

The next generation pharma skills you will need in view of continuous manufacturing

Exclusive 3-day training
by leading academic, industry and regulatory experts

11-13 SEPTEMBER, 2018
BINZEN, GERMANY

Demo's and case studies each day

"Entire picture covered:
(flow sheet) modelling,
PAT, control, regulatory"

Feedback fully booked event 2017

LIMITED
TO 50
SEATS

REGISTER
HERE
(early bird)

Day 1

Introduction to continuous manufacturing platforms and material characterisation

Day 2

Modelling and simulation towards design space definition

Day 3

PAT for process monitoring and control of continuous manufacturing processes



Venue:

TTC TECHNOLOGY TRAINING CENTER

Organised by:



www.AM-TEAM.com/training



Prof. Thomas De Beer

BIOMATH

Prof. Ingmar Nopens





“ Great to see theory practically implemented during the DEMO sessions.
 Good combination of presentations and demonstrations. ”
 Participant feedback 2017

Demo at training event 2017, Belgium

Tuesday, Sep 11th

Introduction to continuous manufacturing platforms and material characterisation

- 12.30-13.00** Registration and lunch buffet
- 13.00-13.20** Welcome and introduction
- 13.20-14.50** Importance of raw material and formulation blend characterisation (raw materials and blends)
 - Relevant raw material and blend properties and their characterisation techniques
 - Material property data bases: overview, predictive use, maintenance and challenges
 - Material variability
 - Impact of material properties on the behaviour, performance and residence time of screw feeding systems in a continuous manufacturing platform
- 14.50-15.20** Coffee break
- 15.20-16.00** **Case study:** design space determination of a continuous tablet manufacturing process via wet granulation through empirical process models
- 16.00-16.45** Empirical versus mechanistic modelling of continuous drug product manufacturing processes. Fundamentals - their complementarity - importance of proper data collection
- 16.45-17.30** Material data base **DEMO** + Q&A
- 17.30-17.45** Take home messages of the day
- 19.00** Dinner

Speakers

- Prof. Thomas De Beer (Ghent University)
- Prof. Ingmar Nopens (Ghent University)
- Multiple scientists with hands-on expertise
- Scientists from Glatt (speakers to be confirmed)
- Regulatory experts (EMA and others; to be confirmed)

Demo's include:

- Continuous process lines in action
- Impact of material properties on CM unit operations
- Flow sheet modelling of continuous manufacturing
- Mechanistic modelling of twin-screw granulation, drying and milling

Organisers



Venue

TTC - Technology Training Center,
 Meitner Ring 1, 79589 Binzen, Germany



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Wednesday, Sep 12th

Modelling and simulation towards design space definition

- 8.00-8.30** Transfer from hotel to TTC + coffee
- 8.30-8.45** Introduction to Day 2
- 8.45-9.15** Current status on feeding and blending modelling
- 9.15-14.00** Modelling of CM unit operations
 - 9.15-9.45** Twin-screw granulation: collection of high quality data for model development, calibration and validation
 - 9.45-10.30A** holistic systems view of drug product manufacture and in-vitro/in-vivo performance - Flow sheet modelling - Generic model + **DEMO**
 - 10.30-11.00** Coffee break
 - 11.00-12.00** Twin screw granulation: model development, calibration and validation + **DEMO**
 - 12.00-13.00** Lunch break
 - 13.00-14.00**Data collection and modelling of drying and milling in a continuous manufacturing platform + **DEMO**
 - 14.00-14.45** Optimal experimental design (OED) - OED vs Design of Experiments (DoE) - OED for efficient model calibration and process optimisation for new formulations - Uncertainty analysis as essential step in the establishment of the model-based Design Space determination for continuous manufacturing processes
 - 14.45-15.35** Coffee break and transfer to innovation center
 - 15.35-17.00** **LIVE DEMOS** with continuous process lines including feeding, blending, wet granulation, fluid bed drying, dry milling
 - 17.00-17.20** Take home messages of the day
 - 19.00** Wine tasting and dinner

Thursday, Sep 13th

PAT for monitoring and control of continuous manufacturing processes

- 8.00-8.30** Transfer from hotel to TTC + coffee
- 8.30-8.45** Introduction to Day 3
- 8.45-9.15** 3D modelling of liquid mixing for pharma applications
- 9.15-9.45** PAT for monitoring and control of continuous manufacturing processes for drug products - SPC - traceability - F-test
- 9.45-10.30** Data collection and management and track and trace
- 10.30-11.00** Coffee break
- 11.00-12.00** Advanced process control of continuous processes for drug products
- 12.00-13.00** Lunch

Register here

Rates (EUR, excl. VAT)

Industry	1,700	1,500
Government/academia	1,200	1,000
Student	1,000	800

LIMITED TO 50 SEATS

Early bird rate ends July 1st

Normal rate

AM-TEAM.com/training
training@AM-TEAM.com

Sponsoring and exhibition

Ample exhibition space in the direct vicinity of the lectures is foreseen. Breaks will be organised in the exhibition hall.

Application and info: training@AM-TEAM.com