

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

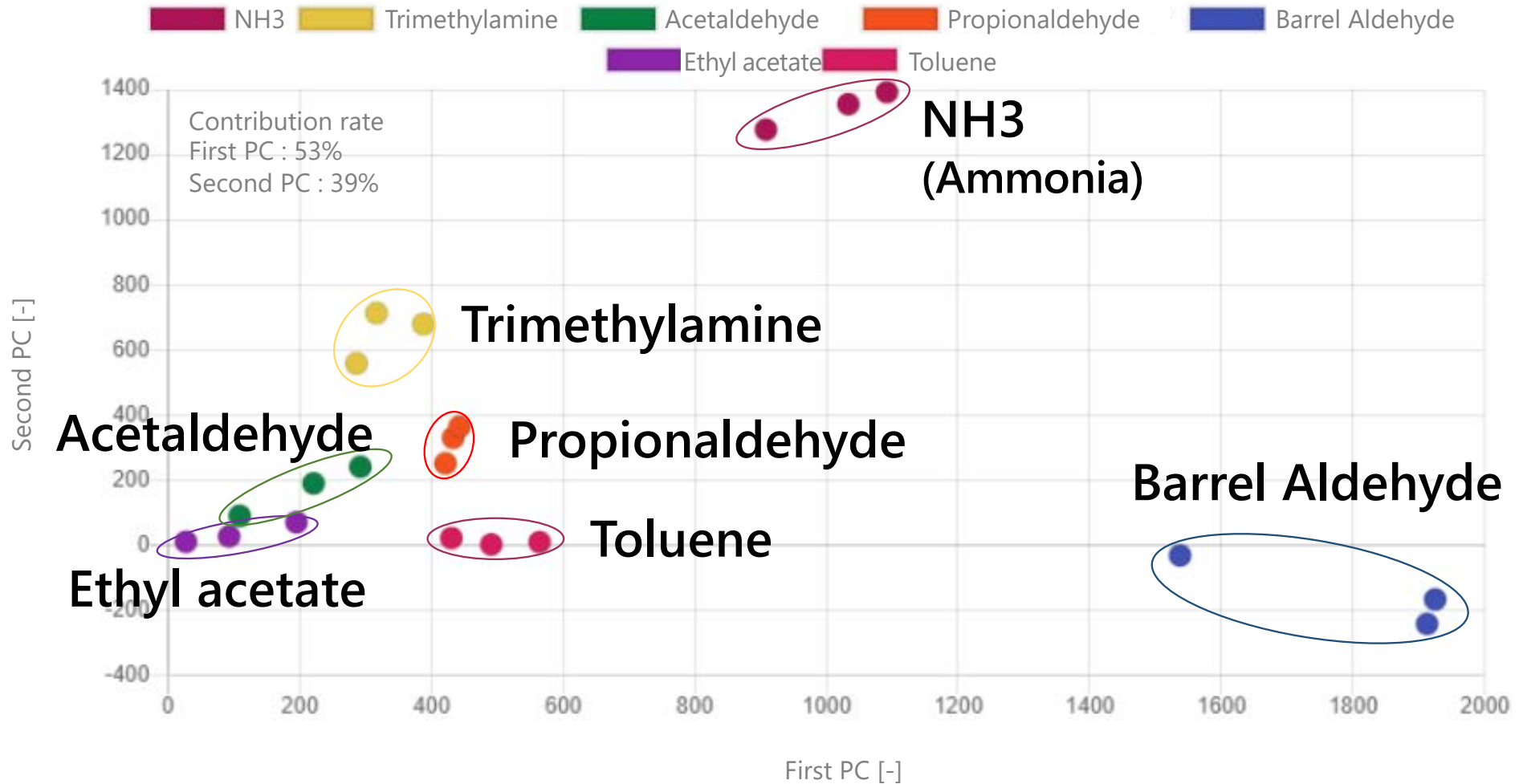
- NH₃
- Trimethylamine
- Acetaldehyde
- Propionaldehyde
- Barrel Aldehyde
- Ethyl acetate
- Toluene

