

Aroma Bit, Inc.

Aroma Coder® V2 Set

**PCA Data**

**Bad odor / Unpleasant odor**

May, 2022



# Principal Component Analysis [PCA] Data Samples

**35** membrane types Dataset acquired by Aroma Coder® V2 Set

## Data Sample 1: Bad odor

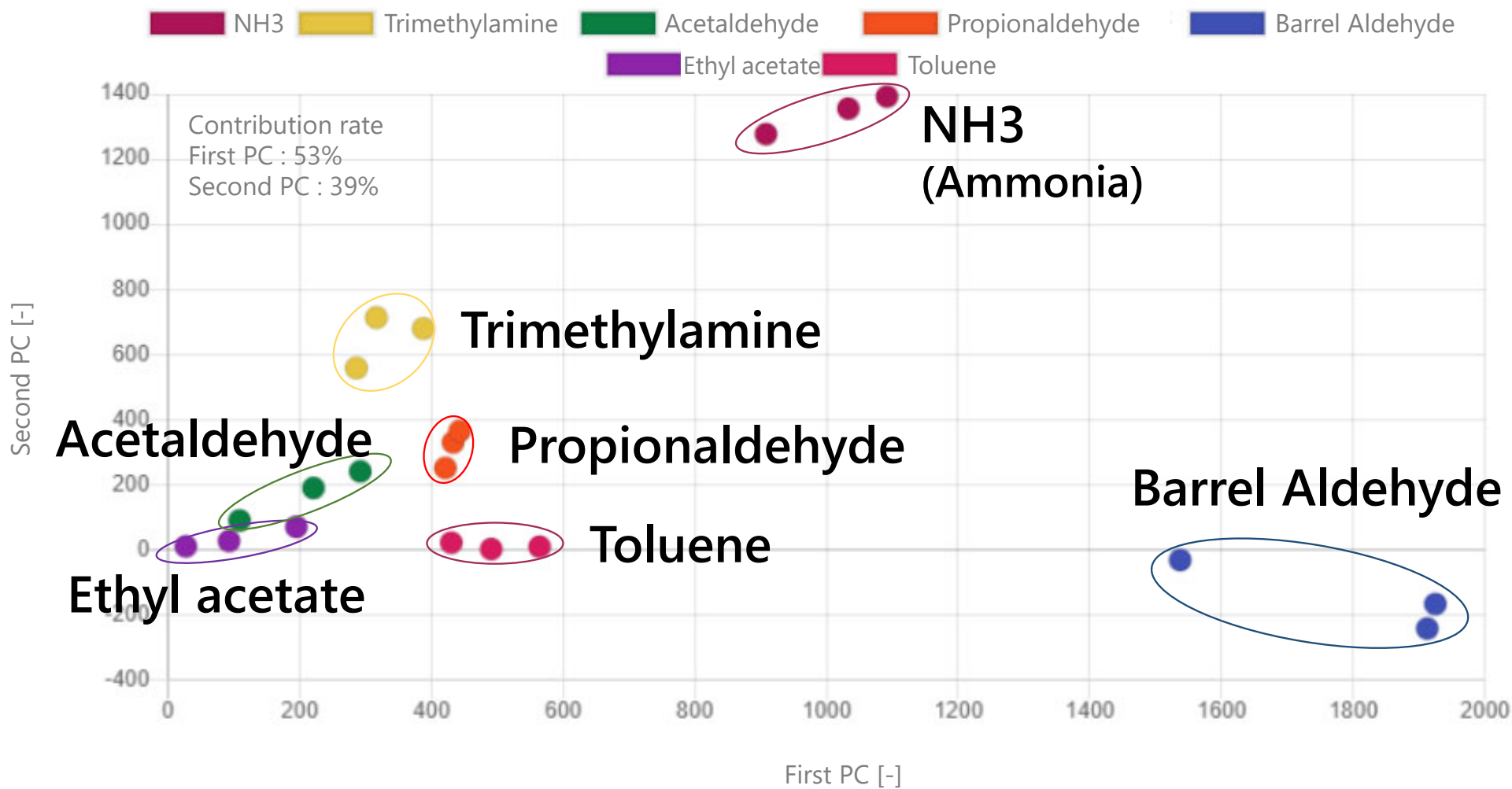
- NH<sub>3</sub>
- Trimethylamine
- Acetaldehyde
- Propionaldehyde
- Barrel Aldehyde
- Ethyl acetate
- Toluene

