Short Course May 14-15, 2024

Dairy Economics & Unit Operations in Dairy Processing

Dairy Products Technology Center, CalPoly, San Luis Obispo
This workshop focuses on the fundamentals and building blocks of dairy processing. Hands-on demonstrations in the pilot plant, equipment displays/demos. No pre-requisites needed, open to all dairy processing staff.
Instructors: CalPoly faculty and staff, industry representatives, equipment and process suppliers, expert consultants.

Individuals $450, Discounted: 2 or more from same company $400, Students $175.
For more info: Dr. Carmen Licon carmenl@clpoly.edu
Registration: https://dairy.calpoly.edu/short-course-symposia
Preferred CalPoly rates available at area hotels.

Tuesday, May 14

An Introduction to "Dairy Economics"

8:00 Registration, continental breakfast available
8:30 **Welcome, introductions; operations overview**
Dr. George Gallagher, Dpt. Head, Animal Sciences
Katy Pankey, Dr. Carmen Licon, DPTC
Veronique Lagrange, CDIC/CMAB
8:45 **Milk pricing and "Dairy Economics" – Part I**
Mike McCully, McCully Group
10:00 Break
10:15 **Milk pricing and "Dairy Economics" – Part II**
11:00 **Feed, breed and other factors impacting milk composition, yield, pricing**
Alfonso Lago, DVM, PhD, Dairy Experts
Lunch

Fundamentals & Building Blocks

1:00 **Milk production and composition**
Dr. Carmen Licon, DPTC
2:00 **Receiving, separation, homogenization**
Tour pilot plant, creamery
Dimitri Genard, Katy Pankey
3:00 Break
3:15 **Thermal treatments, pasteurization, concentration, evaporation and pumps in the pilot plant**
Invited industry speaker
4:15 **Q&A with instructors**
5:00 *Cocktail hour and group dinner (location TBA)*

Wednesday, May 15

Advanced Processing Principles

8:30 **Overview of operations for fluid dairy products**
Dr. Hari Meletharayil, Dairy Management Inc.
9:15 **Sanitation in the processing plant:** CIP, COP, manual cleaning
Dr. Steven Pao, Fresno State University
10:00 Break
10:15 **Membrane separation and fractionation fundamentals**
Iswandi Jarto, Hilmar Cheese Company
Daniel Murphy, Synder Filtration
11:15 **Overview of operations: natural and processed cheese**
Dr. Rohit Kapoor, Dairy Management Inc.
Dr. Praveen Upreti, Nestle
12:30 Lunch
1:15 **DPTC Pilot plant demonstrations Part I**
Iswandi Jarto, Hilmar Cheese Company
Daniel Murphy, Synder Filtration
2:00 **Overview of whey processing operations**
Muthu Ramanathan, Hilmar Cheese Company
3:00 Break
3:15 **DPTC Pilot plant demonstrations Part II**
Dimitri Genard, CalPoly
4:15 **Q&A with instructors**
Certificates and evaluation
5:00 Adjourn

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