

These short courses are organised by Dennis Forte & Associates in conjunction with the Institute for Food Research & Product Development (IFRPD) at Kasetsart University.

FULL PLANNED PROGRAMS AVAILABLE FROM THE COURSE WEBPAGES VIA FIE.COM.AU/EVENTS

Applied Food & Feed Extrusion Technology

BANGKOK, THAILAND — 3 - 5 OCTOBER, 2022

Overview

A Unique Approach to Applied Extrusion Training

We have been presenting “Food and Feed Extrusion” courses in Australia and internationally since 1996. That course, while very practically oriented, is dominated by lecture-style presentations, supported by a single practical demonstration.

This “applied” extrusion course, which we have presented in Thailand since 2011, takes a different approach, providing participants with an understanding of the theory of the extrusion process, combined with pilot plant exercises demonstrating how the principles are applied across different products and extruder types.

Introductory sessions cover relevant extrusion theory, followed by discussion in which the product formulation, and screw configuration/process parameters, are “designed”. Then we go to the pilot plant and make the product - running the formulation with the designed screw profile.

Up to six different products are made on three different types of extruder (long barrel single screw, twin screw, and collet extruders) during the three-day course.

Course Content

Topics covered include -

- › Principles of extruder configurations (single and twin screw)
- › Role of rheology in extrusion
- › Die types and effects, die design
- › Ingredients used in extrusion
- › Causes and effects of extruder instability
- › Screw, barrel, and die-plate wear

Exercises in product formulation, screw configuration and process design include -

- › Textured vegetable protein, TVP (similar operation to pet food)
- › Direct expanded breakfast cereal
- › Third generation snack pellet
- › Co-extruded expanded snack
- › High moisture meat analogue

These exercises are chosen to reflect the range of processes/ configurations used across both human food & animal/fish feed applications.

Food & Feed Drying Technology

BANGKOK, THAILAND — 6 - 7 OCTOBER, 2022

Overview

Drying is one of the most common operations in food and feed production. It is used across virtually every sector/commodity. It is critical to the quality and/or functionality of many products, and it is one of our most energy-intensive process operations. Yet it is often poorly understood and inefficient.

This short course in Drying Technology combines the practical perspective of experienced industry professionals with the in-depth technical knowledge of drying processes.

Course Content

The course will start by explaining water activity in products, and how it relates to both the quality/preservation of the product and the efficiency of the drying process. We will then go on to the basics of drying theory and how this theory relates to practical application.

Different types of drying systems will be explained. Principles of psychrometrics will be combined with heat & mass balance techniques to analyse and design drying processes, demonstrated using practical examples.

On Day 2, more advanced drying concepts will be explained, using practical examples to demonstrate how drying curves can be modeled and predicted based on real data. Quality issues in dried products will also be discussed in more detail, and a case study presented to show how existing drying processes can be improved.

The program will finish with a series of case studies about different drying technologies. This course is about understanding the drying technologies used commonly across the food and feed industries - and how we can use that understanding to improve current processes and products, or design/select new systems that are both effective and efficient.

Applied Food & Feed Extrusion Technology

Food & Feed Drying Technology

OCTOBER 2022, BANGKOK, THAILAND

COURSE DETAILS

Course Venue

The Institute of Food Research & Product Development (IFRPD)
Kasetsart University, Bangkok, Thailand.

Registration Fee

APPLIED FOOD & FEED EXTRUSION TECHNOLOGY

45,000 Thai Baht per person

(~\$AUD1800 or ~\$US1340 depending on exchange rate)

FOOD & FEED DRYING TECHNOLOGY

33,000 Thai Baht per person

(~\$AU1350 or ~\$US1000 depending on the exchange rate)

Registration fees are set in Thai Baht and will vary when converted to other currencies according to fluctuations in exchange rates.

A **10% discount** applies for registrations received by **19 AUG 2022**.

An additional **5% discount** applies for **three or more registrations** received together from the same company.

An invoice for fees with payment details will be sent in response to registrations received.

REGISTRATIONS CLOSE 23 SEPTEMBER 2022

Register online via course webpages, or send participant details (name, company, address, email, ph) to training@fie.com.au

Course Enquiries

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Courses Presented by

Dennis Forte & Associates

Dennis Forte, your course presenter, is a chemical engineer with extensive experience in extrusion processing and die design, having worked with a variety of companies and extruded products, including breakfast cereals and snacks, pet foods and aqua-feeds, pasta, and confectionery.

Dennis is also available for company training or consultancy while in the Thailand region. Contact to discuss details.

Institute for Food Research and Product Development (IFRPD)

IFRPD is a research institute located at Kasetsart University. It performs research on food science and technology to assist food industries. In addition it provides food information to the community.

Books by the Course Presenter

Available to course participants at 20% discount to list price. Or order online from fie.com.au/books or major booksellers.

