MassWorks™

An Innovative MS Software Tool for Chemistry Research and Education

Cerno Bioscience invented a novel MS calibration technology embedded in its commercially available MassWorks™ software product. This technology has been featured in a [front cover Analytical Chemistry article](#) and the software product received [the Bronze Medal for the Most Innovative Product at PittCon 2006](#) where it was first launched.

Research Benefits

When applied to Agilent GC/MSD system in the MS lab, the software is capable of recognizing the PFTBA tune gas signal inside an otherwise conventional GC/MS run, perform the accurate mass calibration automatically via the [AutoCal™ process](#), then automatically apply the calibration to the rest of the GC/MS scans with accurate mass results obtained, by simply opening the acquired MS data file. This would enable accurate mass measurement on the existing single quad GC/MS system, without requiring GC-TOF system. The accurate mass measurement is [acceptable for publication in JOC](#). Equally importantly, any graduate (and even undergraduate) student from organic synthesis to catalyst research will be able to get the accurate mass measurement all by themselves with only an initial 5-10 min training from the lab manager.

Educational Benefits

With accurate mass measurements so readily available on a conventional single or triple quadrupole system (either GC/MS or LC/MS), it is now possible to teach undergraduate or graduate students the idea of accurate mass measurements, the isotopes and isotope distributions, and let them experience unknown identification first hand, all in an intuitive, interactive, and graphical manner ([watch this brief animation](#)). Students with such critical and updated mass-spec knowledge would be better prepared for either industry or academic careers. This educational goal can be achieved without the requirement of or the fear of potential damages to higher resolution MS instruments, which requires more skilled personnel to operate with its associated operational and maintenance costs.

Offerings

A. Special price with significant discount is available from Agilent when bundled with a new GC/MSD system purchase, for a special version of MassWorks software, MassWorks for GC/MSD.
B. Standalone full version available directly from Cerno Bioscience, which supports not only GC/MSD but also other MS systems including triple quads and HiRes MS such as TOF or Orbitrap MS.