

May 6th-10th, 2024

Turin, Italy

Student Contest in Freeze Drying

Monday, May 6th, 2024 Politecnico di Torino 14:00-18:00 Poli

PoliTo's Student Contest in Freeze Drying

The 2nd PoliTo Student Contest on Drying and Freeze-Drying is an international competition organized for the second time by Politecnico di Torino, as a side-event of the ISLFD-24 Conference. It is addressed to M.Sc. and Ph.D. students and aims to stimulate innovative ideas for applications in the area of freeze-drying for pharmaceuticals, sustainable food, energy, and environmental processes.

Workshop in Freeze Drying

Tuesday, May 7th, 2024

Unione Industriali, Piemonte room9:00-12:00Fundamentals in freeze drying
Steve Nail14:00-17:00Cycle development, scale up and PATs in freeze drying
Jos Corver

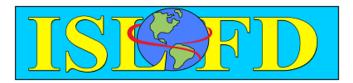
ISLFD 2024 Conference

Wednesday, May 8th, 2024

Unione Industriali, Piemonte room	
8:15-8:30	Welcome
	Kevin Tebrinke , President, <i>ISLFD</i>
8:30:9:10	Keynote, tBD
	Steve Nail
	SESSION I. FUNDAMENTALS
9:10-9:35	Insights into thermal interactions during freezing of pharmaceuticals in vials
	Roberto Pisano & Fiora Artusio . <i>Politecnico di Torino</i>
9:35-10:00	Behold the freezing step - insights from fluid dynamics with implications on
	process control and product quality
	Miguel Rodrigues . Universidade de Lisboa
10:00-10:25	Case studies in the use of through-vial impedance spectroscopy (TVIS) in th
	determination of critical process parameters of a lyophilization process
	Geoff Smith . De Montfort University
10.25-10.40	Panel discussion

10:25-10:40 Panel discussion

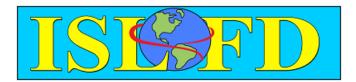
10:40-11:00 Break & Poster session



May 6th-10th, 2024

Turin, Italy

	SESSION II. FORMULATION & CHARACTERIZATION
11:00-11:25	Formulation and process optimisation for lyophilised ChAdOx1 vaccines
	Paul Dalby . University College London
11:25-11:50	
	Elizabeth Topp . <i>Purdue University</i>
11:50-12:15	Advanced physical characterization and stability of lyophiles: protein/protein
	interaction, water clusters, and solid-state acidity
	Evgenyi Shalaev . <i>AbbVie</i>
12:15-12:40	Predicting solid formulation stability by measuring its fundamental relaxation
	processes
	Marcus Cicerone . <i>Georgia Tech</i>
12:40-13:00	Panel discussion
13:00-14:00	LUNCH
14:00-14:40	Keynote. 35 years of using and studying freeze drying: what did we learn?
	Gerhard Winter. Ludwig-Maximilians-Universität München
	SESSION III. EMERGING TECHNOLOGIES
14:40-15:05	From late-night leftovers to lyophilization: quasi-random field (qRF)
	microwave heating for pharmaceutical freeze-drying
_	Andrew Strongrich. Purdue University
15:05-15:30	GMP-ready continuous and controlled freeze-drying
	Thomas De Beer & Jos Corver . Ghent University & RheaVita
15:30-15:55	Spray freeze-drying of pharmaceuticals: Modeling applications & Challenges
	Sebastiao Israel Borges. Pfizer
15:55-16:10	Panel discussion
16:10-16:30	Break & Poster session
16:30-18:00	Roundtable discussion

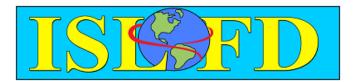


May 6th-10th, 2024

Turin, Italy

Thursday, May 9th, 2024

Unione Industriali, Piemonte room		
8:30-9:10	Keynote on emerging technologies & regulatory aspects	
	Maxwell Korang-Yeboah, FDA	
	SESSION IV. PROCESS ANALYTICAL TECHNOLOGIES (I)	
9:10-9:35	New insights into the stabilization of proteins In lyophilisate	
	Wolfgang Friess. Ludwig-Maximilians-Universität München	
9:35-10:00	Using PAT technologies to optimise lyophilization of biologics	
	Paul Matejtschuk. MHRA	
10:00-10:30	Break & Poster session	
	SESSION IV. PROCESS ANALYTICAL TECHNOLOGIES (II)	
10:30-10:55	The use of Design of Experiments in Lyo Formulation Development	
	Kevin Ward . <i>Biopharma</i>	
10:55-11:20	Vapour flow monitoring in lyophilization. The new PAT tool to develop &	
	validate lyophilisation process under QbD approach	
	Jaume Vallet Xicoy , COMSER	
11:20-11:40	Panel discussion	
11:40-12:30	Challenges in lyophilisation: competitions of ideas. [Awards ceremony]	
	Antonello Barresi. Politecnico	
12:30-13:30	LUNCH	
13:30-14:30	Spotlight Poster Presentations	
	Bakul Bhatnagar . Pfizer	
14:30-16:00	Poster session & Sponsor exhibition	
17:00	Italy Winery tour & Gala dinner	



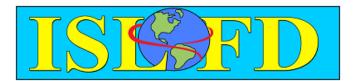
May 6th-10th, 2024

Turin, Italy

Friday, May 10th, 2024

	ali, Piemonte room
8:30-9:10	Keynote. Freeze-drying and cultural heritage: from the key role to salvage water
	damaged archival and library materials, and archaeological artifacts, to the
	creation of artworks
	Davide Fissore. Politecnico di Torino
	SESSION V. APPLICATIONS (I)
9:10-9:35	The challenge of probiotics preservation: strategies and tools to identify stress
	mechanisms and sites of cell damage induced by dehydration processes
0.05.40.00	Fernanda Fonseca . Université Paris-Saclay
9:35-10:00	Freeze drying of a Microbiome Ecosystem Therapies
	Sophie Declomesnil. Maat Pharma
10:00-10:25	tBd. Learnings from implementation of production scale controlled nucleation
	Technology
	Arnab Ganguly . Amgen
	Panel discussion
10:40-11:00	Break & Poster session
	SESSION V. APPLICATIONS (II)
11:00-11:25	Use of annealing to optimize freeze-drying cycle of vaccines
	Bernadette Scutellà . GSK Vaccines
11:25-11:50	
	tBd. Sanofi
11:50-12:15	
10 15 10 10	Mark Smith. Pfizer
12:15-12:40	tBd. [smart URS and minimized testing and qualification process for Lyos]
12:40 12:50	Maik Guttzeit. Bayer
	Panel discussion
12:50-13:40	
13:40-14:00	SESSION VI. EQUIPMENT
13.40-14.00	tBd . Tofflon
14:00-14:20	
14.00-14.20	
14:20 14:40	tBd. IMA
14:20-14:40	 AD-L NAIlles de Table et ann
	tBd. Millrock Technology

14:40-14:55 Panel discussion



May 6th-10th, 2024

Turin, Italy

Friday, May 10th, 2024 (Continued)

Unione Industriali, Piemonte room

	SESSION VII. YOUNG SCIENTISTS
14:55-15:50	The three best poster abstracts
	Fiora Artusio . <i>Politecnico di Torino</i>
15:50-16:20	Closing and remarks
	Kevin Tebrinke , President, ISLFD
16:20	Turin city tour