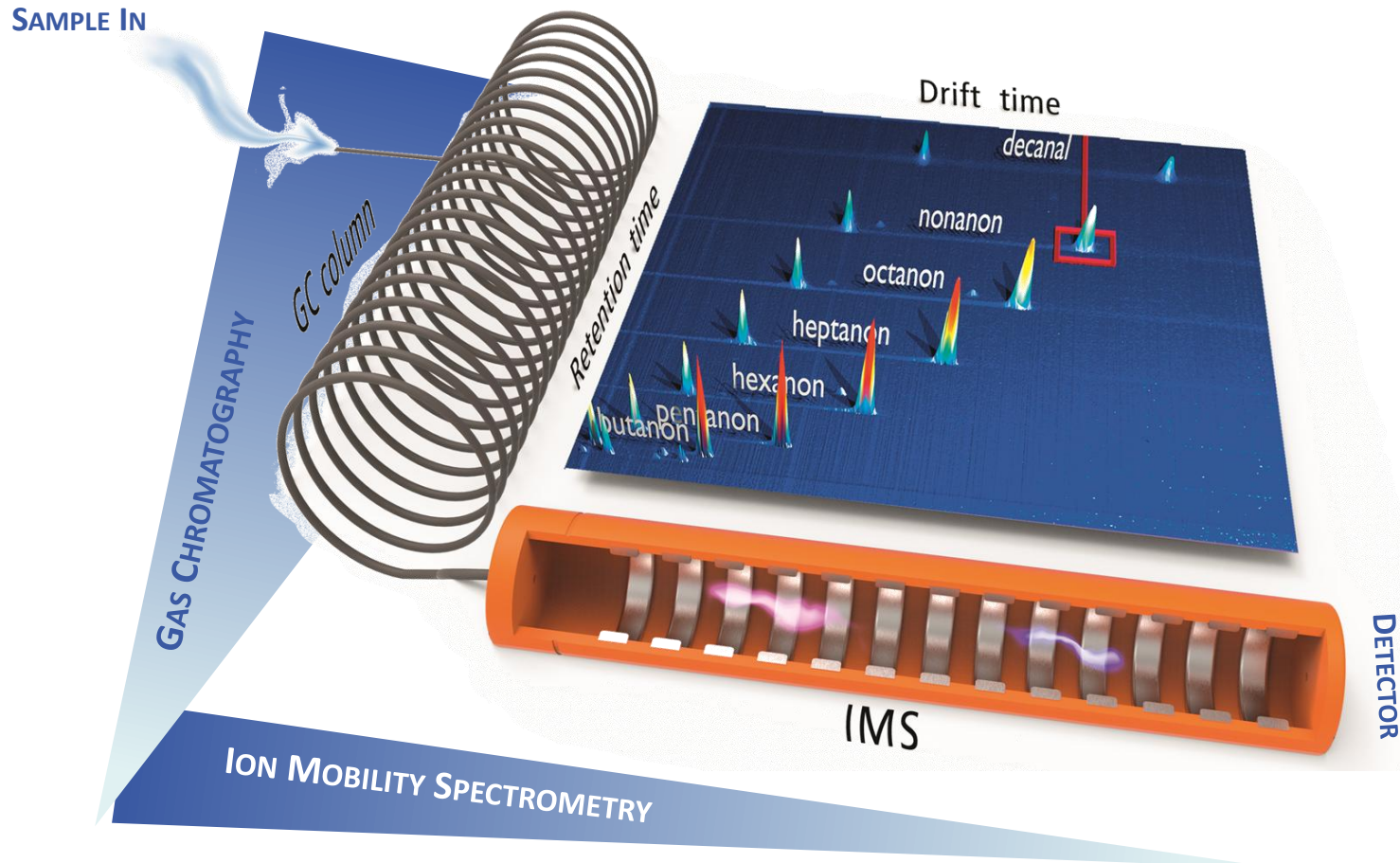
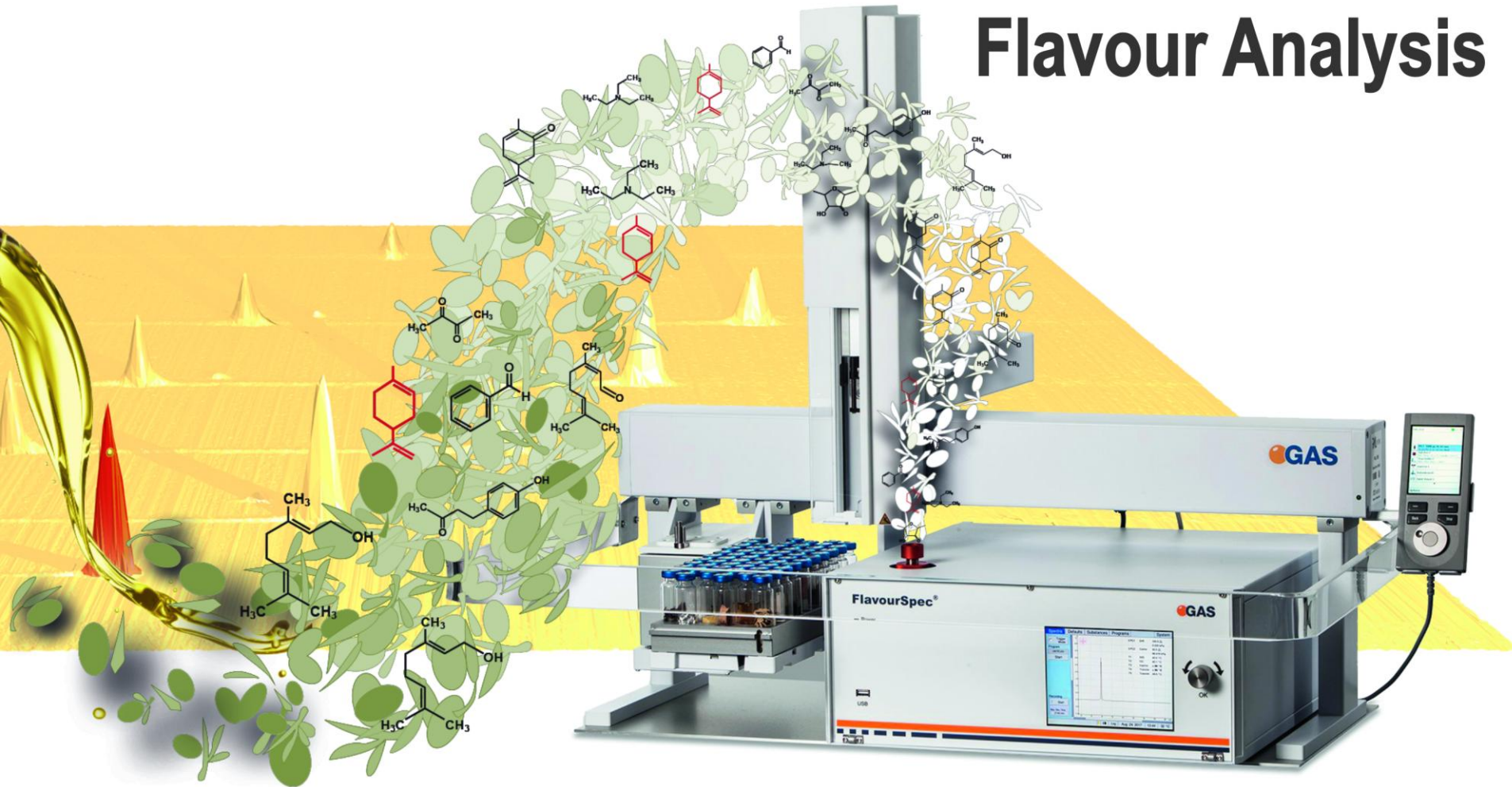
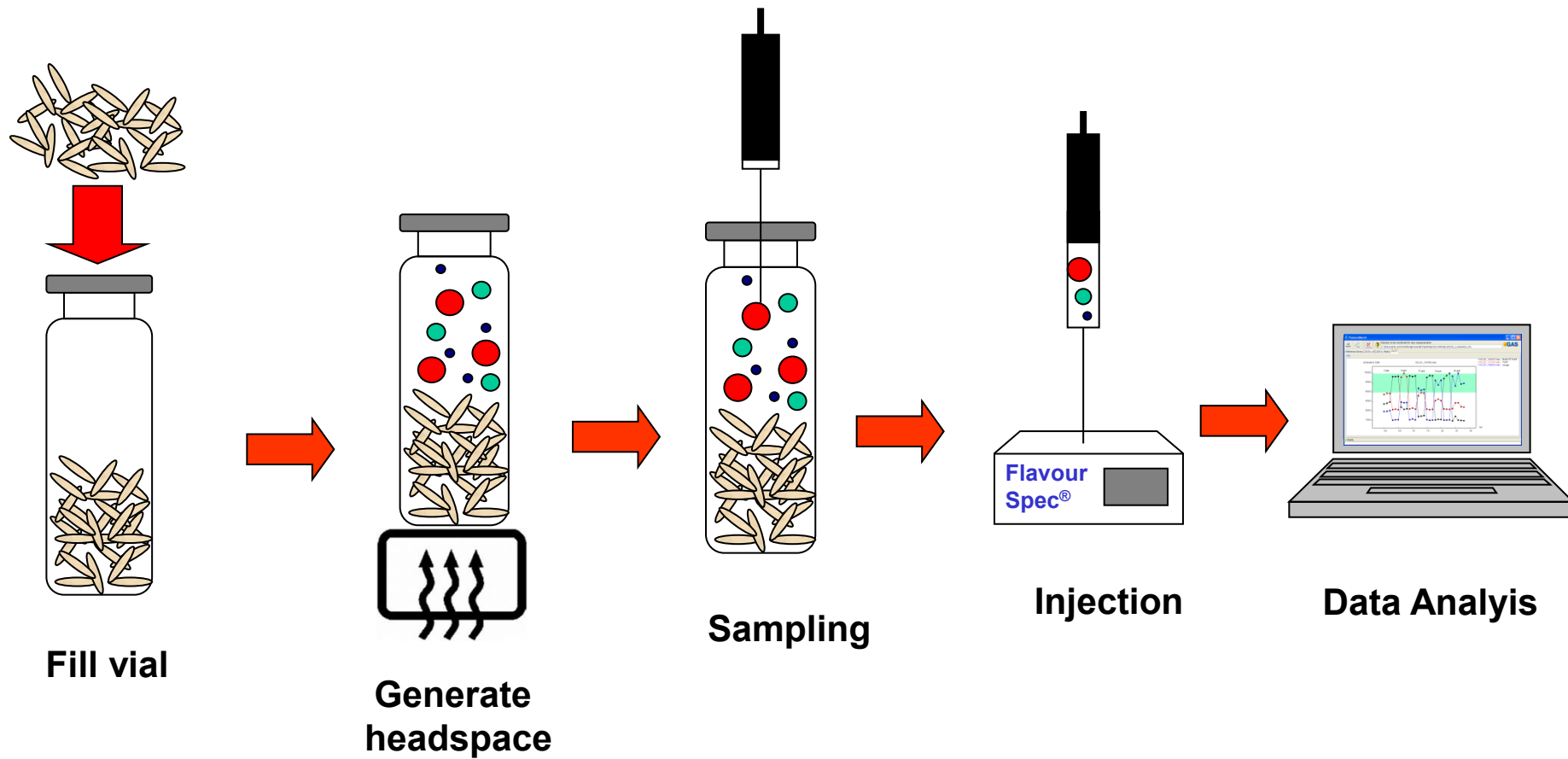


