



FREEZE DRYING TECHNOLOGY:
*A PRACTICAL GUIDE TO
PROCESS DEVELOPMENT*



**biopharma
group**

intelligent freeze drying

**2021
WINCHESTER, UK**



COURSE SCHEDULE

Testimonials

"The course was well worth while. I learned a lot about areas I previously knew very little about, mainly in the cycle development area"

"The training was very good, everyone in the group felt that they knew how to work with the equipment afterwards"

"Everything was great, especially the hospitality"

"I felt that the people working at Biopharma were very competent and helpful"

Course Overview

This course which is 80% classroom-based and 20% laboratory-based provides an in-depth insight into the theory and practice of freeze drying. It covers the formulation design and characterisation, through the fundamentals of freezing and sublimation and related Process Analytical Technology (PAT), to aspects of product analysis and Quality by Design.

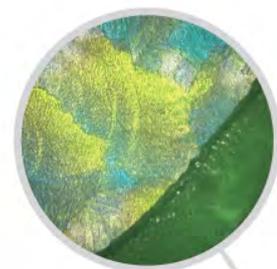
The laboratory sessions offer the opportunity for attendees to see various analytical methods in action, and the chance to witness and discuss many of the practical aspects of using freeze drying equipment and designing a freeze drying cycle.

+ Day One

- Welcome & Course Opening
- Introduction to Freeze Drying Technology
- Product Freezing
- Break
- Primary Drying
- General Concepts of Formulation
- Lunch (included)
- Formulation Characterisation (1)
- Temperature Measurement
- Break
- Formulation Characterisation (2)

+ Day Two

- Secondary Drying, PAT & Endpoint Determination
- Cycle Design & Scale-Up
- Break
- Freeze Drying of Proteins
- Freeze Dried Product Analysis
- Lunch (included)
- Practical Session in BTL Laboratory
- Course Ends





IS THIS COURSE RIGHT FOR YOU?

IF YOU'RE INTERESTED IN:

- 1) Biotechnology
- 2) Pharmaceuticals
- 3) Freeze and Cycle Development
- 4) Diagnostic industries

MEET THE EXPERTS



+ Dr. Kevin Ward

Kevin was awarded his PhD for studies in pharmaceutical freeze drying, focusing on the use of protective agents in formulations of proteins and liposomes for drug and vaccine delivery. He is R&D Director at BTL and regularly lectures on the freeze drying process.



+ Thomas Peacock

With an MSc in Pharmaceutical Analysis, Tom has managed many commercial freeze drying projects typically involving formulation development and characterisation, looking at key product factors and designing robust and efficient cycles.

£1,485

PRICE

£1,270

EARLY BIRD

BIOPHARMA HOUSE

WINNALL VALLEY ROAD, SO23 0LD

BOOK NOW

<http://bit.ly/registeryourinterest>

Tel: +44 (0) 1962 841092

Website: www.intelligentfreeze-drying.com

Please note that the cost of accommodation is not included in the course fee* and that bedroom bookings must be made by the participants.

A list of local hotels will be provided with the registration confirmation.

*fees include morning and afternoon breaks, lunch and full lecture notes

Early bird prices to be confirmed.

Payment must be made in full before the start of the course to guarantee a place. Payment by BACS or credit/debit card is acceptable - please note we cannot accept payment by cheque. An invoice will be issued on receipt of booking. Payments in credit/debit card will be charged in GBP at the prevailing exchange rate as set by xe.com. An invoice will be issued on receipt of booking. Discounts are also available for academia and multiple bookings from the same company, please contact Sally Potentier at spotentier@biopharma.co.uk for more information. Cancellation in writing more than 5 weeks before the course start date will incur a service charge of 30% of the applicable fee. No refunds can be made for cancellation after this date. Substitutes will be accepted at any time. Transfer to another scheduled course must be made in writing and a service charge will be incurred. Full T&Cs available on request.



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