

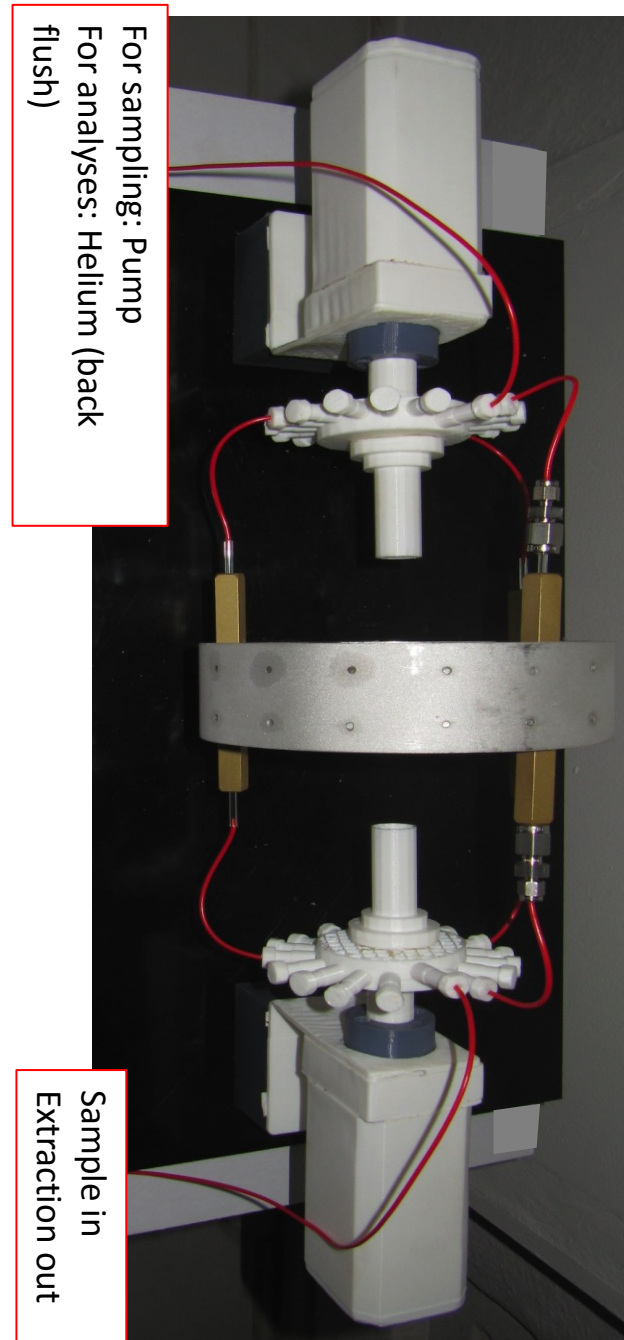
Available systems on the market and its limitations:

Sampling require manual connection of cartridge to pump  
Only one cartridge can be used/ fixed at one time

