

Advances in high-resolution LC-MS and Mass Spectrometry Imaging, for deeper and more confident measurement of the metabolome

Waters has made considerable advances in analytical platforms for metabolomics. New chromatography technology can be coupled with scalable ion mobility and high-resolution time-of-flight to help researchers reliably measure more of the metabolome than ever before. Metabolites of interest can be interrogated with novel combinations of ion-mobility and collision-induced dissociation, increasing our knowledge of chemical structure. Spatial distribution of metabolites and lipids in tissue can now be measured at speed with ultra-high resolution mass spectrometry, unlocking a new realm of mass accuracy and fine isotope structure, previously unattainable with Time-of-Flight mass analysers.

Part 1: Reducing Non-Specific Losses in Metabolomics and Lipidomics Research with ACQUITY Premier Technology, Giorgis Isaac

Part 2: Ultrahigh Resolution Imaging of Metabolites and Lipids using Multi Reflecting Time-of-flight (ToF) Mass Spectrometry, Bindesh Shrestha

Part3: Addressing the challenges of Structural Elucidation: Utilising Cyclic Ion Mobility for Confident Metabolite Characterisation, Lee Gethings