Data Sample 2: Unpleasant odor

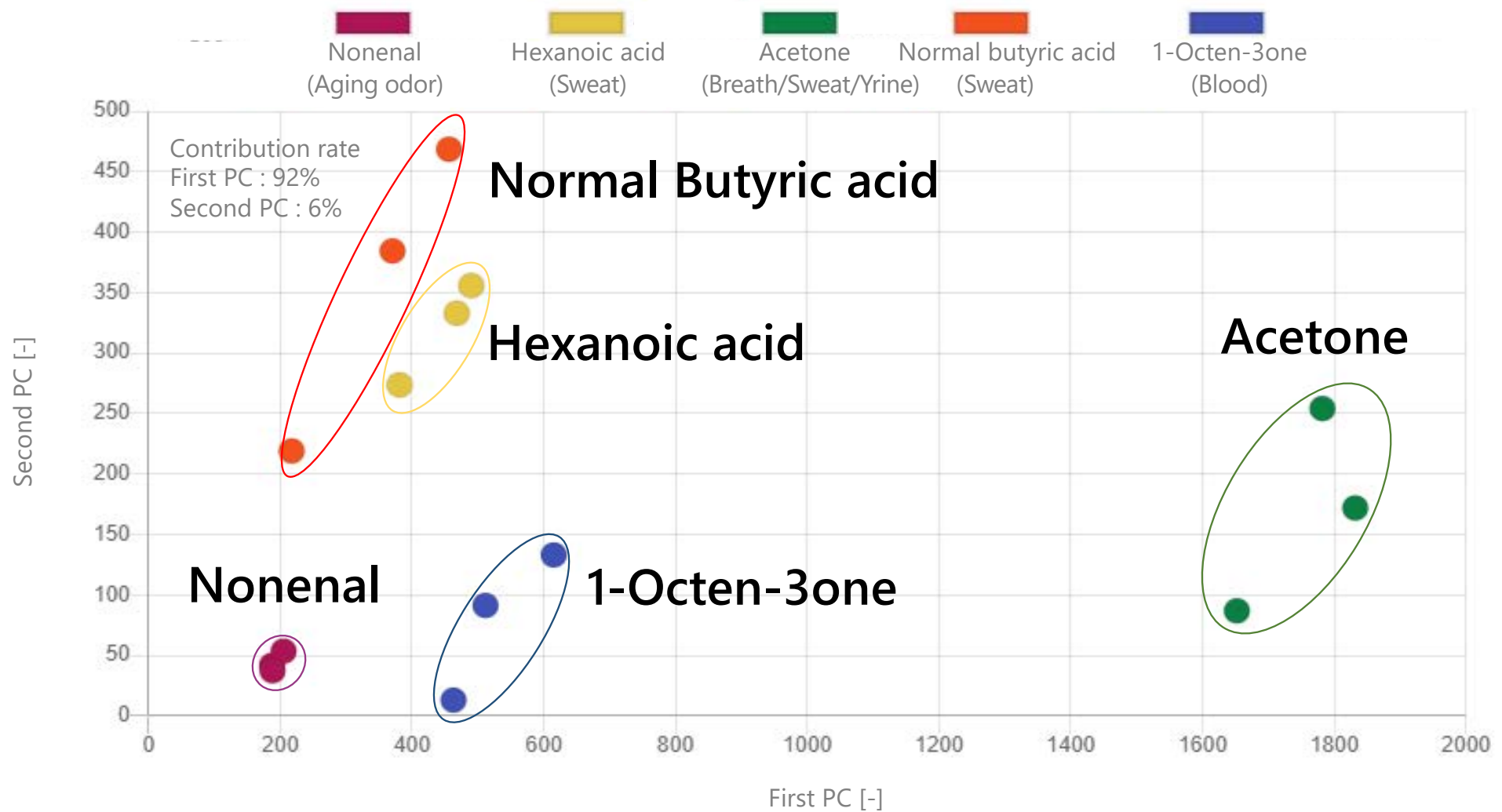
- Nonenal (Aging odor)
- Hexanoic acid (Sweat)
- Acetone (Breath/Sweat/Yrine)
- Normal butyric acid (Sweat)
- 1-Octen-3one (Blood)

