

Thermo Fisher Scientific launches online 2D-LC systems to characterize complex samples

17 February 2021 | News

2D-LC System offer a robust and flexible platform for pharmaceutical/biopharmaceutical R&D, food safety, environmental testing, omics and polymer analysis of complex samples



The Vanquish Online 2D-LC system leverages the performance and ease of use of the innovative Vanquish technology, while offering maximum application flexibility and versatility for multi-dimensional liquid chromatography. The platform delivers confident peak identification and purity analysis for even the most difficult to separate analytes, for example, structural isomers. Laboratories in fields such as pharmaceutical/biopharmaceutical R&D, food safety, environmental testing, omics and polymer analysis can take advantage of the flexibility of the Vanquish Online 2D-LC system, combining the confidence of 2D-LC and productivity boost of Dual LC in one system, while not requiring dedicated 2D-LC instrumentation.

Integrating the online 2D-LC system with complimentary LC assays enables improved sample throughput while increasing confidence in results. The Vanquish Online 2D-LC system presents an easy upgrade from existing single channel standard Vanquish HPLC or UHPLC systems, without the need for dedicated equipment for each analysis type. Automated and

complete workflows accelerate sample analysis time, maximize sample integrity, and improve confidence in the results.

The Vanquish Online 2D-LC system offers full peak characterization, with complete, automated and flexible workflows, allowing customers to expand their analytical capabilities while presenting a user-friendly experience.

The flexible, precise, and easy-to-use interface of the Vanquish Online 2D-LC system makes it ideal to characterize complex samples across a wide range of industries, including pharmaceutical/biopharmaceutical R&D and process control, food safety, environmental testing, omics and polymer analysis. Key applications include confident peak identification and purity analysis, even in difficult to separate analytes, and making legacy methods with UV detection and non-volatile buffer usage compatible with mass spectrometry (MS) detection.

Vanquish Dual split sampler technology - Switch between instrument usage without manual replumbing, utilizing as a 2D-LC system for increased confidence or a Dual LC for increased productivity.

Solvent modulation - Use the 2D-pump and T-piece for improved resolution power in the second dimension and reduced resources (bench space and instrumentation).

Vanquish Trap Heart-Cut and Simple Switch 2D-LC kit with valves and Viper Fingertight Fitting Systems - Easy, tool-free fluidic connection facilitates optimum chromatographic performance while enabling user-friendly installation and operation of the advanced multi-dimensional liquid chromatography methods.