

Aroma Bit, Inc.

Aroma Coder® V2 Set

PCA Data

Orange juice by Manufacturer

November, 2022



Data Sample: Orange juice by Manufacturer

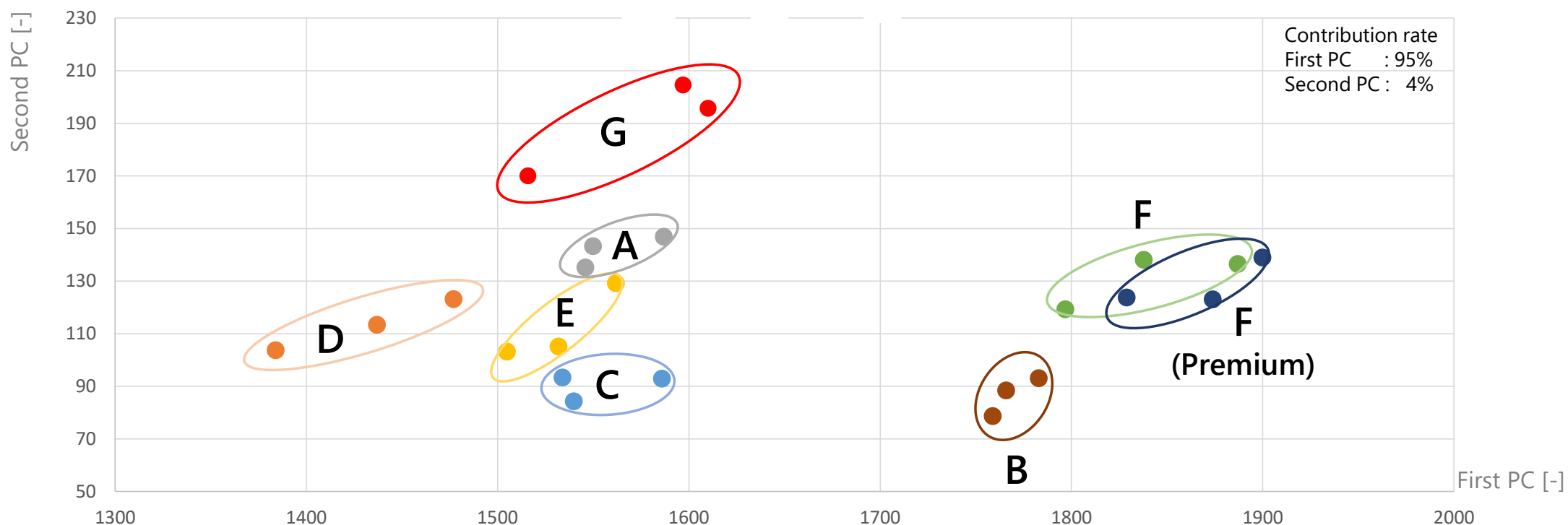
- A
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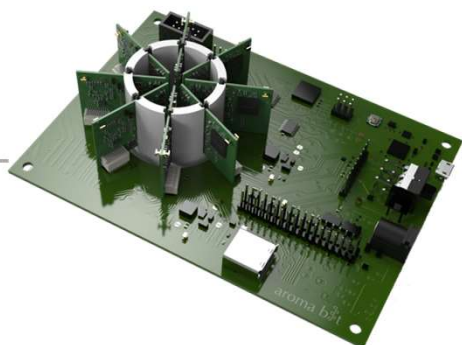
PCA Data Sample: Orange juice by Manufacturer

8 orange juice samples from 7 different manufacturers is measured with Aroma Coder® V2 Set and principal component analysis [PCA] is conducted.

Conclusion:

- (1) Aroma Coder V2 successfully achieved high odor resolution discrimination of orange juice samples by juice manufacturers.
- (2) 2 samples from the same manufacturer (Manufacturer F) are plotted close together, implying high resolution odor discrimination of the different product smell (caused by differences in ingredients, recipes, etc.) despite the sample from the same manufacturer.





