# Market Analysis: Frontiers in Spectrometry and Analytical Chemistry, London UK on March 23-24, 2020

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Mass spectrometry is widely used for accurate analysis of small as well as large molecules in pharmaceuticals, forensic & clinical research, and other areas. The mass spectrometry applications market is segmented into pharmaceutical & biotechnology applications, environmental testing, food & beverage testing, petrochemical applications, and other applications. The pharmaceutical & biotechnology applications segment held the largest share of the market in 2019, a trend that is expected to continue during the forecast period. The large share of this segment can be attributed to the rise in demand for pharmaceutical biosimilars, phyto pharmaceuticals, and regenerative medicine.

The worldwide spectrometry market is segmented on the basis of technology secondly application and geography. Further classification of the technological market includes mass spectrometry, atomic spectrometry and molecular spectrometry. Mass spectrometry techniques includes ion trap mass spectrometry, Fourier transform ion cyclotron resonance mass spectrometry (FTICRMS), gas chromatography mass spectrometry, MALDITOF that is matrix-assisted laser desorption/ionization time of flight spectrometry , liquid chromatography mass spectrometry (LC MS), triple quadrupole liquid chromatography mass spectrometry, inductively coupled plasma mass spectrometry, quadrupole time of flight liquid chromatography (QTOF LC/MS) and others. Atomic spectrometry technique include X ray diffraction spectrometry, atomic absorption spectrometry, elemental analyzers, X ray fluorescence spectrometry, inductively coupled plasma and others. Lastly the molecular spectrometry encompasses infrared spectrometry, resonance spectrometry, nuclear magnetic resonance spectrometry (NMR), near infrared spectrometry, ultraviolet visible spectrometry, Raman spectrometry, color measurement, infrared spectrometry and others.

Key market players for mass spectrometry market are Thermo Fisher Scientific, PerkinElmer, Inc., Agilent Technologies, Bruker Corporation, Waters Corporation, Bio-Rad Laboratories, Danaher Corporation, Shimadzu Corporation and others.

MASS SPECTROMETRY MARKET, BY REGION (USD BILLION)
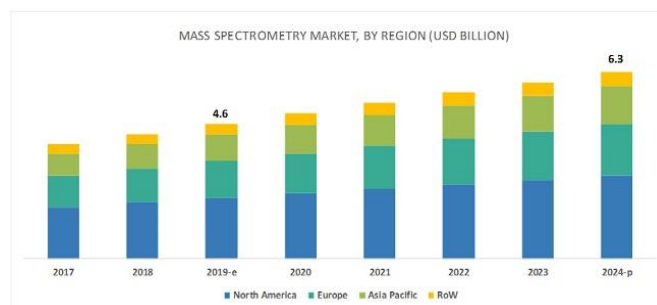
The mass spectrometry market is expected to grow from USD 4.6 billion in 2019 to USD 6.3 billion by 2024, at a CAGR of 6.7% during the forecast period. Growth in the market is primarily driven by factors such as government initiatives for pollution control and environmental testing, increasing spending on pharmaceutical R&D across the globe, government regulations on drug safety, growing focus on the quality of food products, increase in crude and shale gas production, and technological advancements in mass spectrometers.

The years considered for the examination are as per the following:

• Base year – 2016

• Estimated year – 2017

• Projected year – 2022

• Forecast period – 2017 to 2022

The targets of the report

- Targeted analysis allows the thorough analysis of all ions, at all abundance range above the noise level, at any time window in the experiment.
- In contrast, non-targeted analysis would, typically, only allow detection of the most abundant 50-100 ions over the entire experiment time. Such limitation of non-targeted analysis makes it less suitable for analysing highly complex, highly dynamic sample such as human blood serum
- The methods of utilizing targeted mass spectrometry are still at a primitive stage, in the sense that the

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inclusion list used in the targeted analysis is typically manually typed-in by scientists.

- In addition to that, only one inclusion list is allowed for the entire experiment. Such manual process is both labour-intensive and error-prone. This is largely due to the lack of software to control the mass spectrometer