SIBabs
SCIENCE – INNOVATION – BUSINESS

2D-GC-MS

Two-dimensional Gas Chromatography – Mass Spectrometry

FOR IDENTIFYING VOLATILE COMPOUNDS FROM CHALLENGING MATRIXES

Comprehensive GC-MS System by Shimadzu
- GCMS-QP2010 *Ultra* with Zoex ZX-1 Modulator
- SPL Split/Splitless + Optic-4 multimode injectors
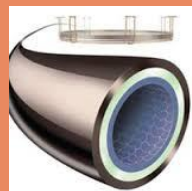- MS + FID detectors
- AOC-5000 Plus sampling robot
- Cold trap

SAMPLING

Liquid sample
Head Space
Thermal desorption
DMI (difficult matrix introduction)

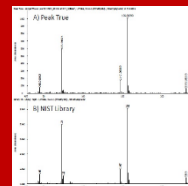CHROMATOGRAPHY SEPARATION

Two GC columns separating compounds

DETECTION

Comparing MS spectrum with MS library spectras

STUDY EXAMPLES

Monitoring compounds of pyrolysis distillates
Monitoring fungi volatiles from infected spruces
Monitoring thermal breakdown of silica coatings
Monitoring exhaled breath compounds relating diets
Monitoring what is "mysterious stuff" in various samples
Monitoring resin acids and from coniferous resin salves
Monitoring volatile compounds of mushrooms
Recognizing plasticizers from plastics
Detecting smelling contaminant

What`s the smell?

What compounds are in this?

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