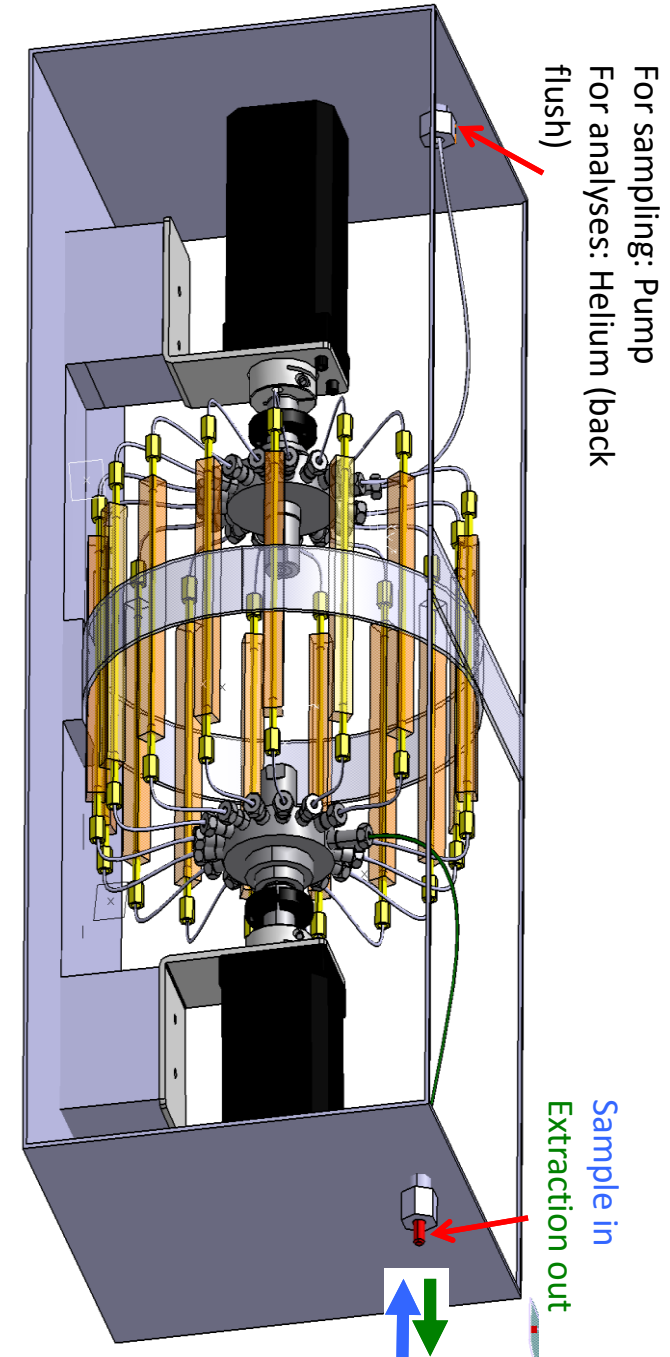
Extraction require manual fixation of cartridge in GC or extraction system

Only one cartridge can be use at one time nor preparation possible

New airsampling system: 3D- printed



New airsampling system: 3D- modell



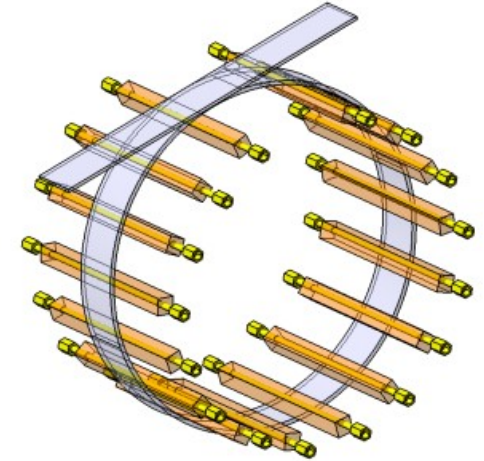
## Innovative

- Very small amount of adsorption material (max. 10mg)
- No manual handling of cartridge during sampling and extraction
- Up to 16 samples within one system
- Cooling during sampling
- The sampling will be controlled by various events:
  - ✓ Rain
  - ✓ Temperature
  - ✓ Daylight
  - ✓ Darkness
  - ✓ Time

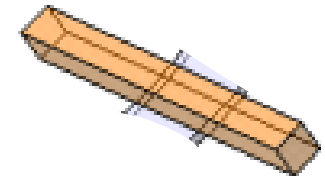
## Main components

- Cartridge:
  - 1/8 outer diameter
  - 12cm long
- Heating and cooling for each cartridge:
  - 11cm long
  - Heating up to 300°C
  - Cooling up to -20°C
  - Both with electrical power
- Pump, external connected:
  - Required volume: 3-30ml/ minute
  - Require time controlling linked to the valves
- Valves with 16 ports: buy in part from VICI
  - they produces the most reliable valves in the market

## Heater and cartridge fixation



Heater for cartridge



Heater with cartridge