GC-IMS from G.A.S. – New Frontiers



Flavour Analysis



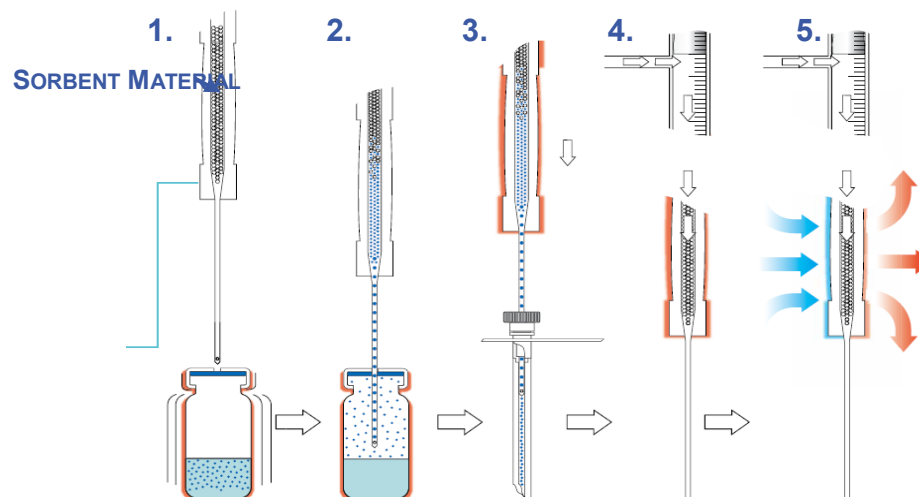


Advantage:...take the Sample as it is presented to the human Nose!

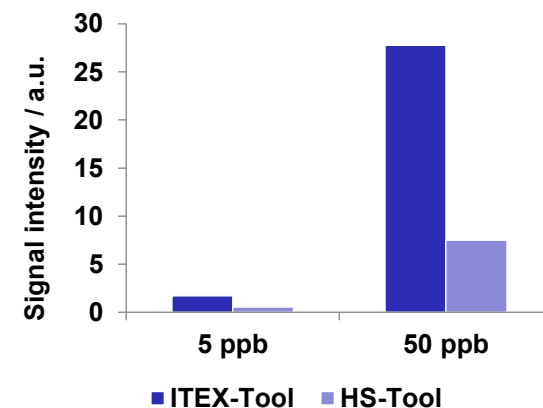
Sensitivity or Presence of Ethanol: ITEX In-Tube Extraction



