ENBIS Spring Meeting 2025

Thursday, 29 May 2025

Session: Quality by Design I (10:00 - 11:00)

-Conveners: Sonja Kuhnt

time	[id] title	presenter
10:00	[3] Defining process operating space under uncertainty: Bayesian Design Space for complex kinetic reactions	MONTES, Frederico
10:20	[20] Capability by Design: A novel paradigm for selecting raw material suppliers aligned with Quality by Design	BORRÀS-FERRÍS, Joan
10:40	[29] Robustness Evaluation by Design of Experiments in Vaccine and Pharmaceutical Development	FRANCQ, Bernard LIEF, Kevin

Session: Quality by Design II (11:30 - 12:30)

-Conveners: Jacqueline Asscher

time	[id] title	presenter
11:30	[39] Quality by Design (QbD) and Analytical Quality by Design (AQbD): A Holistic Approach to Pharmaceutical Quality	VITORINO, Carla
11:50	[2] PAT and chemometric models on CHO cell culture lines	PEREIRA, Vitor Hugo
12:10	[9] Multiscale interval PLS for spectral data modeling	RATO, Tiago

Session: Hybrid Modelling I (14:00 - 15:20)

-Conveners: Pierantonio Facco

time	[id] title	presenter
14:00	[31] Predicting drug solubility through digital models: towards pharmaceutical industry 5.0	Prof. FACCO, Pierantonio
14:20	[12] Physics-Informed Neural Network for Bioprocess digitalization	THIRUGNANASAMBANDAM, Monesh kumar
14:40	[13] Deep hybrid modelling and control of microbiome evolution	PINTO, José
15:00	[14] Hybrid Semiparametric Modelling of the Supercritical Carbon Dioxide Extraction Process	Mrs AGHARAFEIE, Roshanak

Session: Hybrid Modelling II (16:20 - 17:20)

-Conveners: Dongda Zhang

time	[id] title	presenter
16:20	[1] Enhancing Pharmaceutical Manufacturing Efficiency with End-to-End Models and Physics-Informed AI	BOFARULL-MANZANO, Ignasi
16:40	[15] Encoding of neural networks of different architectures to SBML format	MOSKOVKINA, Ekaterina
17:00	[37] 3D-bioprinting by design: A Dynamic Model of the Blood-Brain Barrier and Glioblastoma	BRANCO, Francisco

Friday, 30 May 2025

Session: xAI (09:45 - 10:45)

-Conveners: Sonja Kuhnt

time	[id] title	presenter
09:45	[7] An explainability study (XAI) of Deep CNN for near-infrared spectroscopy : IPA under the light	HAFFNER, Florent
10:05	[22] Green LIME: Improving AI Explainability through Design of Experiments	MUELLER, Werner G.
10:25	[17] Exploring CNN architectures for NIR based chemometric tasks - the Deep Tutti-Frutti application.	PASSOS, Dário

Session: Active Learning (11:15 - 12:35)

-Conveners: Alberto J. Ferrer-Riquelme

time	[id] title	presenter
11:15	[38] Optimal Experimental Designs for Process Robustness Studies	GOOS, Peter
11:35	[36] "Classic" DoE vs. Bayesian Optimization / Active learning:	Dr FEILER, Stefanie
11:55	[32] Traditional or Adaptive Experimental Design? A Comparison of Statistical Design of Experiments and Bayesian Optimization for a Chemical Synthesis Problem	COUTINHO, João
12:15	[16] A Comparison of DOE and BO in the In Silico Optimization of Lipid Nanoparticles (LNPs)	VIDINHA BATISTA, Daniel Alexandre

Session: PAT & Chemometrics (14:00 - 15:20)

-Conveners: Raffaele Vitale

time	[id] title	presenter
14:00	[5] A digital toolbox for pharmaceutical tablet manufacturing	Dr MATRALI, Sofia S. H.
14:20	[6] Accelerating pharmaceutical dry granulation through digital twins and application of chemometrics.	Dr DONG, Runqiao
14:40	[19] Implementation of in-line PLS model and sensor fusion for real-time reaction monitoring	GRANJO, Jose
15:00	[8] Optimising PAT for Continuous Direct Compression using Feed Frame Simulator and SentroPAT FO NIR Spectrometer	DE GIORGI, Eleonora

Session: Data Science (15:25 - 16:25)

-Conveners: Alberto J. Ferrer-Riquelme

time	[id] title	presenter
15:25	[10] ONLINE MONITORING AND OPTIMIZATION OF REACTIVE EXTRUSION PROCESSES	Dr GHEGHIANI, Manis
15:45	[18] Industrial Text Data Analysis: From Word Counting to GenAI Applications	Dr STRELET, Eugeniu
16:05	[35] Knowledge transfer for biopharmaceutical production: data analysis of different process development campaigns	BRAGANÇA, Nuno Francisco