

# 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

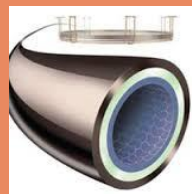
### SAMPLING

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



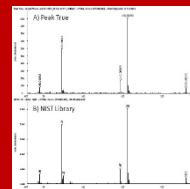
### CHROMATOGRAPHY SEPARATION

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 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?

### CONTACT

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