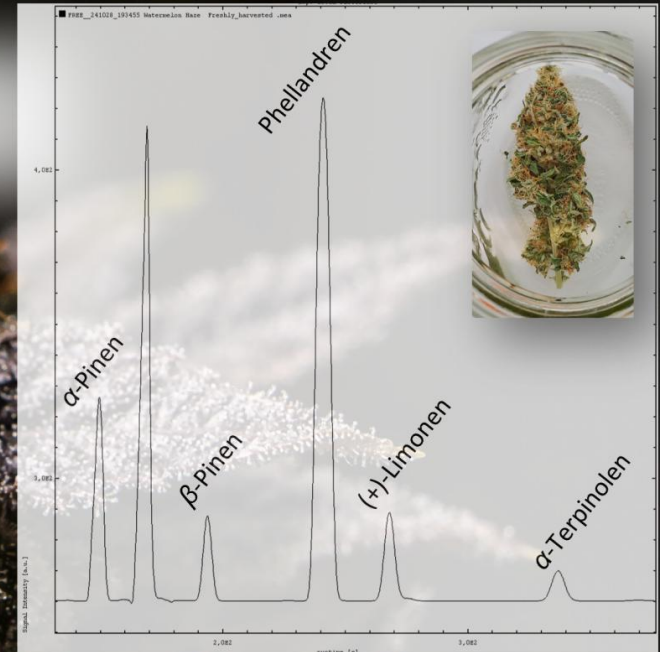
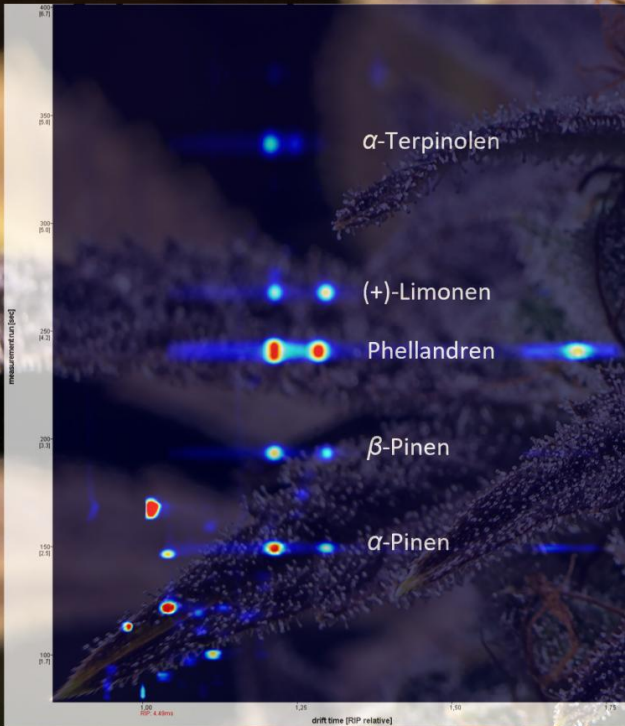
WORKING PRINCIPLE

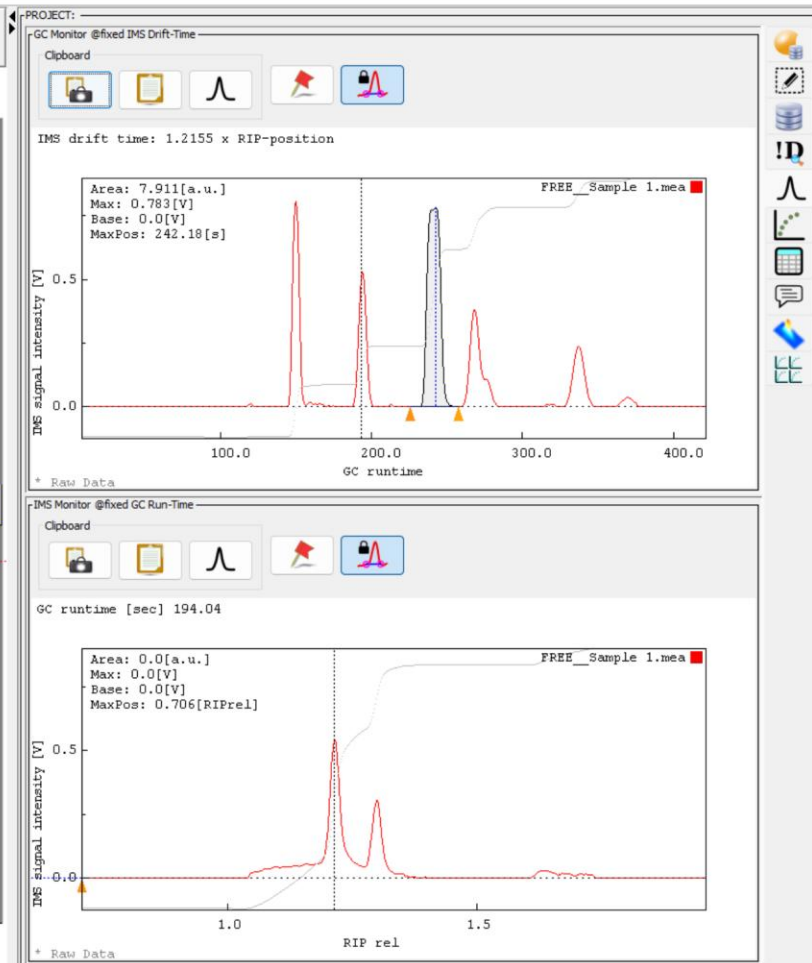
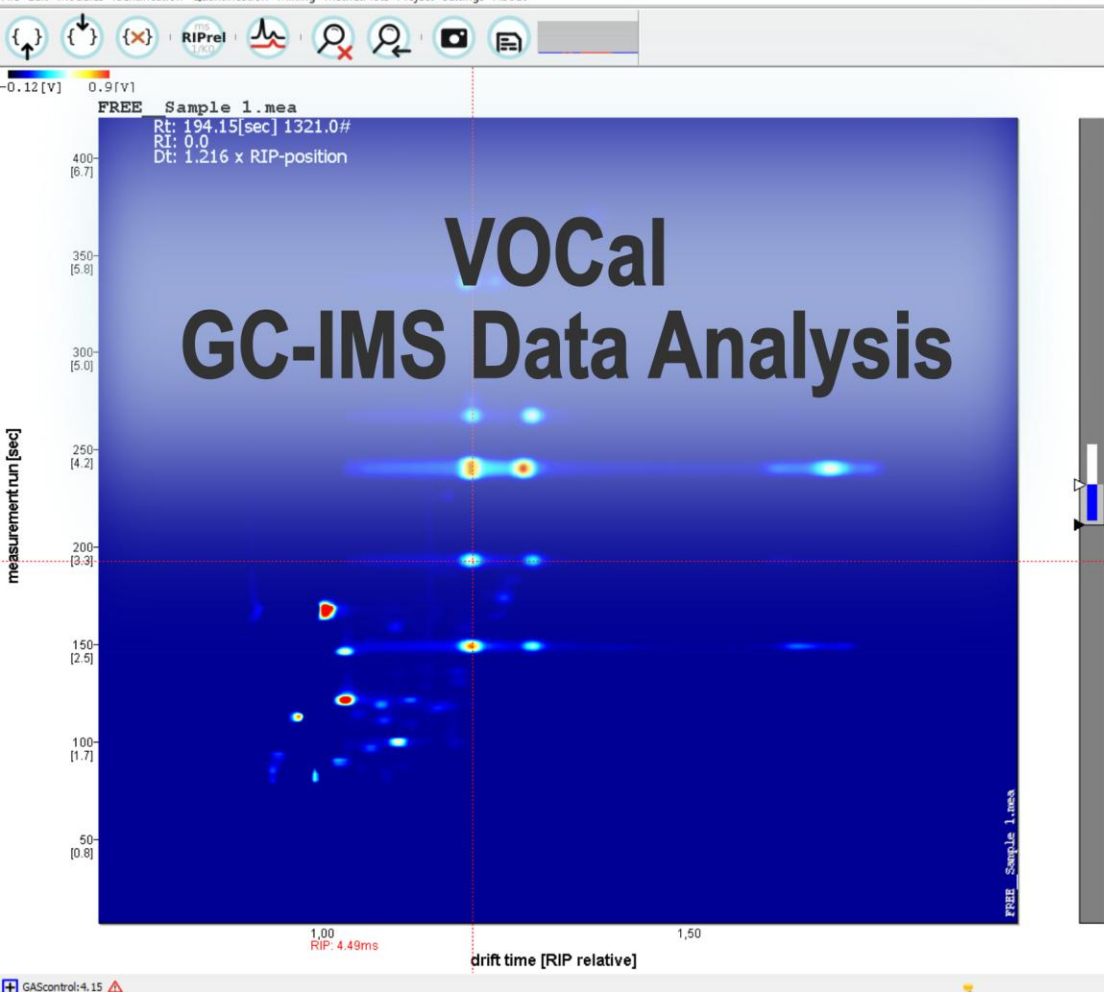


