

## Press Release

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**European premiere: New Triple Quadrupole LCMS-8040  
Expanded range of ultra-fast,  
high-sensitivity applications**

**High-throughput analysis at lower levels of detection /  
World's fastest tandem LCMS/MS system/  
Five-fold increase in sensitivity**

Shimadzu, one of the world leaders in analytical instrumentation, has introduced the LCMS-8040, a triple quadrupole mass spectrometer, during the 36th International Symposium on Capillary Chromatography in Riva del Garda, Italy.

The system combines newly improved ion optics and collision cell technology with proprietary ultrafast technologies. This significantly expands the application range and ensures high-sensitivity, high-throughput analysis at lower levels of detection.

The LCMS-8040's ion optics (UF-Lens™) integrate two multi-pole RF ion guides with UFsweeper™ II collision cell technology to provide higher multiple reaction monitoring (MRM) sensitivity. A five-fold increase in sensitivity (reserpine, S/N ratio) has been achieved in comparison to the LCMS-8030 model by improving ion focusing and minimizing ion losses between multi-pole lenses.

The fastest scan speed of 15,000 u/s and the fastest polarity switching time of 15 msec, already known from the LCMS-8030, expand

in combination with the higher sensitivity the potential range of LC/MS/MS applications. Shimadzu will also offer an upgrade kit for LCMS-8030 customers to raise the sensitivity to the LCMS-8040 level. In this way, existing customers have full flexibility to expand their application fields.

### **The world's fastest LCMS/MS tandem mass spectrometer**

The LCMS-8040 achieves multiple reaction monitoring (MRM) transition speeds of up to 555 MRMs per second utilizing UFsweeper II collision cell technology. UFsweeper II features high-speed ion transport technology that maintains sensitivity and suppresses cross-talk, even for high-speed or simultaneous multi-component analyses. In addition, the LCMS-8040 features the world's fastest polarity switching at 15 msec and a high-speed scanning rate of 15,000 u/sec for maximum analytical throughput.

LabSolutions LCMS software offers a variety of data processing features, including a Quantitation Browser which processes multiple analytes, and a Data Browser which allows users to analyze and compare multiple sets of data in the same window. Users can also optimize MRM parameters easily with LabSolutions software by utilizing automated flow injection analysis.

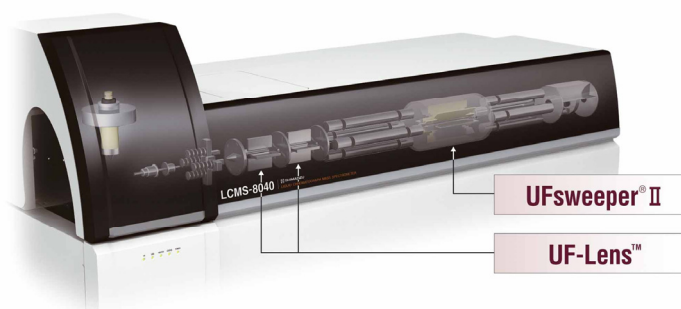
### **Various method packages available**

For improved performance, Shimadzu provides a variety of method packages to eliminate the need for MRM determination and chromatographic method development. In addition, the LCMS-8040 features a robust, user-friendly interface, compatibility with LCMS-8030 MRM parameters for easy method transfer, and easy maintenance to ensure maximum instrument operation.

For more information on the LCMS-8040, visit [www.shimadzu.eu](http://www.shimadzu.eu).



**Figure 1:** New Triple Quadrupole LCMS-8040



**Figure 2:** Improved ion path design

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