

# Chapter 7

## SPME

(Solid Phase MicroExtraction)

# Various Sampling GC



Liquid injection method



Headspace method  
(Syringe method)

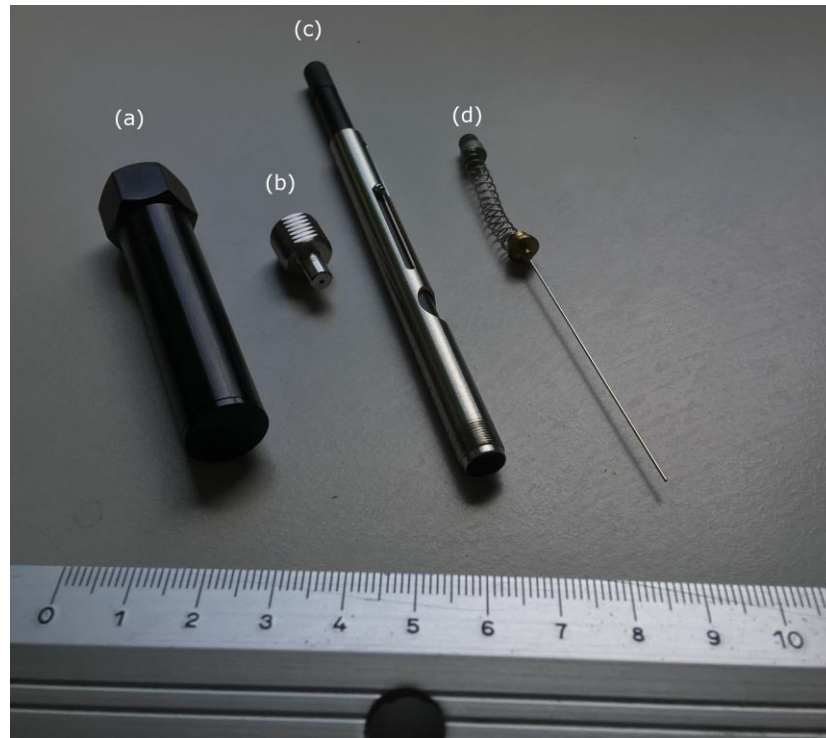
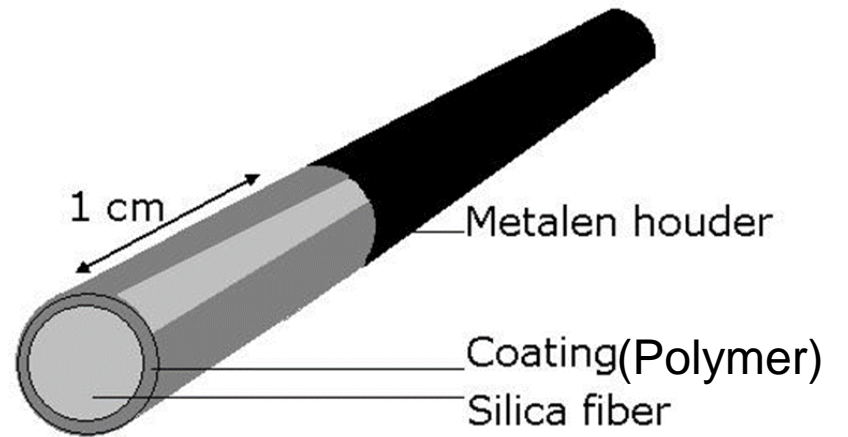