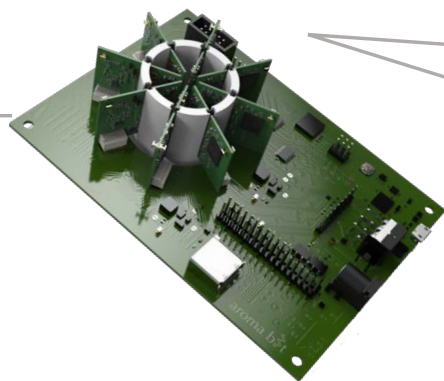
PCA Data Sample 1: Bad odor

acetate



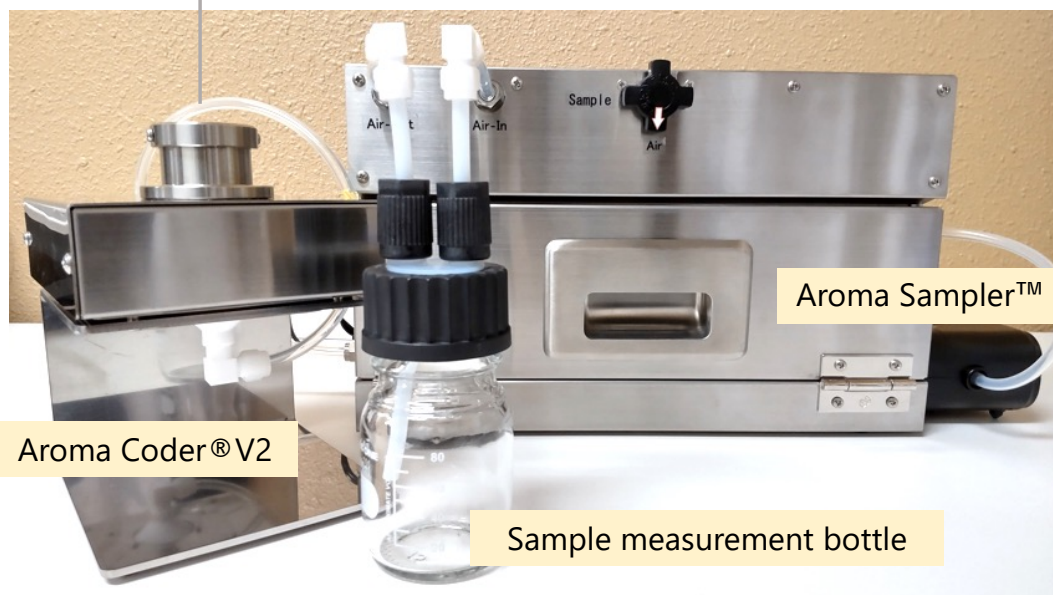
PCA Data Sample 2: Unpleasant odor





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.



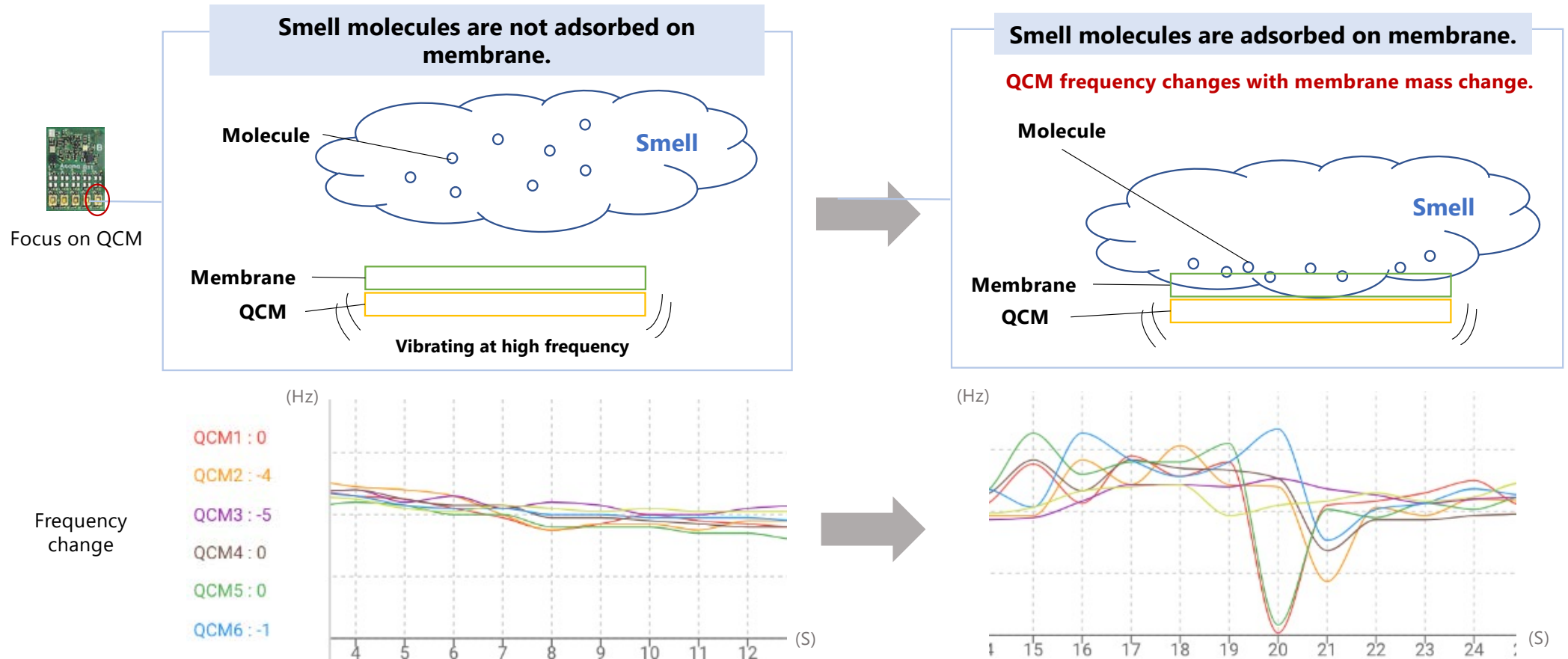
What is Aroma Coder® V2 Set ?

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.

