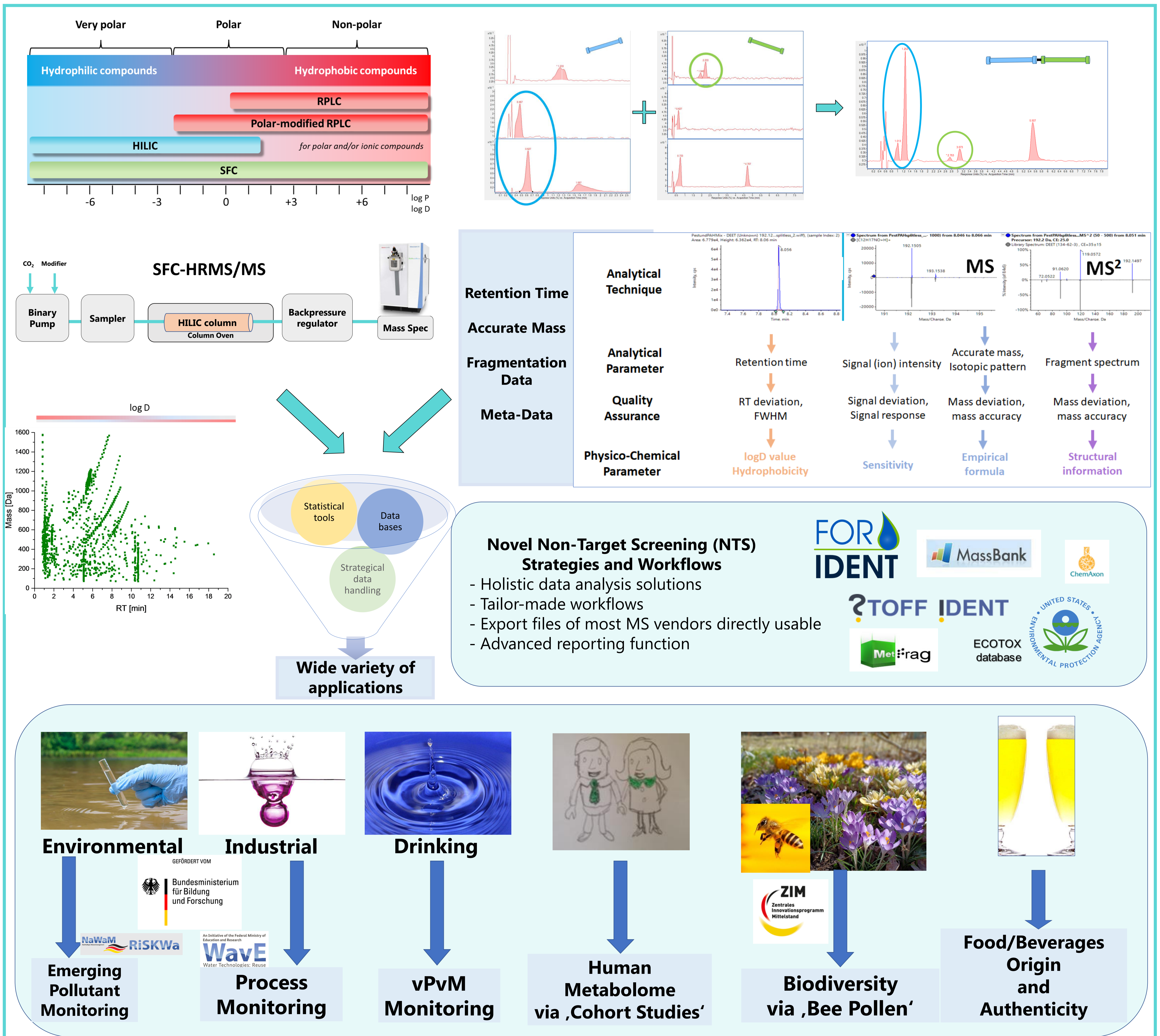


Supercritical Fluid Chromatography in Hyphenation with Mass Spectrometry New Gold Standard in Polarity-Extended Non-Target Screening

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Non-target screening (NTS) is an analytical strategy, which can be used to detect and identify unexpected organic compounds, but also to compare small to large sample sets and to characterize them on a statistical basis. Depending on the question to be answered by NTS, the analytical process from sampling over analysis to data processing has to be adjusted thoroughly. Recent advances in the fields of chromatography, MS-instrumentation and data evaluation software have helped to improve the applicability of NTS as a screening technique.

However, the experimental analysis is still a challenging part in NTS if it comes to the analysis of (very) polar molecules. On the other hand, in the last decade the polarity extended chromatography played an increasing role because non polar, polar and very polar compounds could be separated in one run. Specifically, RPLC-HILIC [1,2] and polar column supercritical fluid chromatography (SFC) [2,3] were very suitable strategies. Recent developments in special column combination [4], ionization prediction [5] and sensitive screening results [6] bring SFC now to a level of an excellent, sustainable and robust tool for non-target screening. The poster will give a detailed overview in using SFC-ESI-MS as gold standard in various NTS disciplines like food and environmental analysis.



Create new paradigms in complex sample analysis using SFC and Non-Target Screening workflows !

Get **answers for YOUR analytical questions** and conduct molecule or sample characterization and/or statistical data interpretation

References:

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