2024 September Short-Term Program

Aim: Understand the theories used in the production of packaged foods, and apply these theories to practical skills.
Schedule: September 9 (Mon) - September 20 (Fri), 2024
Capacity: 10 persons
Registration fee: 80,000 yen (includes the cost of lectures, lab sessions, textbooks, and factory tours)
Language: English
*Please make your own hotel reservations.
Contact: international@toshoku.ac.jp

	9:00 – 10:40	10:50 – 12:30	13:30 – 15:10	15:20 – 17:00
9/9 Mon			Registration, Opening Session, and Campus Tour	Tea Reception
9/10 Tue	Lab Session 1: Canned Seafood			
9/11 Wed	Lab Session 2: Foods in Plastic Pouches and Cups			
9/12 Thu	Factory Tour 1: details to be announced			
9/13 Fri	Lab Session 3: Canned Fruit			
9/14 Sat				
9/15 Sun				
9/16 Mon	Lab Session 4: Heat Sealing of Plastic Pouches			
9/17 Tue	Factory Tour 2: details to be announced			
9/18 Wed	Lab Session 5: Aseptic Filling of Beverage			
9/19 Thu	Lab Session 6: Capping of Bottles			
9/20 Fri	Lab Session 7: Double Seaming of Cans			Closing Session

: Lab Session : Tour : Tea time reception with teaching staff

Lecture / Lab session	Course Title	Description
Lab session 1	Canned Seafood	Why can packaged foods be stored at room temperature? The production principles of packaged foods (container, filling, sealing, and sterilization) will be explained. In the practical training, we will make canned fish, which is a typical low-acid food (pH > 4.6, Aw > 0.94). Packaging design will not be discussed.
Lab session 2	Foods in Plastic Pouches and Cups	You will learn how to produce curry in retort pouches and quality control methods such as center temperature measurement and strength testing. You will also learn how to produce puddings with caramel in containers.
Lab session 3	Canned Fruit	Canned fruits are processed as a representative acid food (pH≦4.6, Aw>0.94). While processing canned oranges, we will focus on the principles of chemical treatment specific to canned orange and sterilization methods specific to Acid Food.
Lab session 4	Heat Sealing of Plastic Pouches	Participants master the theory, mechanical mechanisms, and inspection methods related to heat sealing (basic to specialized knowledge and comprehensive techniques).
Lab session 5	Aseptic Filling of Beverage	The concept of aseptic beverage manufacturing technology will be experienced through this practical training. The concept is to fill and seal aseptic product liquid into aseptic containers in an aseptic environment.
Lab session 6	Capping of Bottles	Students will understand the function of caps, how to evaluate closure quality, and learn about different container caps and closure machines. Students will also participate in hands-on capping training and capping quality evaluation training.
Lab session 7	Double Seaming of Cans	This course deals with the principles of the double-seaming method of sealing metal containers through a wide variety of double-seaming machines. In addition, students will learn how to inspect the double-seaming process using several measuring instruments.

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Lecture / Lab session	Course Title	Teaching Staff
Lab session 1	Canned Seafood	Hidehito TAKAHASHI, Norio MIYAO, Yoko KAWAUCHI, Ayane SEKI
Lab session 2	Canned Fruit	Yoko KAWAUCHI, Hidehito TAKAHASHI, Norio MIYAO, Ayane SEKI
Lab session 3	Foods in Plastic Pouches and Cups	Norio MIYAO, Hidehito TAKAHASHI, Yoko KAWAUCHI, Ayane SEKI
Lab session 4	Heat Sealing of Plastic Pouches	Tamotsu INOUE
Lab session 5	Aseptic Filling of Beverage	Tamotsu INOUE, Toshihiro UEHARA, Mutsuyuki FUKUSHIMA, Fujihiko MATSUNAGA
Lab session 6	Capping of Bottles	Shunichi IMAIZUMI, Tamotsu INOUE
Lab session 7	Double Seaming of Cans	Tsuyoshi SHIONO, Kazutada TANAKA, Toshihiro UEHARA, Kazuhiro NISHI

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Date	Factory	URL
Sep. 12	details to be announced	
Sep. 17	details to be announced	

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