sample when the sample is expected to be very dilute.

## 2. Monitoring of compounds for structure elucidation

This task is needed especially in a single small-scale facility to detect Schedule 1 compounds which are not included in the database. It can be applied also in the case of alleged use.

This task can be performed on-site with a gas chromatograph equipped with element specific detectors, like atomic emission detector, which can identify compounds including e.g. phosphorus and fluorine simultaneously. In a designated laboratory this type of analysis can be done with a high resolution mass spectrometer giving the elements included in the molecule. This, of course, may reveal confidential information as is the case with NMR and IR spectra. HPLC with enzymatic detector can be used to identify enzyme inhibitors irrespective of their detailed structure.

The identity of suspicious samples are always confirmed in a designated laboratory.

## 3. Unambiguous identification of agents

This analytical task can be performed with spectrometric techniques but often a combination including chromatographic techniques (e.g. GC-MS) is needed for sample introduction and separation of components in the sample. Two independent methods giving positive identifications are required.

In this task two different cases are distinguished:

a) Unambiguous identification of compounds for the verification of declared activities such as declarations of stockpiles and declarations of the destruction of them as well as declarations of the production in single small-scale facilities.

When there is plenty of material available the unambiguous identification can be performed in a mobile laboratory, e.g. in stockpiles or in destruction facilities.