Controller board mounted on
Aroma Coder® V2



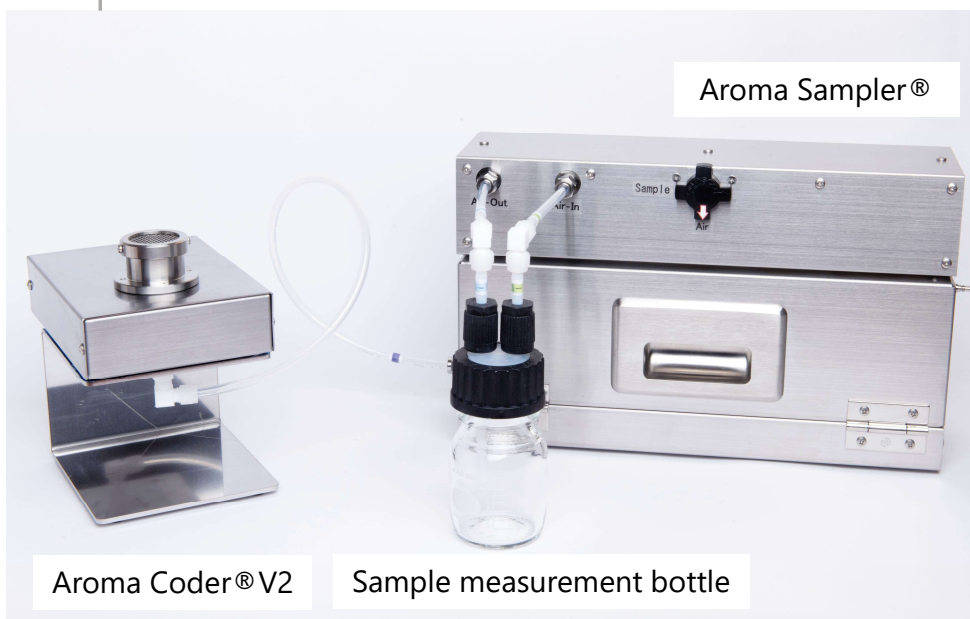
QCM type smell sensor module 5Q-SSM

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.

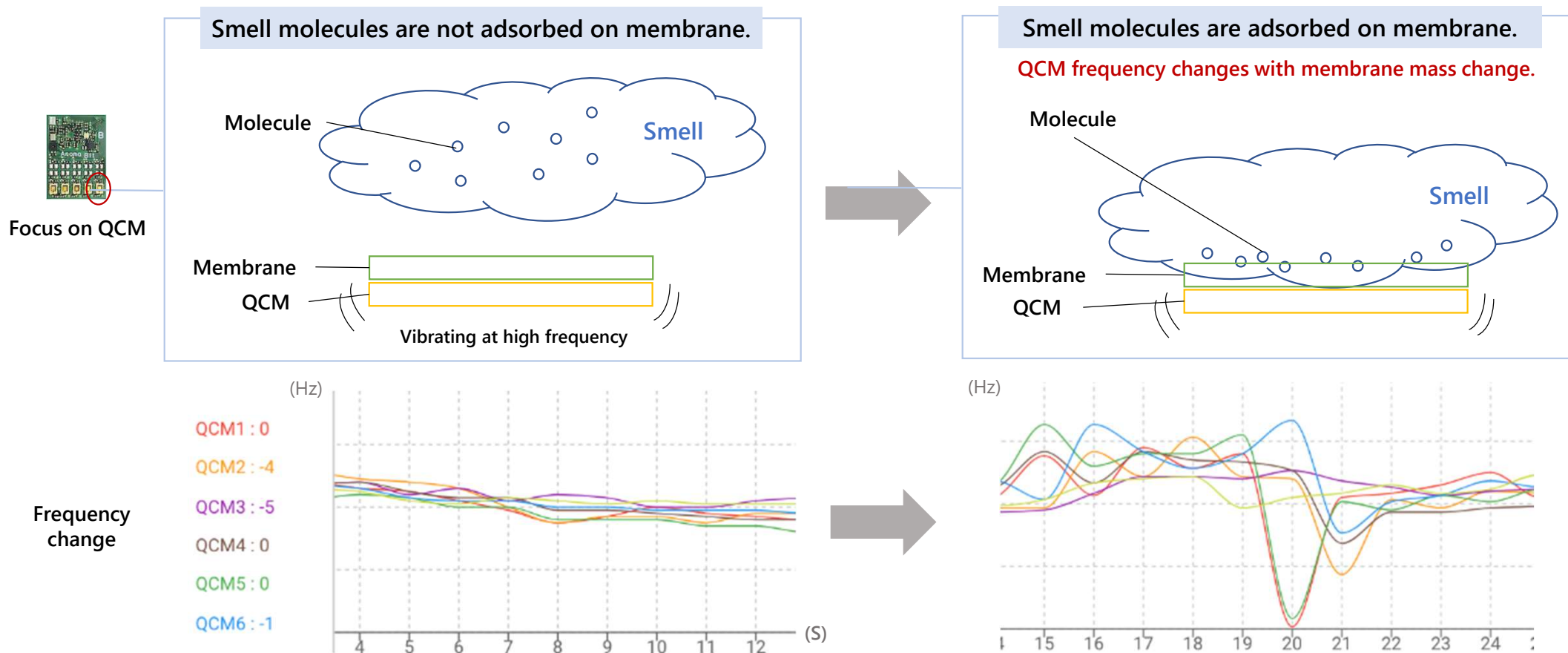


Aroma Coder® V2

Sample measurement bottle

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.



Food & Beverages,
Agriculture

Consumer Products

Product Development

Experimentation,
Research

The product is not only for juice, intended for use in Food & Beverages, Agriculture, Consumer Products, as well as in experiments and research at universities and research institutes.