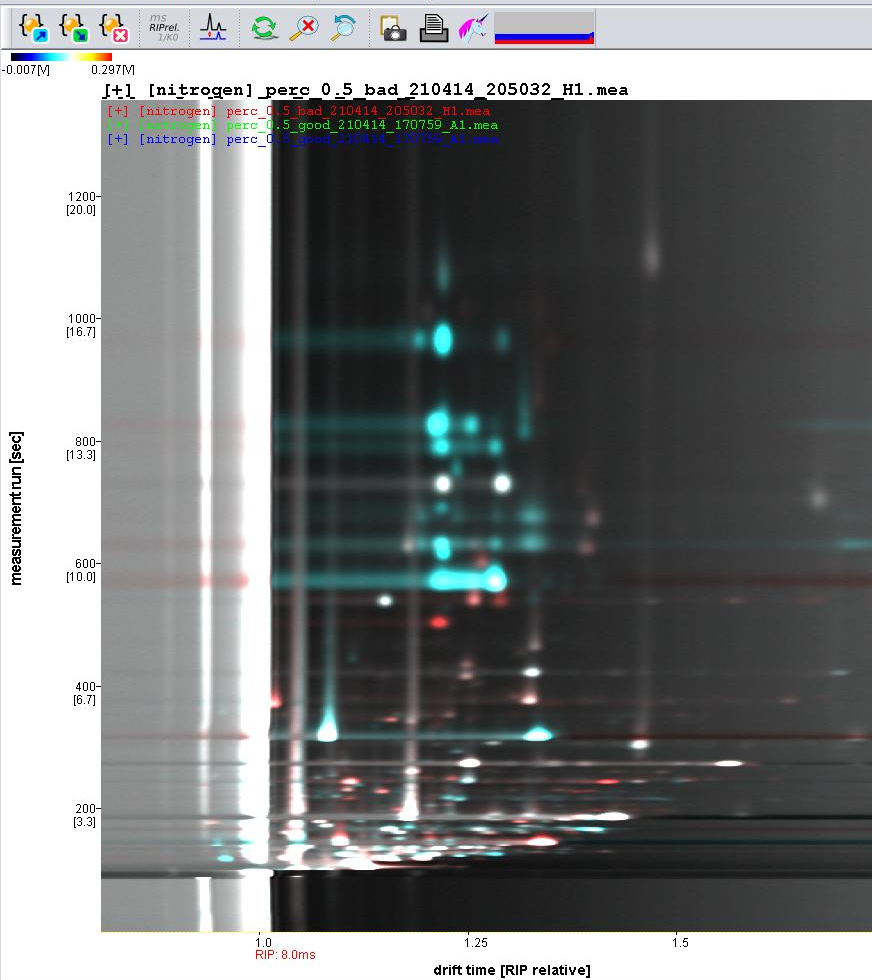
LoD: GUAICOL



Terpene Analysis in Cannabis







The screenshot displays the 'Project Explorer' and 'Project Measurements' panels. The 'Project Explorer' shows a file tree with various data files, including 'D:\MEA Data\2021_25_Apricot puree of CONSERVE ITALIA\Messungen'. The 'Project Measurements' panel shows a list of measurements, with two highlighted rows: 'perc_0.5_bad_210414_205032_H1.mea' and 'perc_0.5_good_210414_170759_A1.mea'.

Project Explorer

D:\MEA Data\2021_25_Apricot puree of CONSERVE ITALIA\Messungen

- 210415_041533_B3.mea [75336 KB]
- 210415_044719_C3.mea [75336 KB]
- 210415_051909_D3.mea [75336 KB]
- 210415_055055_E3.mea [75336 KB]
- 210415_062243_F3.mea [75336 KB]
- 210415_065428_G3.mea [75336 KB]
- 210415_072617_H3.mea [75336 KB]
- 210415_101750_KETONMIX.mea [75336 KB]
- apricose-italy.gasprj [26 KB]
- apricose-italy_DS.gasprj [52 KB]
- apricose-italy_DS_sorted.gasprj [51 KB]
- perc_0.5_bad_210414_205032_H1.mea [75336 KB]
- perc_0.5_good_210414_170759_A1.mea [75343 KB]
- test.gasprj [15 KB]
- tmp.gasprj [81 KB]

Project measurements

Project measurements toolbar:

Project measurements list:

- perc_0.5_bad_210414_205032_H1.mea
- perc_0.5_good_210414_170759_A1.mea

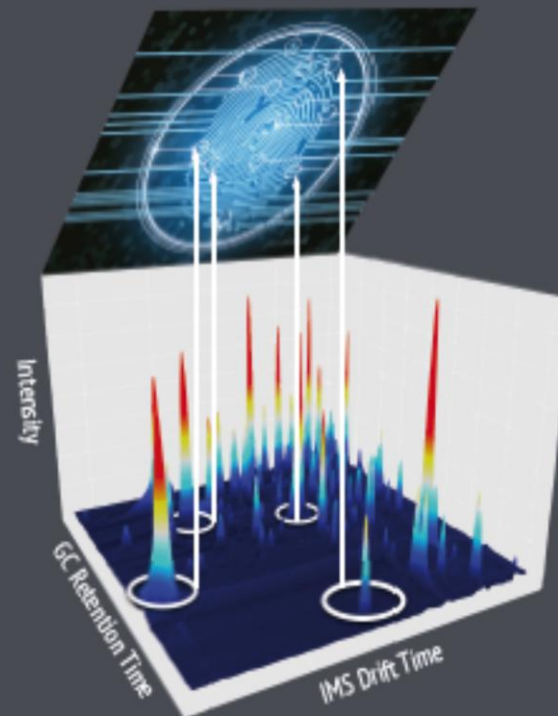
Legend: ☐ auto refresh plot ☐ auto zoom runtime TOP: Browse for measurements. BOTTOM: Compile list of project-measurements for evaluation.

No column normalization present

Plug-Ins/Feature Detection to differentiate Classes easily.



