

## International standardization of K-value testing method as freshness index for fish

19<sup>th</sup> May, 2023 15:30-18:00

Hokuto Hall (Faculty of Education)

### Program

#### Welcome greetings (Toshiyuki Suzuki)

#### Oral presentation (Chair: Kenji Ishihara)

1. K-value, a freshness index of fish. Its application for modern demand (Kunihiko KONNO)
2. Characterization of anthocyanin-based film and its application in fish freshness monitoring and preservation (Yaqin HU)
3. The factors affecting K-value of small yellow croaker (*Larimichthys polyactis*) under different packaging condition and a new spoilage potential algorithm (Yuan LI)
4. Postmortem biochemical changes of Spotted Mackerel (*Scomber australasicus*) during ice storage by using K-value (Zhuolin WANG)
5. Changes in the K-value in several fishes and the benefits of applying K-value in the distribution of fisheries products (Yuko MURATA)
6. Validation of a simplified method for determination of K-value by interlaboratory study (Takeya YOSHIOKA)
7. Effect of Freshness before Freezing on the Quality of Thawed Meat in Japanese Pilchard Landed at Ports in Eastern Hokkaido (Keisuke MORIYA)
8. Introduction to standardization in ISO (Yoshiaki YAMANO)

#### Panel discussion (Chair: Toshiyuki Suzuki)

1. Introduction of International standardization of K-value testing method as freshness index for fish (Toshiyuki Suzuki)
2. Panel discussion (Panelist: Kunihiko Konno, Emiko Okazaki, Yaqin Hu, Tran Thi My HANH, A. K. M. Azad SHAH, Youling L. XIONG (Video message), Nuilmala MALA (Video message))

### Objective of this workshop

In recent years, the consumptions of fresh seafood are on the rise world-widely. To access the freshness of the fish, K-value has been used for more than 60 years as the sensitive index. The value is based on the degradation extent of IMP (degraded product of ATP). The value well reflects rigor-mortis, its resolution, and softening of meat; conventional freshness indices of fish. In order to make a sensitive freshness standard of fish in the world, K value is a promising index. Development of standards of freshness index for fish make it possible to guarantee its quality. Its measurement protocol has been simplified and the method is distributed in Japan. In this workshop, we would like to discuss about international standardization of testing method of K-value as freshness index for fish and how we will benefit from or be impacted by the standardization.