Advances in Multi-modal MS imaging

Multi modal imaging is a concept that combines the strengths of different imaging modalities to provide a more complete picture of the biological question. This can involve the use of morphological imaging such as H&E staining, functional imaging like Positron Emission Tomography (PET) or the use of molecular imaging like Mass Spectrometry Imaging (MSI). There can be significant benefit of combining or fusing these technologies.

Within the scope of MSI, different ionisation techniques have been demonstrated to have complementary strengths. Here we will demonstrate the benefits of combining matrix assisted laser desorption ionization (MALDI) and desorption electrospray ionization (DESI) applied to pharmaceutical DMPK applications and imaging in the pre-clinical and clinical applications.