Fingerprint Analysis / Fast Classification



IonMobilitySpectrometer25

Innovative GC-MS-IMS Solution

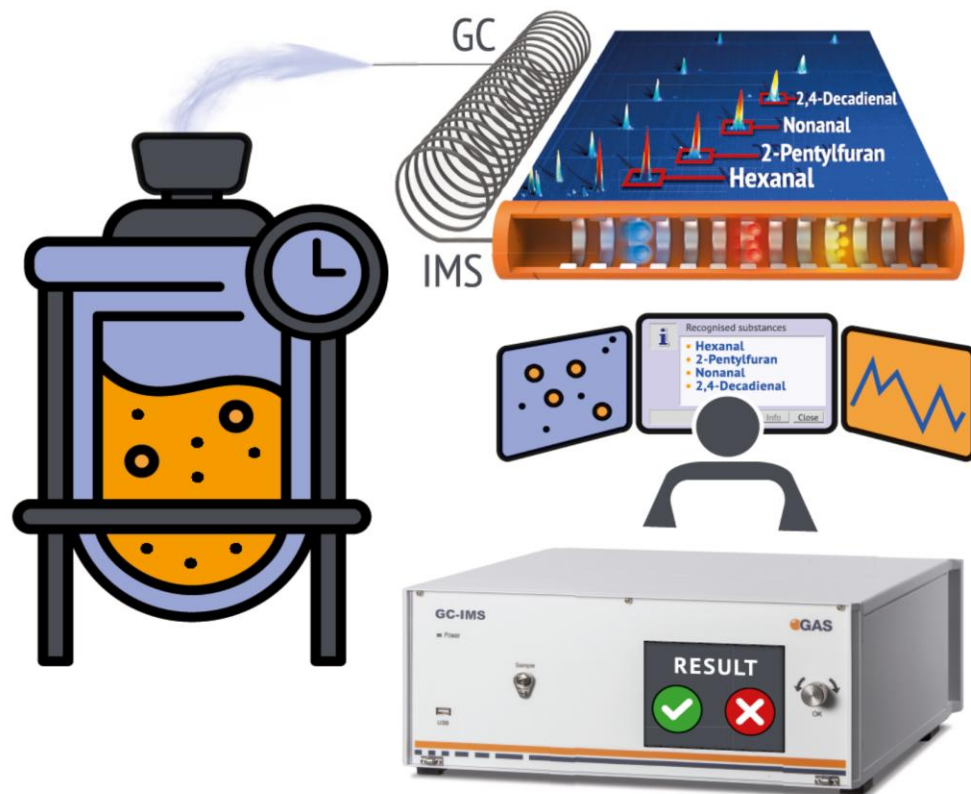


Coupling with Agilent, Thermo Fisher, Shimadzu GCs



Taylor-made Solutions

...through close cooperation with G.A.S. Customers



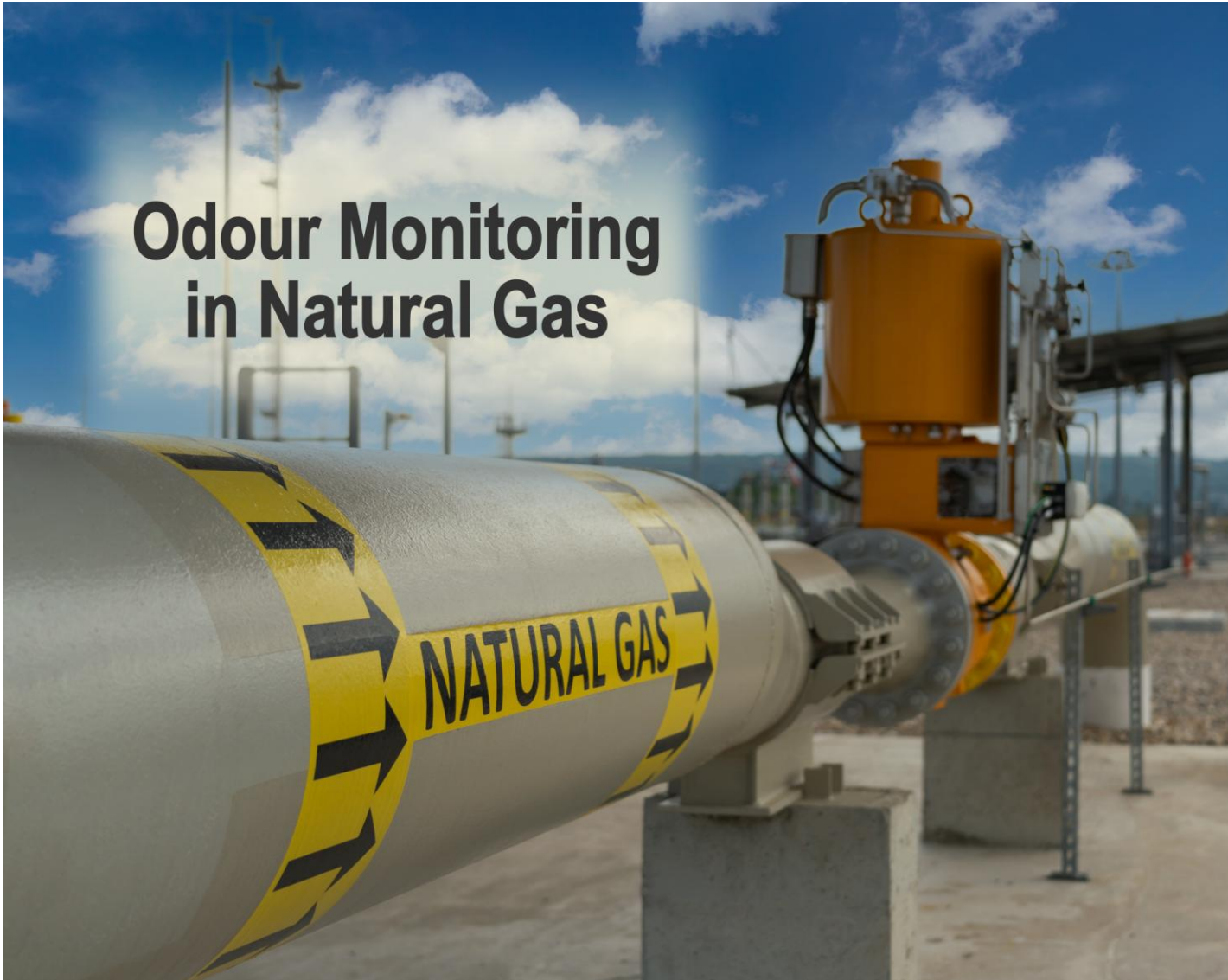
Bioreactor-Monitoring via VOC Analysis

Nontargeted Volatile Metabolite Screening and Microbial Contamination Detection in Fermentation Processes by Headspace GC-IMS

Joscha Christmann, Manuel Weber, Sascha Rohn, and Philipp Weller, *Analytical Chemistry* **2024** 96 (9), 3794-3801

DOI: 10.1021/acs.analchem.3c04857, <https://pubs.acs.org/action/showCitFormats?doi=10.1021/acs.analchem.3c04857&ref=pdf>