## Data Sample 2: Unpleasant odor

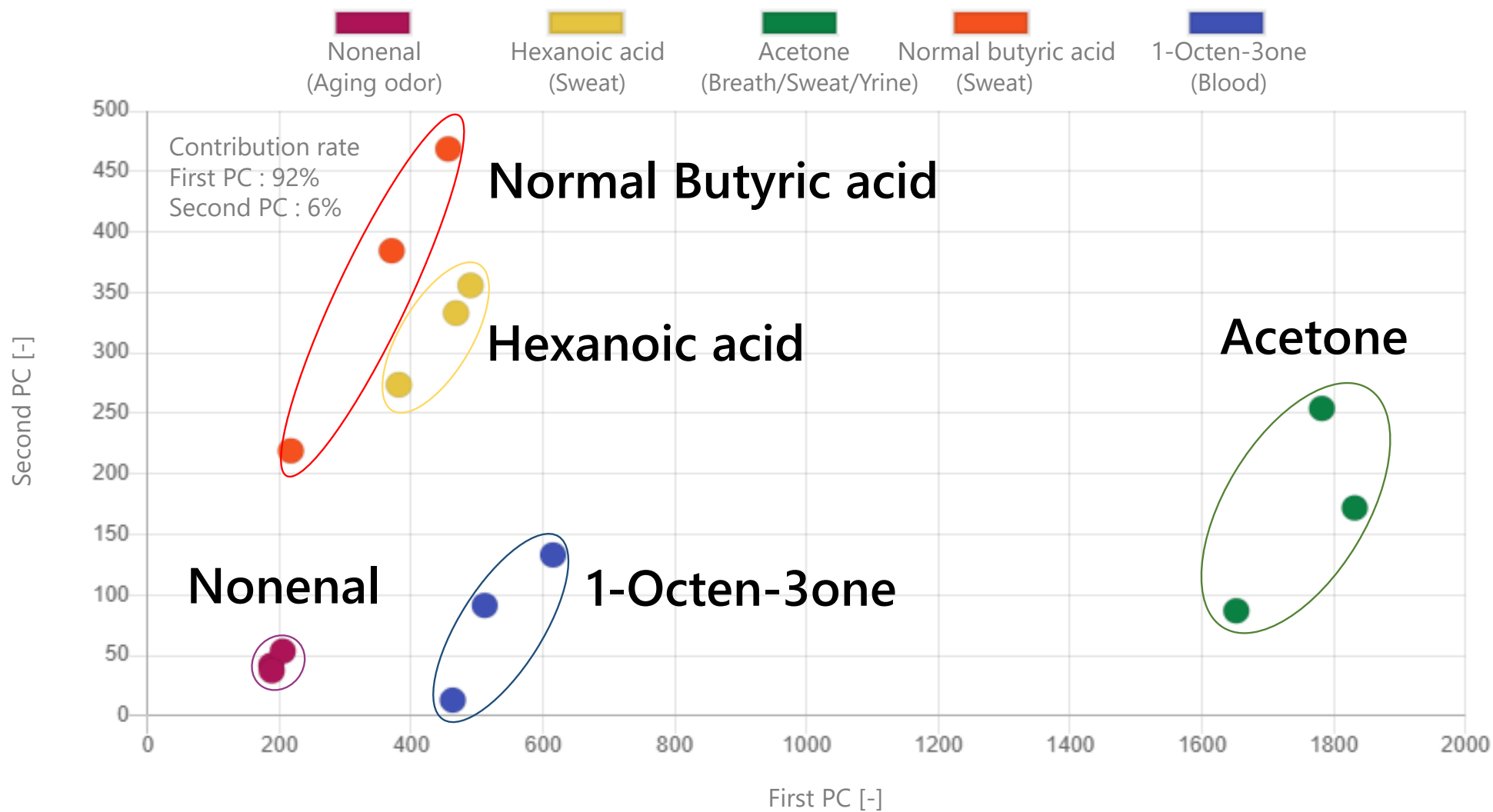
- Nonenal (Aging odor)
- Hexanoic acid (Sweat)
- Acetone (Breath/Sweat/Yrine)
- Normal butyric acid (Sweat)
- 1-Octen-3one (Blood)

