The (Brief) History of Mass Spectrometry at Agilent Technologies
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The Start
1938 - First Mass Spectrometers
The story of Mass Spectrometry at Agilent Technologies starts with the founding of Hewlett Packard in 1938, when graduates Bill Hewlett and David Packard started the company at 367 Addison Avenue Palo Alto. This site was officially designated as a California State Historical Landmark in 1999. Agilent, the leading Silicon Valley milestone. In 1999 Agilent Technologies started with the founding of Hewlett-Packard.

First Mass Spectrometers
1971 - 5930A GC/MS System
The first mass spectrometer introduced was the 5930A GC/MS system in 1971. The 5930A floor standing model was the first commercial SE mass spectrometer and was an easy-to-use benchtop GC/MS system. It introduced the first fully automated mass spectrometer. This system was soon followed by the 5970A in 1982. The 5970A was the first of the mass selective detector (MSD) family of systems.

1974 - 5980 Series GC/MS System
The 5980 system implemented the use of a new technology for the first time in mass spectrometry, and became the basis of a family of floor standing units.

1976 - 5992A Benchtop GC/MS
The introduction of the 5992A was a milestone in the history of MS/MS. The 5992A was the first benchtop GC/MS system, which included an integrated gas chromatograph and a benchtop quadrupole mass spectrometer.

1982 - First "MSD" GC/MSD for all.
After a brief period with a dedicated MALDI-TOF system in the late ’90s, Agilent saw the need for a benchtop TOF system. This used an INVAR tube for the flight path, minimizing the effect of external thermal changes and offering both good resolution and mass accuracy in a benchtop unit.

Taking MS to the next level
1977 – 1992 Floor Standing Systems Evolution
Shortly after the introduction of the 5992A benchtop GC/MS system in 1977, the 5992A floor standing model was introduced. The 5992A featured a glass hyperbolic quadrupole, removing the need for precision alignment providing reliable mass assignments.

1984 – 1996 GC/MSD for all.
Agilent continued to invest in the development of new technologies and software to make the systems easier to use for a greater group of scientists. 1990 saw the introduction of a whole new model, the 5971, which featured a glass hyperbolic quadrupole.

Expanding Technologies Routine, Reliable and Robust for Every Analysis
2006 – 2009 New MS Technologies and Shrinking Products
Agilent continued to invest in the development of new technologies for the first time in mass spectrometry that would continue to take the technology to the next level. The GC/MS system in 2000 saw the introduction of an Ion Trap system, co-developed with Bruker. This allowed a wider range of analytes than before to be covered.

2006 also saw the reduction in size of the benchtop 6100 LC/MSD, closely followed in 2007 with the 7000 ICP-MS model, minimizing the amount of bench space required without a loss of performance, further opening the opportunity for new users to move to MS.

2003 LC Time of Flight Systems
After a brief period with a dedicated MALDI-TOF system in the late ’90s, Agilent saw the need for a benchtop TOF system. This used an INVAR tube for the flight path, minimizing the effect of external thermal changes and offering both good resolution and mass accuracy in a benchtop unit.

GC/MS saw the introduction of a new generation of mass selective detector (MSD) system in 2007 based on the well accepted gold plated quadrupole technology and benchtop design quickly becoming a leader in the market.

References
1. US Patent 5,616,919
2. USA Patent 6,083,003, 6,278,110