# **Applied Food & Feed Extrusion Techology**

BANGKOK, THAILAND 15 - 17 July 2024

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

#### 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 underlying theory of the extrusion process, combined with Pilot Plant Exercises demonstrating how principles are applied across different products and extruder types.

Introductory sessions cover relevant extrusion theory, followed by discussion in which the Product Formulation and 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
- › 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.

## **Course Venue**

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

**Course Enquiries Dennis Forte** 

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## Registration Fee

#### 47,000 Thai Baht per person

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 31 May 2024 and paid within 14 days.

An additional 10% discount applies for those attending consecutive courses.

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

Discounted fees apply for PhD students and non-profit research organisations - see course webpage for details.

Registration fee includes hand out notes directly related to the presentations, as well as lunches, morning & afternoon refreshments.

#### **REGISTRATIONS CLOSE 28 June 2024**

Register online via the course webpage or send participant details (name, company, address, email, ph) to mjephcott02@gmail.com

### **ALL PAYMENTS MUST BE RECEIVED BY 8 JULY, 2024**

#### **Course Presenter**

Mr 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 Published 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.