Odour Monitoring in Natural Gas



Natural Sulphur and from Odorization

Mobile Odour Monitoring

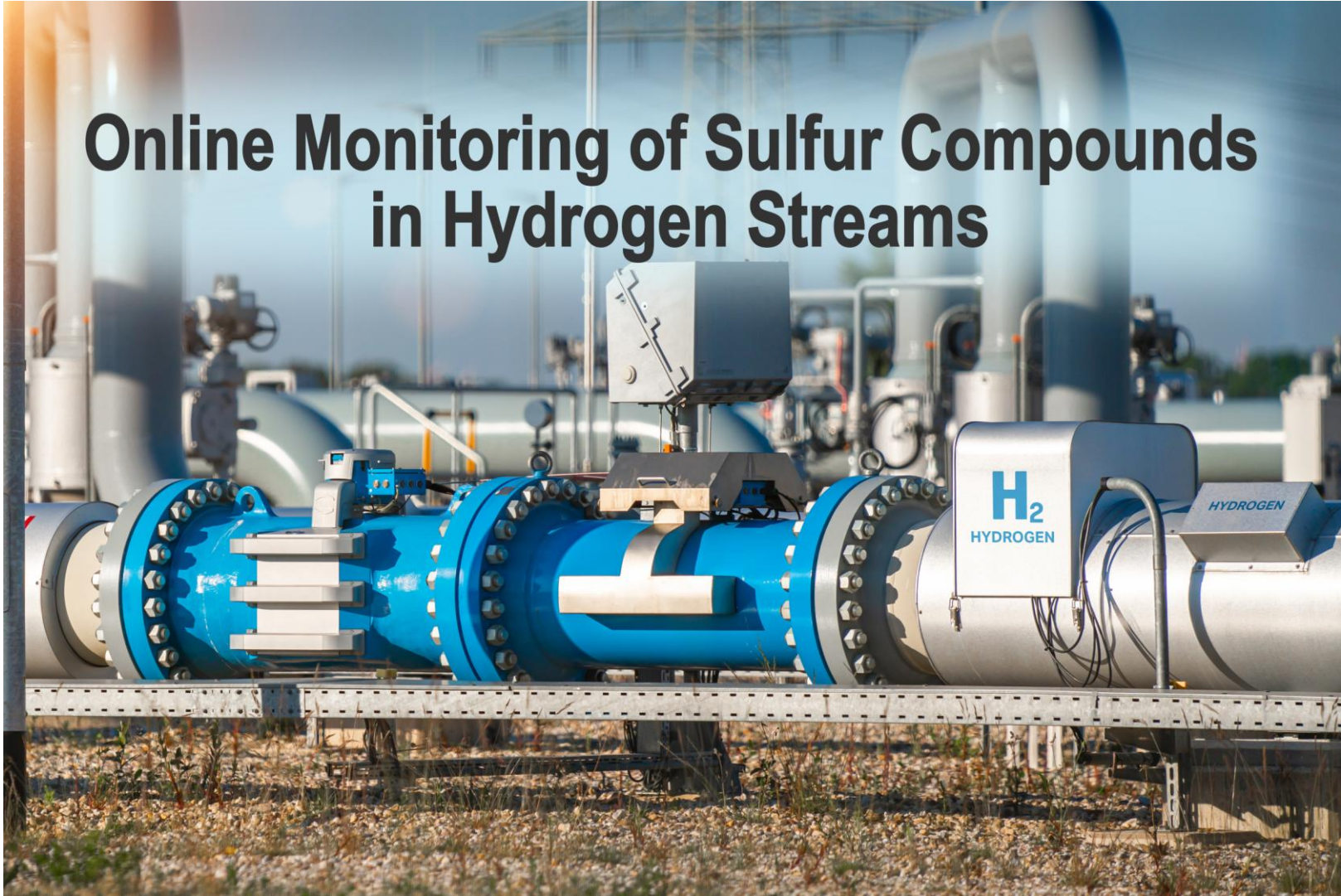


US Market

Panel - Ex - Enclosure with AC

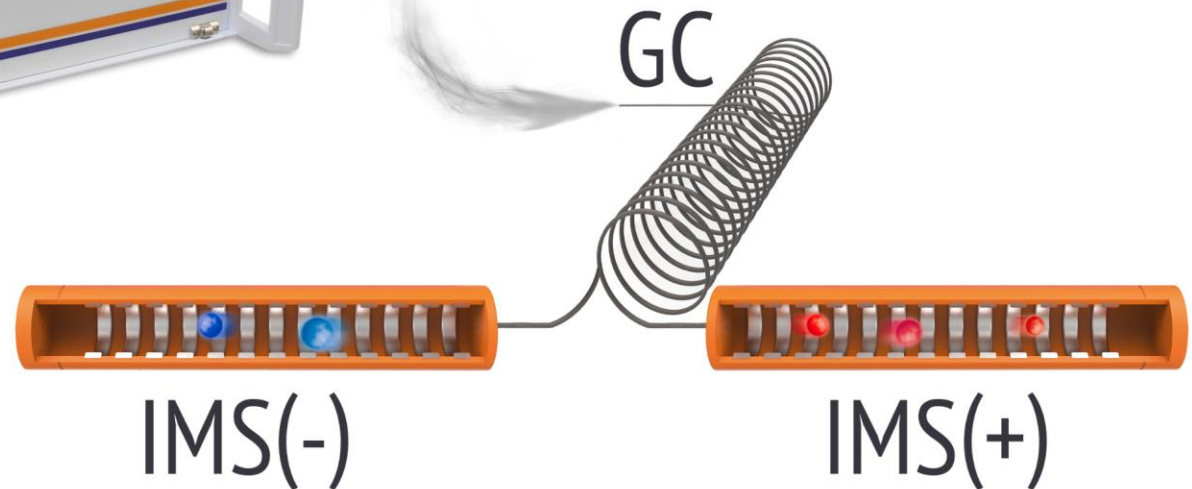


Online Monitoring of Sulfur Compounds in Hydrogen Streams





GC-TWIN-IMS



... to simultaneously test for pos./neg. charged Ions from Sulphur Species

High Precision Gas Dilution

Completely Intertized Setup for all gas-bearing Parts



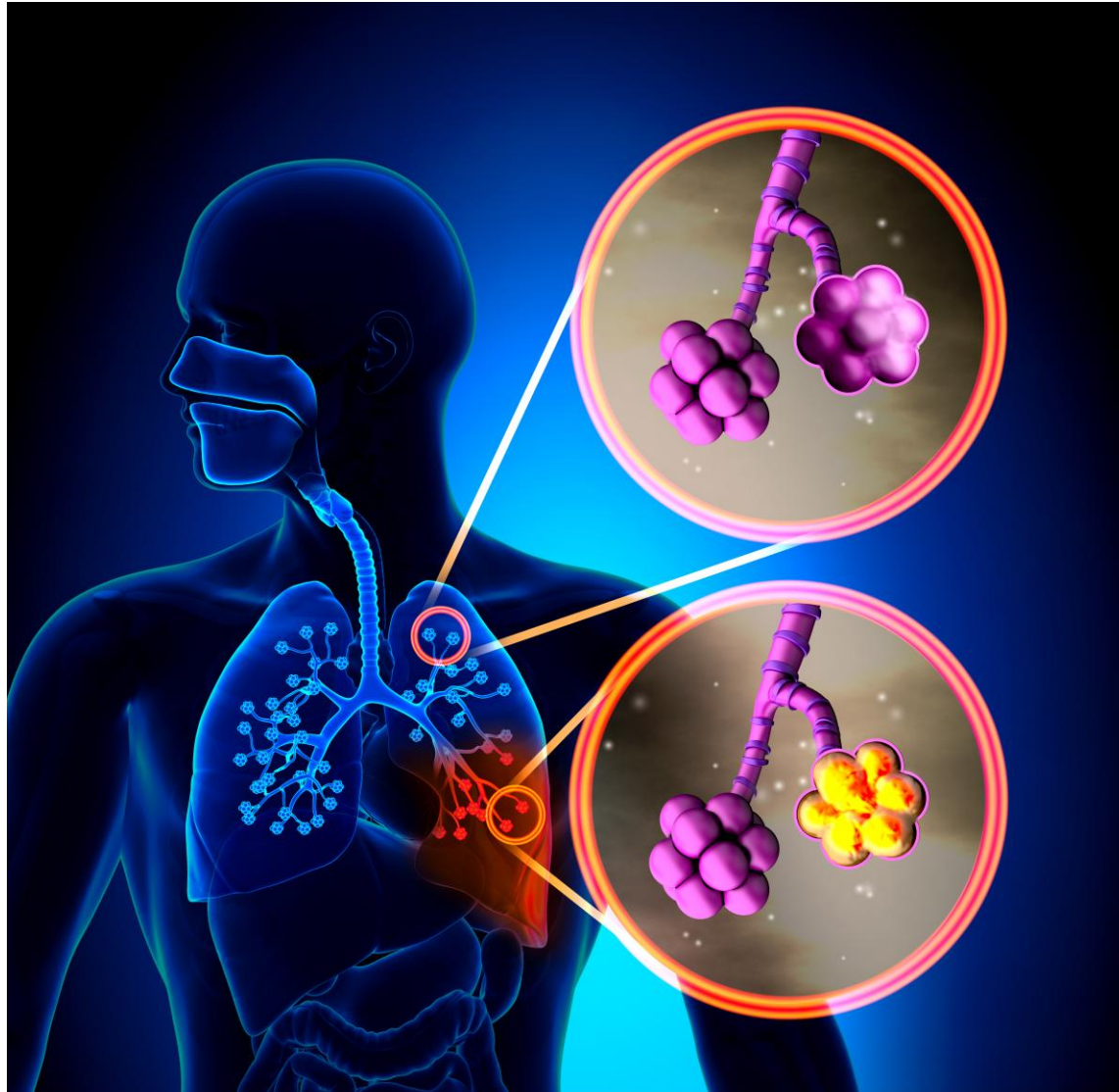
... to reliably calibrate Instruments at ppb-Level.



Sensitive Testing of Malodours, Toxic Compounds in Air and Industrial Gases

