



Curie Point Injector JCI-22 Odor Analysis Coffee In comparison with SPME

- **JCI-22 with mini-PAT**

Coffee powder 200mg

Dynamic Head space with mini-PAT

Pre heating at 150c

Curie point heating at 280c for 5sec

Injection 150kPa

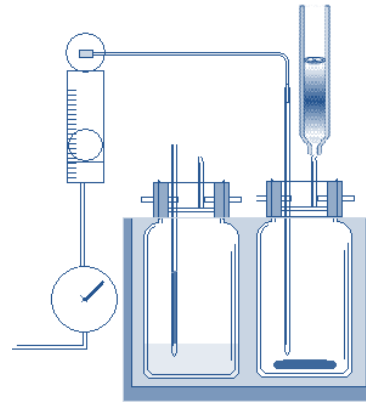
- **SPME**

Coffee powder 200mg

Head space with SPME

(PDMS/DVB) and (CAR/PDMS)

GC injector at 250c for 15sec



mini-PAT

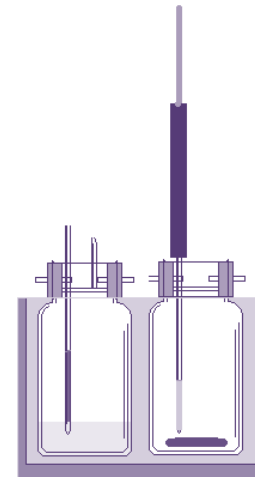
Quartz Glass Sample Tube

ID: 4mm Length: 36mm

Absorbent :Tenax GR 25mg

Pyrofoil :F315 (315c)

(N₂) 50mL/min 60°C for 20 min



SPME

1 PDMS/DVB

2 CAR/PDMS)

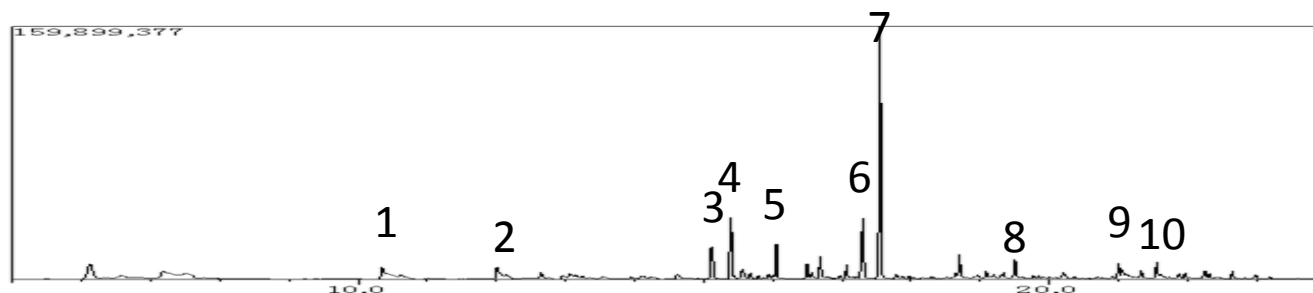
60°C for 20 min

GC	Inj. temp	250°C		
	Det. temp	250°C		
	Anal. Time	35min		
	Total flow rate	32.9mL/min		
	Oven. Temp	Rate (°C/min)	Temp (°C)	Hold (min)
		-	35	6
		10	250	2.5
	Injector	Splite	1/30	
	Head pres	Rate (kPa/min)	Press (kPa)	Hold (min)
		-	46.9	0.01
		100	75	1
		-50	46.9	4.46
		3.7	128.9	2.5
MS	Mass range	33-550		
	EM gain	1.45Kv		
	Sol.cut	5min		
	Scan	5-30min		
Column	HP-INNOWAX	Length	30M	
		I.D.	0.25mm	
		Film	0.25μm	



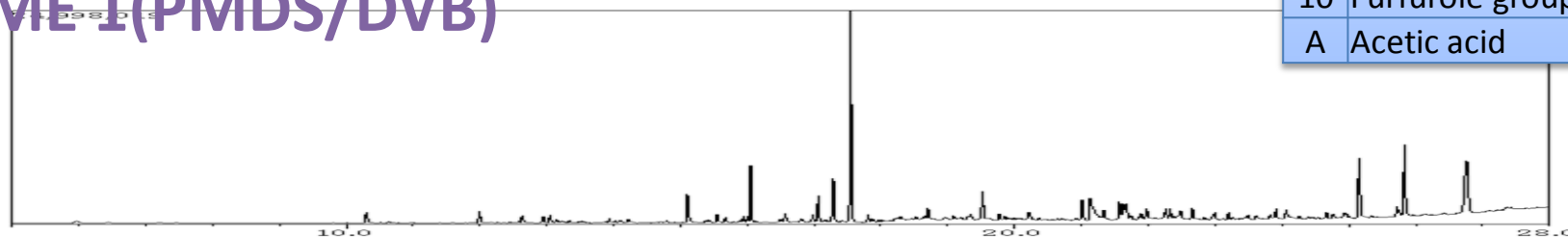
mini-PAT chromatogram Shows more peaks than the other 2 types of SPME

