



INTERNATIONAL CONSORTIUM *for*
INNOVATION & QUALITY
in PHARMACEUTICAL DEVELOPMENT

IQ Consortium Webinar Series Presented by IQ ALG Dissolution Working Group

Webinar 1: 7 June 2019

“Predictive dissolution modeling – when and how?”

The presentation is based on a multi-company collaborative effort to put forward a general strategy for predictive in vitro dissolution model development. It is designed to provide a general roadmap for the use of predictive dissolution models for enhanced product understanding, robust control strategy, batch release testing, and flexibility for post-approval changes. The talk will showcase new and previously published examples of dissolution models used across the pharmaceutical industry to reduce the experimental burden of getting a drug product to approval. Industry case studies of current approaches used for modeling tablet dissolution will be presented, including predictive model use for product development within the space explored during formulation and process optimization, as well as dissolution models as surrogate tests in a regulatory filing.

Presenter profile



Nikolay Zaborenko currently holds the position of Senior Consultant Engineer at Eli Lilly and Company, working at the Indianapolis, IN, site in small molecule design and development. His role is focused on modeling and simulation of multi-scale phenomena in drug product transition from product state to bioavailability, in close collaboration with pharmacologists, chemists and operators in drug product design and evaluation. Nikolay has received his Ph.D. in chemical engineering and M.S. in chemical engineering practice from Massachusetts Institute of Technology, and his B.S. in chemical engineering from Rutgers University.

He is also licensed as a Professional Engineer by the state of Indiana. Nikolay lives in Zionsville, IN, with his family, and in his spare time practices experimental cuisine, fermentation, zymurgy and vinification.