Article in OLORES regarding use of GC-IMS in environmental Applications:
<https://www.olor.es/en/techniques/phsicochemical-analysis/1533-why-gc-ims-is-quietly-becoming-the-new-workhorse-in-odour-science>

GC-IMS in Life-Science

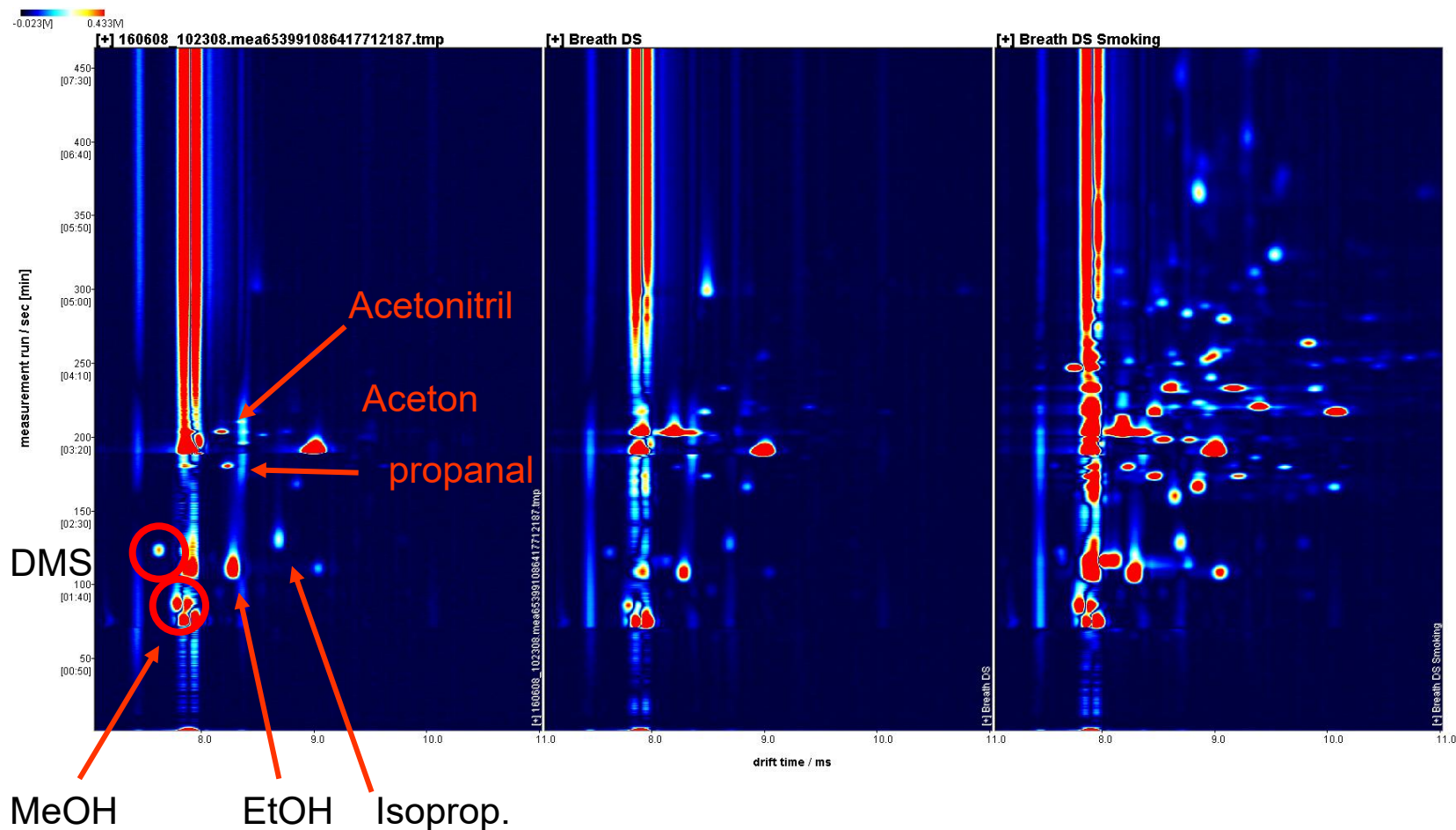


Breath Analysis



Comparison of the quantification performance of thermal desorption GC-IMS and GC-MS in VOC analysis

Schanzmann, H., Gaar, S., Keip, S. *et al.* Comparison of the quantification performance of thermal desorption GC-IMS and GC-MS in VOC analysis. *Anal Bioanal Chem* **417**, 4179–4198 (2025). <https://doi.org/10.1007/s00216-025-05933-w>