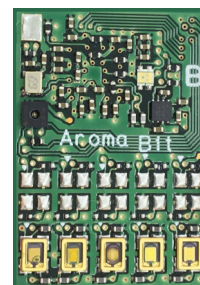
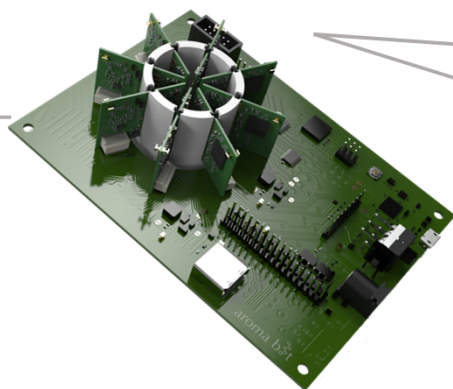
# PCA Data Sample 1: Bad odor

acetate



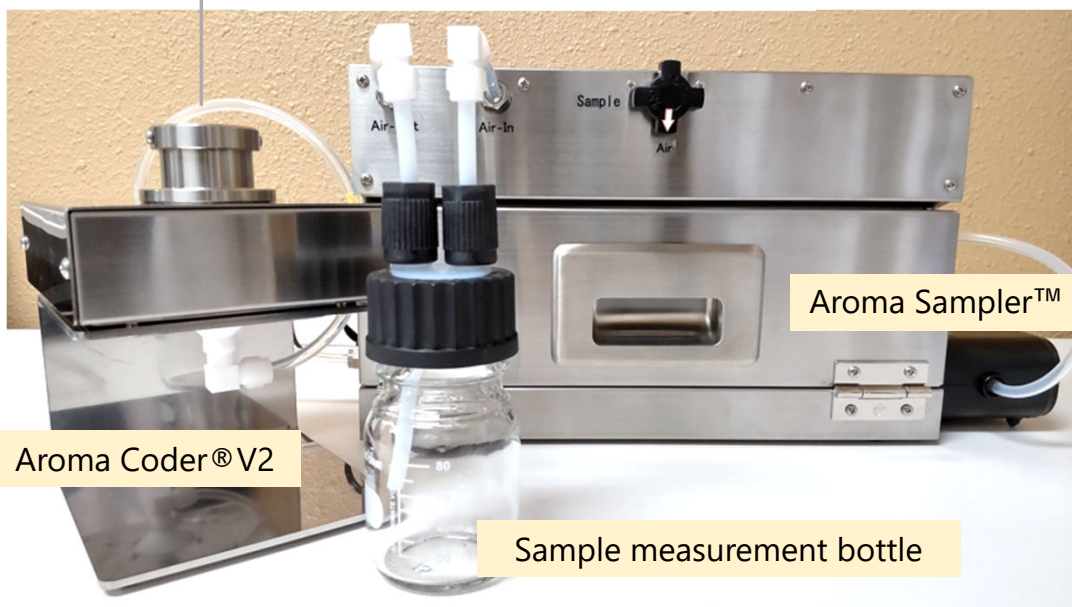
# PCA Data Sample 2: Unpleasant odor





## QCM type smell sensor module 5Q-SSM

is equipped with 5 types of receptor membranes per module. Aroma Coder V2 embeds 7 sensor modules, or 35 different types of receptor membranes per scan.



