CON-PRA-020

CONFIRMATORY METHODS
GC-MS practical aspects: maintenance, optimisation.

• Context

Gas chromatography coupled to mass spectrometry or tandem mass spectrometry is an analytical combination frequently used for various applications when sensitivity and specificity are required. To prevent any deterioration of instrument, some precautions must be implemented by users or qualified people. Sensitivity might be improve by some specific parameter adjustments on instruments.

• General objective(s)

To give an overview of the different parts constituting the system and give comments regarding maintenance for gas chromatograph, vacuum system, ion source, mass analyser, multilplier. To explain how to optimise ion source parameters.

• Main items

GC-MS/GC-MS/MS / Maintenance / Tune

• Pedagogical objectives

✓ To show the operations of maintenance on GC-MS & GC-MS/MS instruments
✓ To show how to optimise the parameters on an electron ionisation source
✓ To give trainees autonomy regarding these operations on the system

• Pedagogical tools

✓ Slide show
✓ Theoretical and practical work on instruments

• Duration

✓ 1 hour

• Pre-requisite

✓ Theoretical lectures on confirmatory methods (CON-THE-010, CON-THE-020, CON-THE-030)