Mass Spectrometry

Mass spectrometry is a kind of identification technology, which plays a very important role in the identification of organic molecules. Mass spectrometry can provide abundant structural information in analysis. The combination of separation technology and mass spectrometry is a breakthrough in separation science. With the development of mass spectrometry, the application of mass spectrometry is becoming more and more widely. Mass spectrometry is widely used in chemical, environmental, energy, pharmaceutical, sports medicine, criminal science and technology, life science, materials science and other fields because of its high sensitivity, low sample consumption, fast analysis speed and simultaneous separation and identification.

Time-of-Flight Secondary Ion Mass Spectrometry (GAIA3)

GAIA3 is the ideal platform for performing the most challenging nanoengineering applications that require ultimate precision and demanding capabilities for microanalysis. The preparation of high-quality ultra-thin TEM lamella, delayering processes in technology nodes, precise nanopatterning or high-resolution 3D reconstructions are some of the applications in which GAIA3 excels.

ICP-MS (Inductively Coupled Plasma Mass Spectrometer)

The Thermo Scientific™ iCAP™ TQ ICP-MS combines triple quadrupole accuracy with single quadrupole ease of use, removing interferences for better quality data in challenging samples. Easily switch between single and triple quadrupole modes in one method depending on your analytes. Intuitive software makes it very easy to use, just choose your elements, and let the software do the rest.

FT ICR MS (Fourier Transform Ion Cyclotron Resonance Mass Spectrometry)

Solarix 7.0T FT ICR MS with its unique ESI/MALDI dual source are the definitive standard for label-free small molecule MALDI imaging studies. This allows for mapping of the localization of drugs and metabolites and providing spatial correlation with omics studies. This instrument is mainly used for top-down/bottom-up proteomics, MALDI imaging, petroleomics, natural product analysis, top-down protein sequencing, metabolite profiling, post-translational modification (PTM) analysis, drug distribution, etc.

253 Plus™ Isotope Ratio MS (IRMS)

The compact 10 kV design of the 253 Plus 10 kV IRMS with its complete analyzer on one monolithic metal cast plate guarantees outstanding long-term stability and robustness. The magnetic sector field is generated by a uniquely shaped electromagnet. The field strength is controlled by a high precision current regulator, which is under full data system control. Perfect peak shapes and unrivaled mass resolving power over the whole focal plane plus a mass range, which covers all stable isotope ratio applications, translate directly into sensitivity, precision, stability, and robustness.