

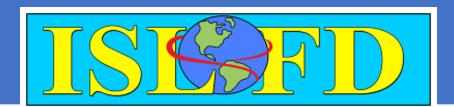
2024 ISLFD Workshop on Lyophilisation

Join us for an enriching workshop on lyophilization held by two renowned experts, Jos CORVER and Steven NAIL

- May 7th, 2024
- 9 a.m. 5 p.m.
- Unione Industriali Congress Centre (Via Vincenzo Vela, 17 Torino)



Check the QR code for workshop location



2024 ISLFD Workshop on Lyophilisation

May 7th, 2024 - Turin, Italy

Workshop programme

Jos CORVER, Steven NAIL

1. Basics of freeze-drying

 Physics of the process: freezing, sublimation and desorption

2. Process control and measurement

Pressure, temperature

3. Equipment of the freeze-dryer

• Chamber, shelves, heat exchangers, compressors, vacuum pumps, condenser

4. Product evaluation

- CQA's and how to measure them
- 5. Scale-up and design space
- 6. PAT and metrology
 - Pressure, temperature, MTM, NIR
- 7. CIP/SIP
- 8. GMP aspects on freeze drying and Annex 1
- 9. New developments
 - Continuous manufacturing, microwave