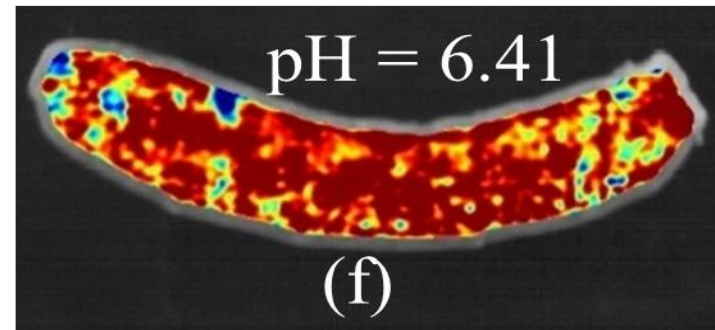
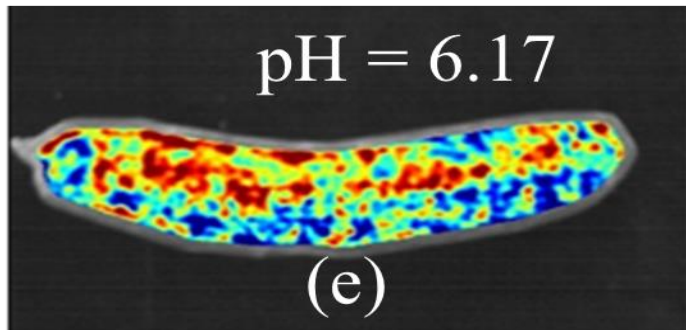
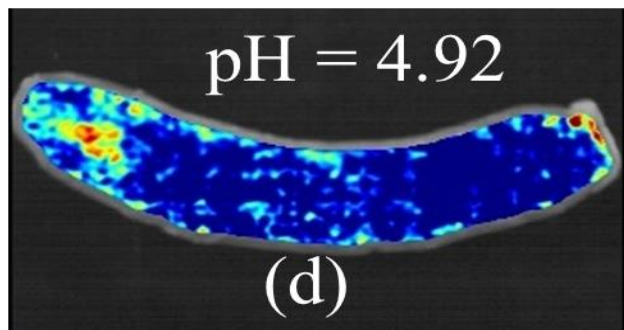
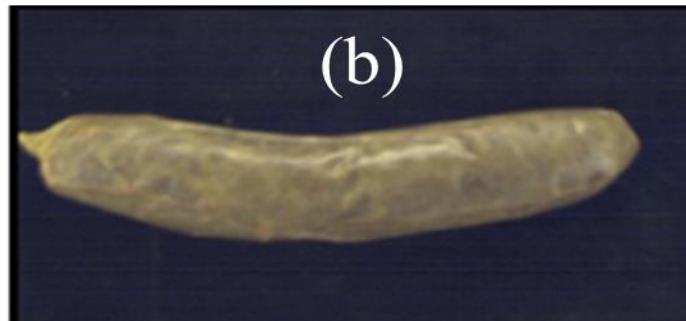
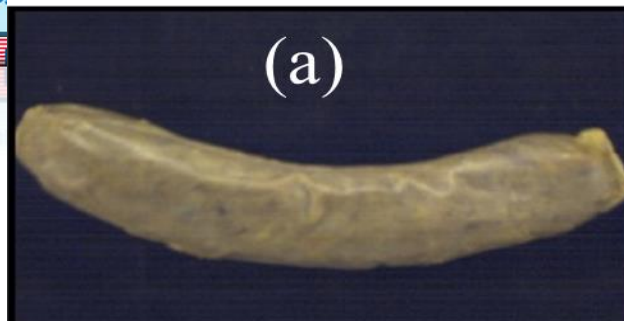




# Applying non-invasive technology in conjunction with multivariate analysis to assess the quality characteristics of foodstuffs

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- Email: [feng.chaohui@mail.kitami-it.ac.jp](mailto:feng.chaohui@mail.kitami-it.ac.jp)
- Current initiatives/accomplishments related to the e-ASIA 13<sup>th</sup> Call for Proposals
  - ✓ Real-time monitoring of food storage and quality management conditions:
    - hyperspectral imaging and terahertz spectroscopy
  - ✓ Sustainable Development Goals:
    1. Citrus fruit peels recycling: value-added by-product extracts utilization (Zero Hunger challenge: eliminate food waste).
    2. Modified sausage casings development: to achieve Zero Hunger challenge: Double small-scale producer incomes<sup>1</sup>



pH scale

Cited from [Feng et al. \(2022\)](#) Evaluation of pH in sausages stuffed in a modified casing with orange extracts by hyperspectral imaging coupled with response surface methodology, *Foods*, 11, 2797