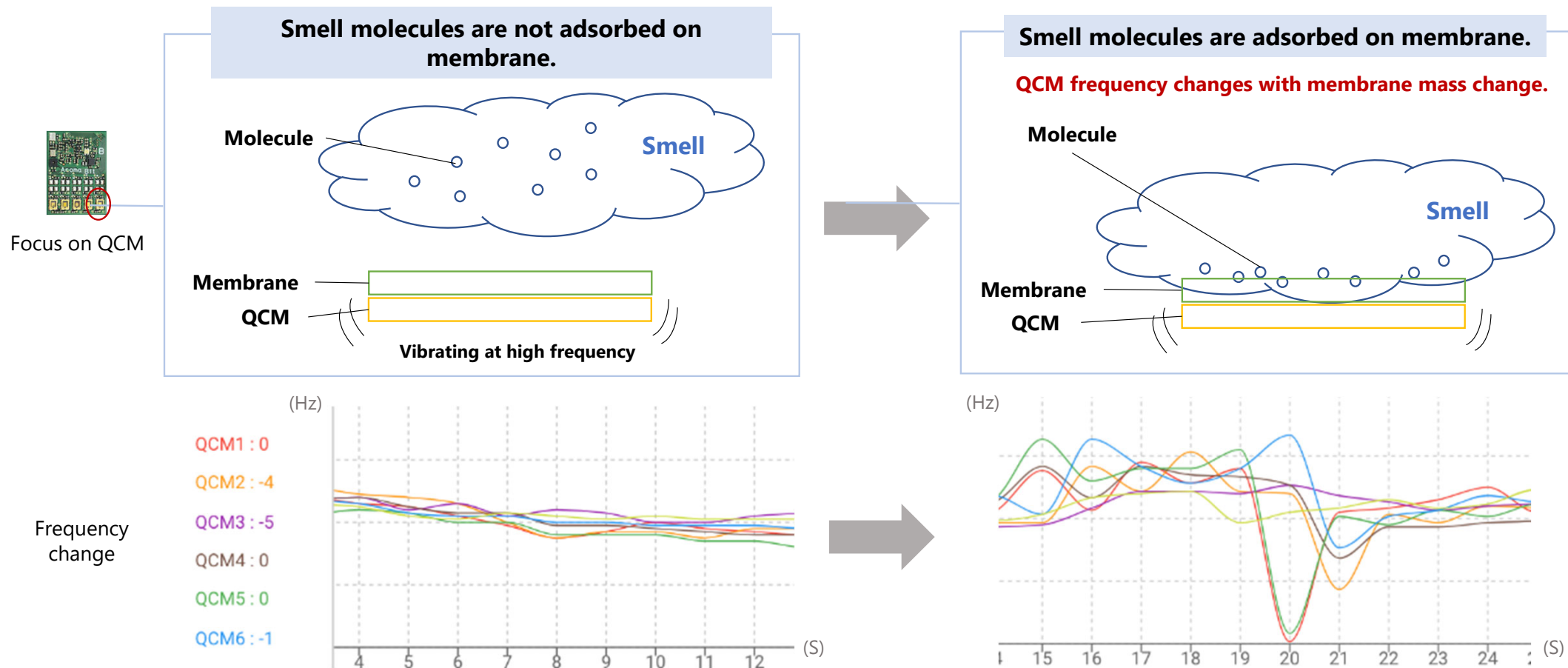
## What is Aroma Coder® V2 Set ?

Aroma Coder® V2 Set is a desktop type odor measurement equipment, equipped with 35 receptor membranes for high-resolution odor measurement.

Equipped with quartz crystal microbalance (QCM) array sensor elements, smell samples are detected and converted as electronic response data, which can be visualized by included software, enabling objective assessment of various smells.

# Mechanism of Smell to Data Conversion

Mass change is detected as QCM frequency change, induced by the adsorption/desorption of chemical substance of smell sample at receptor membrane surface.



Daily necessities

Health care

Product Development

Experimentation,  
Research

The product is intended for use in product development of daily necessities and health care products, as well as in experiments and research at universities and research institutes.

