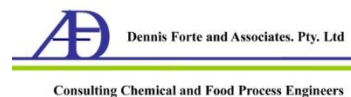




Food drying technology short course

Program¹



Tuesday 25th February 2025 – Day 1

8.30 am	Welcome and introduction	
8.45 am	Dried products and their quality	Dennis Forte, Dennis Forte & Assoc
9.20 am	Drying systems used in the food industry	Dennis Forte, Dennis Forte & Assoc
10:00 am	Morning Break	
10.20 am	Basic drying theory	Dennis Forte, Dennis Forte & Assoc
11.10 am	Water activity: Basic concepts & sorption/desorption isotherms, methods of measurement	Dennis Forte, Dennis Forte & Assoc
12.00 pm	Clextral innovative drying technology	Gaetan Charley, Clextral Pacific
12.15 pm	Lunch	
12:45 pm	Water activity: relevance to food stability and the drying process	Dennis Forte, Dennis Forte & Assoc
1.30 pm	Principles of mass and energy balances as applied to drying processes (Exercise: Using mass and energy balance techniques to analyse simple drying system)	Dennis Forte, Dennis Forte & Assoc
2:30 pm	Afternoon break	
2.45 pm	Principles of psychrometrics, tracing a drying process on a psychrometric chart	Dennis Forte, Dennis Forte & Assoc
3.30 pm	Mass & energy balance applied to a more complex drying system : A case study	Dennis Forte, Dennis Forte & Assoc
4.15 pm	Dryer Performance Comparison: Mass & Energy Balance	Dennis Forte, Dennis Forte & Assoc
4.45 pm	Lab Demonstration	Henry/ Danyang
	End of day 1	

1. The following program may be subject to minor change

Wednesday 26th February 2024 – Day 2

8.15 am	Start of day 2	
8.15 am	Modelling the drying curve (practical measurement/modelling of product drying curve and how it can be used)	Dennis Forte, Dennis Forte & Assoc
9.00 am	The use of dimensional analysis to optimise a drying process (an industry case study)	Dennis Forte, Dennis Forte & Assoc
09.45 am	Morning break	
10.05 am	Specialised drying systems	Darren Gardiner and Henry Sabarez, CSIRO
11:00 am	<i>Pilot plant visit</i>	
12.15 pm	Lunch	
12:45 pm	Option 1: Case studies of a range of drying technologies (fluidised bed, heat pump, vacuum/freeze) Dennis Forte, Dennis Forte & Assoc and Henry Sabarez, CSIRO	Option 2: Spray drying technology Darren Gardiner, CSIRO
2:30 pm	Afternoon break	
2:45 pm	Improving efficiency of established drying processes – a case study	Dennis Forte, Dennis Forte & Assoc and Henry Sabarez, CSIRO
3:30 pm	Drying Process – economic analysis	Dennis Forte, Dennis Forte & Assoc
4:00 pm	Course close	