## - Summary current accomplishments

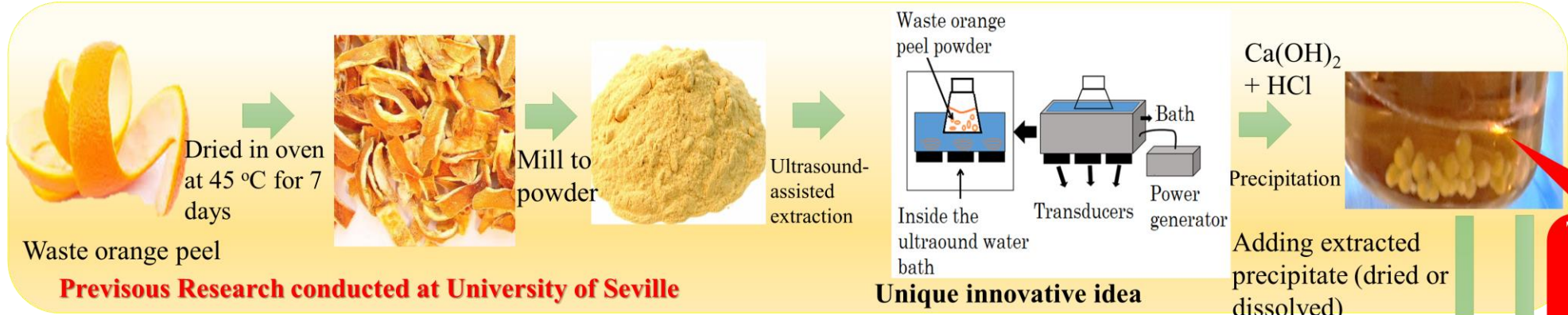
**Publications:** up to now, I have published **44 journal papers**, including **40 SCI** papers in peer-reviewed journals (newest total impact factor: 253.9; including 31 SCI papers as a first and corresponding author), **3 book chapters** and 28 papers or abstracts in International and National conferences as a first author. **h index = 20, 865 citations** (based on Scopus data source).

**Grant management:** I have secured and successfully completed **25 competitive research fundings (total >63 million JPY)** with fruitful outcomes, including “Leading Initiative for Excellent Young Researchers (LEADER) from the MEXT”, “JSPS Grant-in-Aid for Early-Career Scientists”, “Grant-in-Aid for Scientific Research (JSPS No. 16F16104)” and so on.

**Others:** I have secured **12 patents**, I am invited as a peer-viewer for several high-impact factor journals and guest editors.

## - Proposed for the 13<sup>th</sup> e-ASIA Call for Proposals





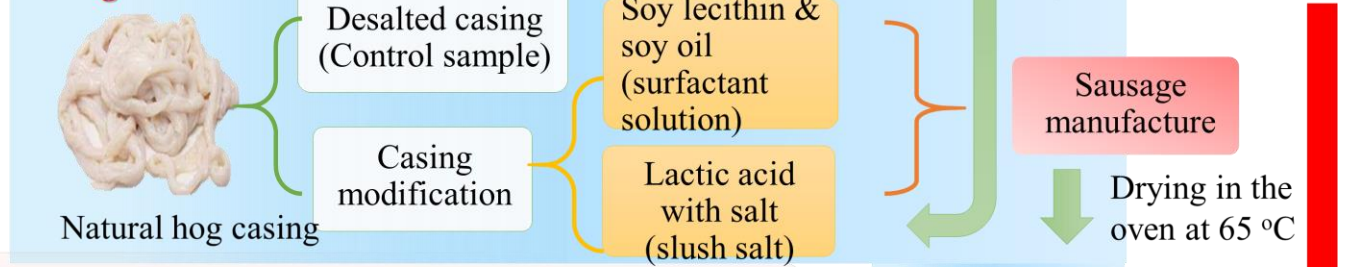
**Previous Research conducted at University of Seville**

**Unique innovative idea**

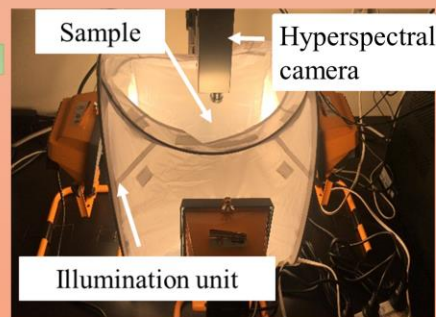
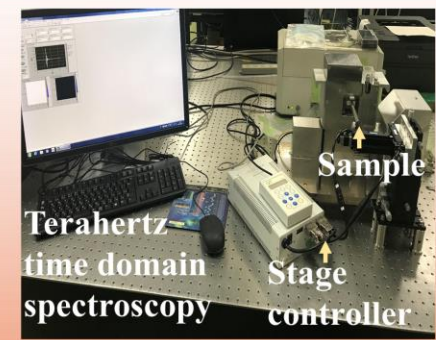
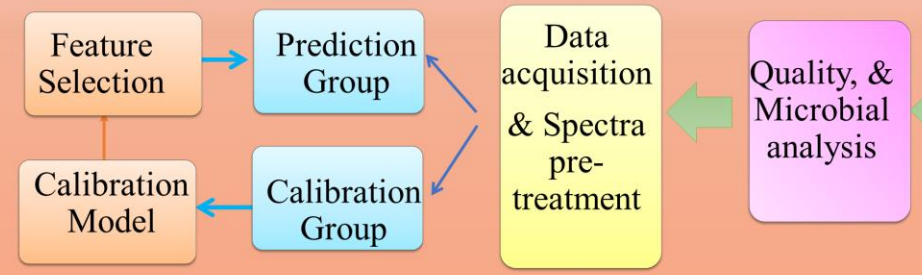
**The sediments are what we want, containing flavonoids!**

Best Mathematical Model: to establish relationship between quality attributes and spectra data

**Previous Research conducted at University of Tokyo & University College Dublin**



**Innovative ideas will be conducted when selected**



Different drying times

Different storage days