

AIR QUALITY AND GAZ MONITORING SYSTEM

Micro-chromatograph able to detect and measure low concentrations of various kinds of air pollutants

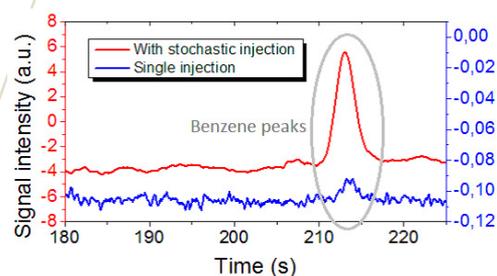
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L'AVENIR EST FAIT D'AUDACE

PRESENTATION

Chromatographs are usually bulky and expensive equipments, while micro air quality analyzers usually provide unprecise or biased measurements. Our micro-chromatograph is designed to discriminate a whole range of different gazes with low detection levels, thanks to cutting-edge silicium-based hardware and smart signal processing algorithms. The signal- noise ratio can optionnally be increased using stochastic injection.

The whole system including pumps and electrovalves is the size of a smartphone, but the core of the silicium-based system is as small as a coin. Furthermore, the system can be tuned to analyze multiple gazes from different rooms or different environments, such as outdoor and indoor air, in a simultaneous manner.



Indoor air quality - Outdoor air quality - Hazardous gazes
Volatile organic compound (VOC) - Chromatograph - MEMS

APPLICATIONS

- Indoor Air Quality
- Outdoor Air Quality
- Hazardous gazes
- Water and liquid analysis

INTELLECTUAL PROPERTY

US patent application US20150204825

CONTACT

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COMPETITIVE ADVANTAGES

- High sensivity
- In situ measurements
- Small form factor

PUBLICATIONS

Patent ref : [High-sensitivity micro-gas chromatography using stochastic injection techniques](#)

Multiple sample chromatography using a stochastic injection technique (US20150204825)

DEVELOPMENT PHASE

- ☑ A prototype has been developed and is proven to work for volatile organic compounds. It could be tuned for other gazes and potentially be adapted to water and liquid analyses.