FoodStream is an Australian company which, working with Gordon Young of FiE and extrusion specialist Dennis Forte, has been presenting extrusion training in countries including Australia, Thailand, Norway, Switzerland, Chile, South Africa and New Zealand for over 20 years.

› DUE TO ONGOING COVID-19 TRAVEL RESTRICTIONS, THESE COURSES WILL BE PRESENTED ONLINE ONLY IN CENTRAL EUROPEAN TIME ZONE (CET)

Petfood Extrusion Technology

3 - 5 MAY 2021 (ONLINE)   SHORT COURSE

Overview

The course will be presented in English.

This 3-day course covers the principles of extrusion, the design of extrusion processes, and the formulation of extruded petfoods. Principles learned will be demonstrated using the extruder at FôrTek.

The program provides background in general extrusion technology, but is specifically directed at petfood extrusion, and the use of this technology for manufacture of dry kibble, wet "chunks", and semi-moist pet snacks.

The course applies to both single and twin screw extrusion technology, and covers topics from the basics of extruders and their configuration, through what is happening chemically and physically inside the extruder barrel, to an understanding of extruder dies and extruder instability.

Course Content

Topics covered include

› Principles of extruder configurations (single and twin screw)

› Role of rheology in extrusion

› Die types and effects, die design

› Extrusion ingredients - design of formulations for extrusion

› Preconditioning for extrusion

› Product density control

› Causes and effects of extruder instability

› Extrusion troubleshooting

› Screw, barrel, and die-plate wear

Principles learned will be applied during the practical demonstration on Day 2. Important aspects of peripheral systems (eg raw materials pre-processing, preconditioning, product drying) are also covered.

This course will be presented online, in parallel with the "Aquafeed Extrusion Technology" program. That is, the two extrusion courses will be presented together - most topics are common, but some "specialised" presentations will be streamed separately.

Course Sponsors

Day 1 Sponsored by CLEXTRAL Extrusion Expertise Excellence
Day 2 Sponsored by CFAM

Design of Food Extrusion Dies

6 - 7 MAY 2021 (ONLINE)   SHORT COURSE

Overview

This course covers the theory and practice of designing dies for food and feed extrusion systems. The program is relevant to the production of all types of extruded products - including expanded snacks and breakfast cereals, pastas and third generation snack pellets, pet foods and aquafeeds.

Note that familiarity with extrusion technology is assumed. We recommend that participants should have completed one of our 3 day Extrusion programs before attending this course.

Course Content

Topics include calculation of die conductance/ pressure drop, allowing for die entrance effects, causes of product curvature, design of primary dies, and the influence of die wear.

FoodStream Driving Food Innovation

Norwegian University of Life Sciences

Course Venue

Streamed online in Central European time zone (CET).

Due to continuing Covid-19 travel restrictions these courses, usually held at the Norwegian University of Life Sciences (NMBU), are being presented online only. A link to join the presentations will be provided shortly before course commencement.

Programs scheduled to run 08:15 - 16:30 (CET).

Registration Fee

PETFOOD EXTRUSION TECHNOLOGY

13,000 NOK per person (or equivalent in other currency at time of invoicing - approx EUR1270, USD1540)

DESIGN OF FOOD EXTRUSION DIES

9800 NOK per person (approx EUR960, USD1160 or equivalent in other currency at time of invoicing).

Registration fee is set in NOK and will vary when converted to other currencies according to fluctuations in exchange rates.

A 10% discount applies for registrations received by 31 March 2021

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

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

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

REGISTRATIONS CLOSE 28 APRIL 2021

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

Course Enquiries

Gordon Young

Food Industry Engineering (FiE), and
Associate of FoodStream (Australia)

+61 414 681200   gyoung@fie.com.au

Additional Information

FoodStream Pty Ltd is a private R&D company offering a complete range of technical consulting services to the processing industry, including a range of specialist training courses. Due to its unique business structure, FoodStream is able to deliver innovative, flexible solutions to the needs of processors.

Details of services offered by FoodStream are available through our website at foodstream.com.au

The Centre for Feed Technology (FôrTek), part of the Norwegian University of Life Sciences (NMBU), serves the international feed industry by carrying out research in all areas of fish feed, pet food, and animal feed as well as in student education. New ingredients and processes can be tested using its extensive pilot plant facilities, which includes extrusion, pelletising, drying, and coating equipment.

Information is available via www.nmbu.no/en/services/centers/fortek

Course Presenters

The main presenter is Mr Dennis Forte, a chemical engineer with extensive experience in extrusion processing and die design, including breakfast cereals, extruded snacks, pasta, and confectionery. Dennis has worked with a wide variety of companies using extrusion technology.

Mr Gordon Young is a food process engineer who has worked in extrusion technology in both University research and with private companies. He is also experienced in a wide range of other food processing technologies, including specific expertise in drying technology and thermal processing.

Books Published by the Course Presenters

Available to course participants at 20% discount to list price.

Or order online from **fie.com.au/books** or major booksellers.