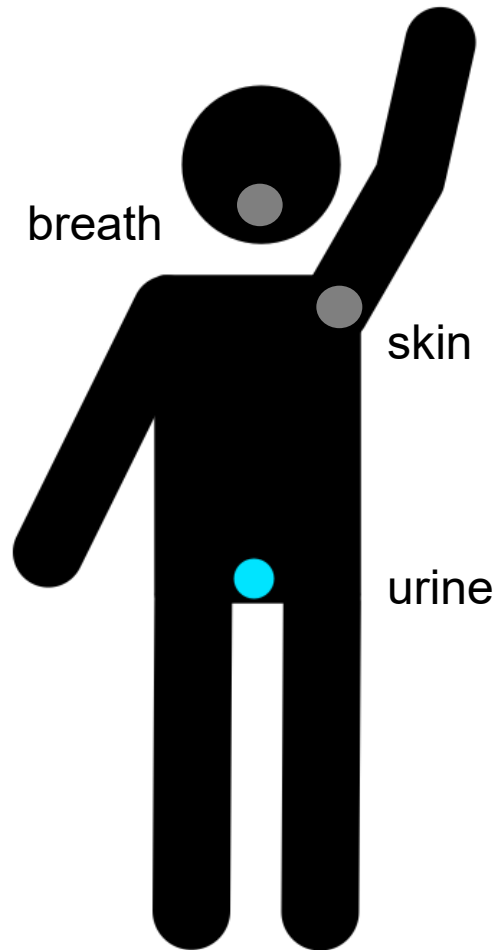
Non Smoker

Smoker

Smoker after Cigarette

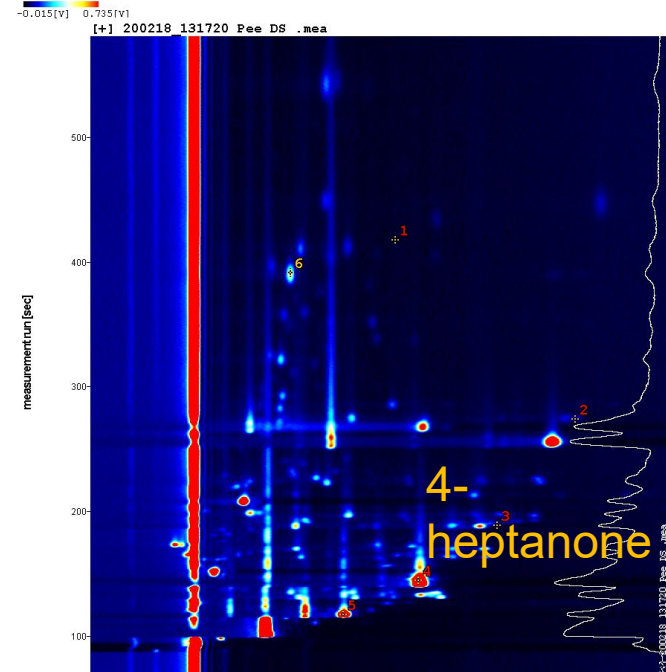
Research in Human Breath: Unlimited availability of Samples.

Medical Research using Urine

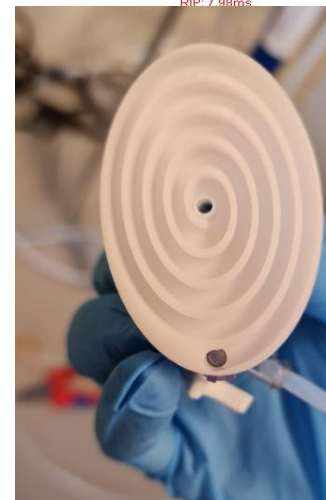
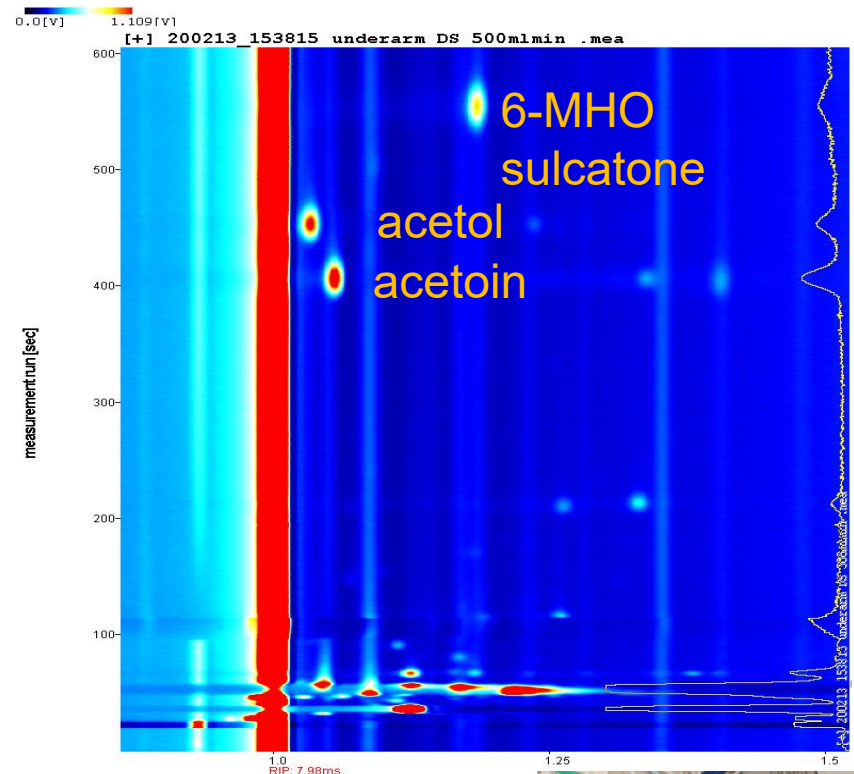
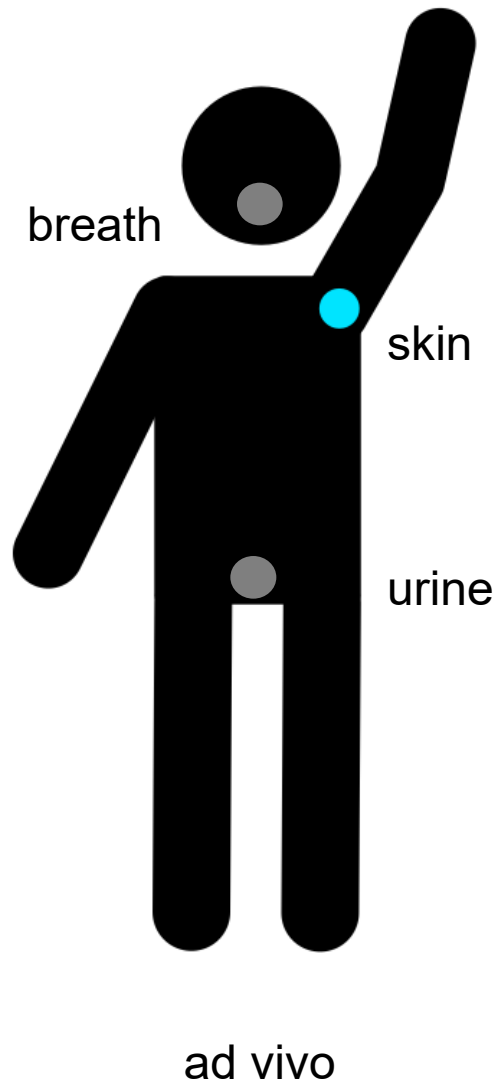


in vitro

Sterile Sampling



Body Smell related Applications





Application Expertise of Users plus GC-IMS related Know-How of G.A.S. leads to innovative analytical Solutions in various Fields.

Thank You for your Attention!

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+49 231 97426550

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