JCI-22 with mini-PAT

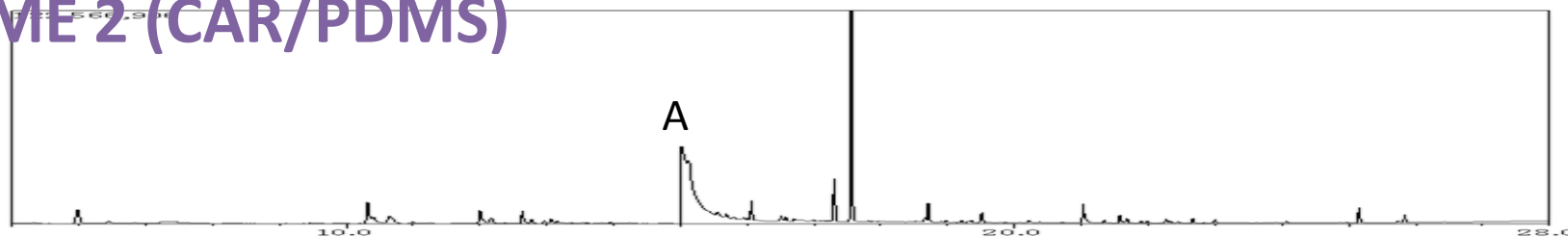


1	Azine
2	Methylpyrazine
3	Furfural
4	2-Ethyl hexanol
5	Furfuryl acetate
6	Butyrolactone
7	Furfuryl alcohol
8	2-Pyrrolidinone
9	Pyridinol
10	Furfurole group
A	Acetic acid

SPME 1(PMDS/DVB)

