

TIMETABLE for Freeze-Drying Seminar
Led by Biopharma Group & University of Cambridge
University of Cambridge - Department of Chemical Engineering and Biotechnology, Philippa Fawcett Dr, Cambridge CB3 0AS
"Freeze Drying: an Enabling Technology for Biomedical Engineering" Friday 17th June 2022

Start	End	Session	Title	Duration	Presenter
0900	0930		<i>Arrival and registration</i>	30	
0930	0945		Welcome and Introduction Welcome, introduction to course presenters and the aims of the seminar.	15	Professor Roisin Owens University of Cambridge
Lab Sessions			Group A	Group B	Group C
0945	1025	Lab1	Practical Demonstration of Freeze Dryer Components and Systems on a benchtop freeze-dryer, User Interface features, how to run a cycle.	Characterisation of Formulations for Freeze-Drying Practical Demonstration of Freeze-Drying Microscopy	Analysis of the Freeze-Dried Product Practical Demonstration of MicroPress analysis and other post-process characterisation methods
40					Freeze-Dryer Practical Demonstration Stephen Jones Biopharma Group
1025	1040		<i>Morning Break</i>	15	
1040	1120	Lab2	Analysis of the Freeze-Dried Product Practical Demonstration of MicroPress analysis and other post-process characterisation methods	Practical Demonstration of Freeze Dryer Components and Systems on a benchtop freeze-dryer, User Interface features, how to run a cycle.	Characterisation of Formulations for Freeze-Drying Practical Demonstration of Freeze-Drying Microscopy
40					Characterisation of Formulations by FDM Ian Blackham Biopharma Group
1120	1200	Lab3	Characterisation of Formulations for Freeze-Drying Practical Demonstration of Freeze-Drying Microscopy	Analysis of the Freeze-Dried Product Practical Demonstration of MicroPress analysis and other post-process characterisation methods	Practical Demonstration of Freeze Dryer Components and Systems on a benchtop freeze-dryer, User Interface features, how to run a cycle.
40					Analysis of the Freeze-Dried Product Dr. Kevin Ward Biopharma Group
1200	1300		<i>Lunch Break</i>	60	
1300	1330	Pres1	Freeze Dried Conducting Polymer Scaffolds for Modelling Human Organs in Vitro		Prof Roisin Owens University of Cambridge
1330	1350	Pres2	Don't overlook the drying stage: a case study with ice-templated collagen scaffolds		Dr Malvika Nair University of Cambridge
1350	1405	Pres3	Development of a 3D in Vitro Model of the Neurovascular Unit (NVU) using a Conducting Polymer Device for Real-Time Monitoring		Chiara Barberio PhD University of Cambridge
1405	1420	Pres4	Building a 3D Bioelectronic Platform for Interrogating Idiopathic Pulmonary Fibrosis (IPF) and Related Co-Morbidities		Sarah Barron University of Cambridge
1420	1500	Pres5	Effect of Formulation and Process Parameters on the Lyophilised Product This presentation will discuss the influence of formulation ingredients on freeze-drying process parameters, and the effect of both formulation and cycle conditions on aspects of the lyophilised product.		Dr. Kevin Ward Biopharma Group
1500	1520		<i>Afternoon Break</i>	20	
1520	1620	Pres5	SMART technology and ControlLy (Live Lecture via Webinar) Software-based lyo cycle development and integration with controlled nucleation		Leslie Mather SP Industries
1620	1630		Question & Answer (Q&A) Session, Wrap-Up, Feedback and Take Home Messages A final Q&A session to cover any points raised during the seminar and lab sessions.		All