SPME method

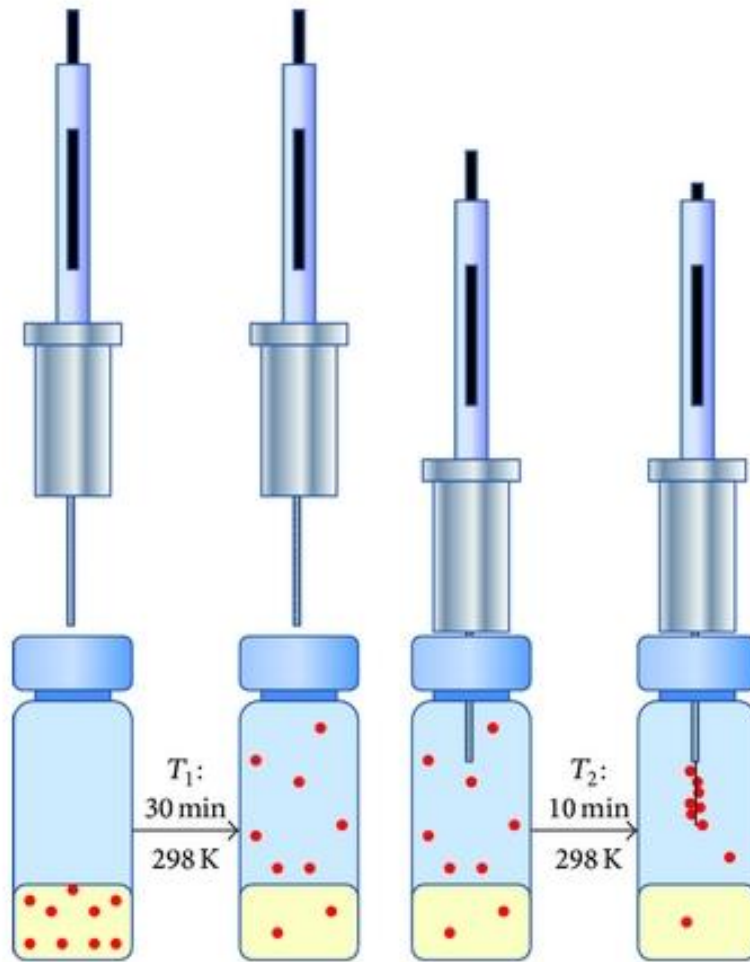
# SPME

- One of the sampling techniques for GC or LC
- Using fiber as sampling device
  - Size: 1 cm long and 100 - 30  $\mu\text{m}$  diameter
  - Polymer or copolymer (PDMS or PDMS/other polymer, color code)





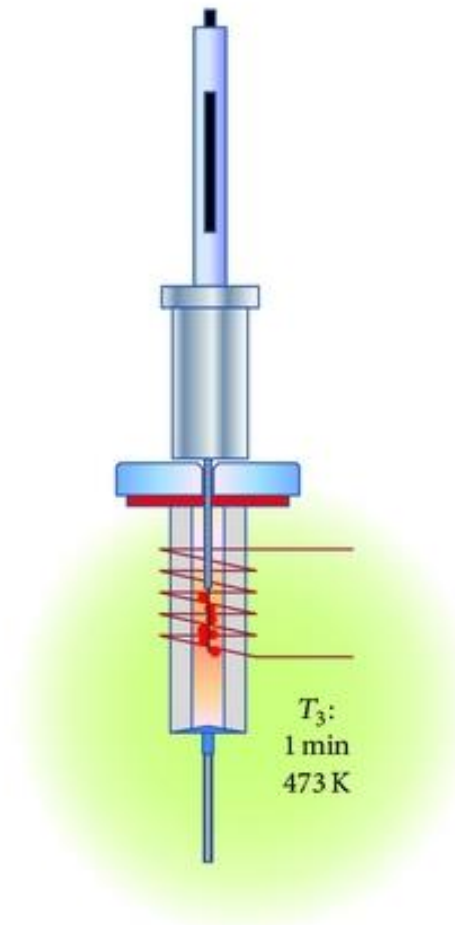
# HS-SPME Sampling GC (Liquid)



Liquid sample  
(blood)

sorption

Thermal desorption  
in GC inlet



# HS-SPME Sampling GC (Solid)

HS-SPME-GC-FID Determination of Acrylamide without Sample Preparation and Derivatization



# SPME Sampling Video Clips

Wine analysis

<https://www.youtube.com/watch?v=PAAn0zfQvM7Q>

Automatic sampling

<https://www.youtube.com/watch?v=yyTKPI30I3g>

<https://www.youtube.com/watch?v=hWBjJ13h3EM>