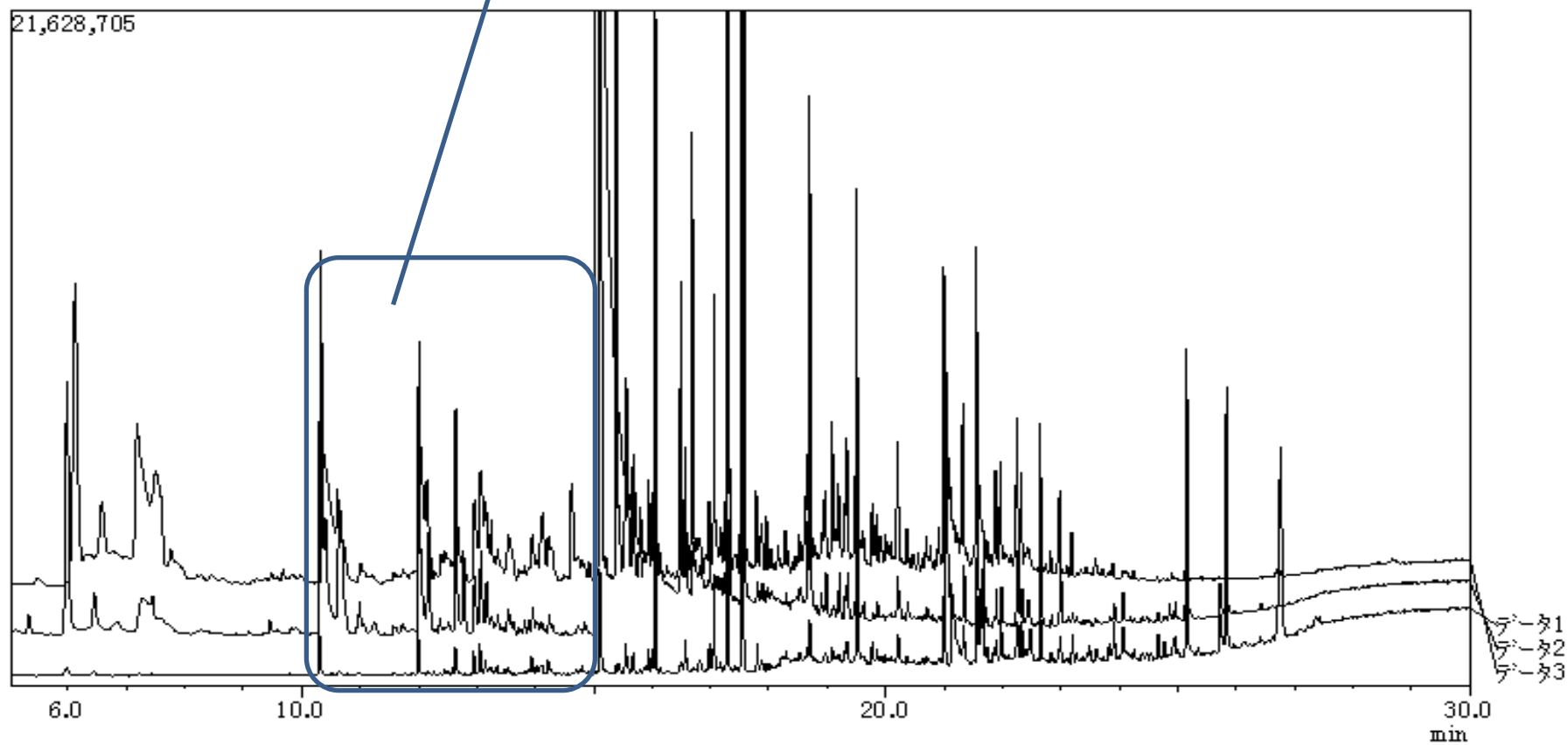


SPME 2 (CAR/PDMS)



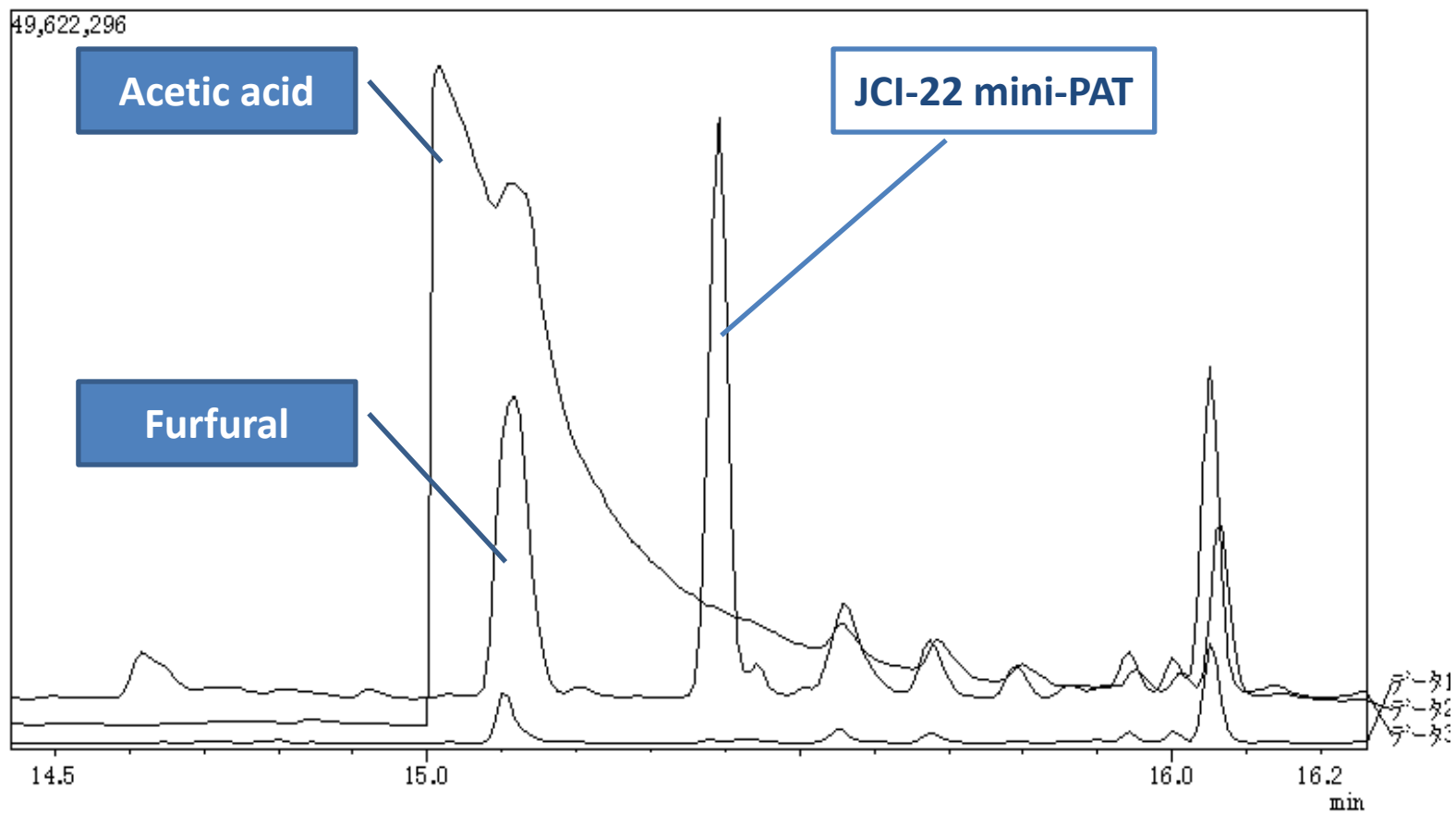
The top chromatogram is from mini-PAT
Second is from CAR/PDMS
The third from PDMS/DVB

Fragrance, pyrazine



JCI-22
JAS-15M II

Japan Analytical Industry Co., Ltd



JCI-22
JAS-15M II

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