

# EFCE Spotlight Talks

Working Party on  
Quality by Design

4 December

13:30 • 15:00  
CET

Quality by Design tools for  
the Optimization of (Bio-)Pharma Processes  
System Modelling, Machine Learning and Digital Twins



*Pharmaceutical processes face economic challenges by product patent expiry or unmet product quality leading to fail batches. Hence, strategies for process optimization are of utmost interest, for which the Quality by Design concept provides a multitude of suitable methods. This webinar demonstrates, with industrial case studies with pharmaceutical and biopharmaceutical processes, how systems modelling, machine learning and digital twins can be used to accelerate gaining transferable process understanding in the development phase as well as to provide a robust manufacturing control strategy.*

## PROGRAM

### **Accelerating biopharmaceutical process scale-up/down through machine learning**

Dr. Pierantonio Facco, University of Padova - IT

### **System modelling to assist the technical risk assessment and the control strategy definition of a dry granulation process for an immediate release tablet**

Dr. Gabriele Bano, GSK - UK

### **Digital Twin Based Optimization of cell cultures**

Dr. Christoph Herwig & Dr. Julian Kager, TU WIEN - AT

[registration](#)

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