Doctoral Landscape Award (DLA) project

Dr Maria Papathanasiou

October 2027 start

Machine learning-enhanced process design and control

The Life Science and Process Systems Engineering Lab (www.papathanlab.com) builds the next generation of intelligent R&D and manufacturing tools. You will combine machine learning with mechanistic models and optimisation, using hybrid modelling, transfer learning and deep learning-accelerated optimisation, to design and control complex processes faster and more robustly (e.g., doi:10.1016/j.chroma.2025.466193; doi:10.1016/j.chroma.2024.464890). The lab works closely with major pharmaceutical companies on real industrial challenges, from biologics to advanced therapies.