# LIQUID CHROMATOGRAPHY/ MASS SPECTROMETRY (LC/MS)

#### WATERS ACQUITY I-CLASS / XEVO TQD

Liquid Chromatography Mass Spectrometry (LC/MS) is an analytical laboratory technique for identification, quantitation and mass analysis of organic and anorganic materials. The hyphenated system delivers the speed, excellent selectivity and sensitivity, wide dynamic range for many different applications.

### **ACQUIRED INFORMATION**

- > Determination of the ion's mass to charge ratio
- > Separation of compounds in complex mixtures
- Reliable identification based on retention characteristics and tandem mass data
- > Automated quantification and reporting with a flag system for an error elimination

## SAMPLE TYPES

- Liquids and solutions of Inorganic, organic, biological materials
- > Pharmaceutical materials (API)
- > Plant extracts
- > Target compound analysis

## MODES, CONDITIONS AND PRECISION

- > Maximum uptime through high robustness
- Operation in SRM mode / MRM mode provides a significant gain in sensitivity compared with acquiring full spectral data
- Accelerated method development due to Intellistart application
- Reduces complexity, increases ease of use, and ensures the correct result every time
- > Maximize throughput with no compromise on quality
- Automated management of the duty cycle resulting in more data points per peak, better reproducibility and higher S/N even with a high number of SRM transitions
- > The widest range of ionization capabilities today

#### DETAILED INFORMATION ON REQUEST



REGIONAL CENTRE OF ADVANCED TECHNOLOGIES AND MATERIALS

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Separation of the analytes using ultra-high performance liquid chromatography and atmospheric pressure photoionization-mass spectrometric detection.