

Enhanced separation in ambient mass spectrometry imaging

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Propositions accompanying the dissertation

Enhanced Separation in Ambient Mass Spectrometry Imaging

Towards quantification of pharmaceuticals

By Lieke Lamont-de Vries, 28th January 2021

1. Challenges in quantitative MSI (Q-MSI) of pharmaceutical compounds are often the result of limited separation prior to MS analysis. – This thesis
2. From a biological point of view, this isomeric separation is crucial in the study of the different metabolic pathways of prostanoids. – This thesis
3. Not only is DESI-MRM imaging more selective but also significantly reduces analysis costs relative to high mass resolving MS imaging of isobars; which can be an argument for implementation in the pharmaceutical industry. – This thesis
4. Although the use of MRM is already standard practice in the pharmaceutical industry for decades, this is not the case for pharmaceutical MSI. – This thesis
5. The impact of MSI on the pharmaceutical pipeline is indispensable which explains the broad interest from major pharmaceutical companies. – This thesis, valorization
6. Reserve your right to think, for even to think wrongly is better than not to think at all. - Hypatia
7. Science and everyday life cannot and should not be separated. – Rosalind Franklin
8. Like what you do, and then you will do your best. – Katherine Johnson
9. Nanakorobi yaoki. Fall seven times and stand up eight. Als je zeven keer valt, sta je acht keer op. – Japanese proverb