## Leveraging Automation and associated Workflows for Accelerated Process Development

## Jean-Philippe Krieger

Syngenta Crop Protection AG, Process Technology New A.I., Breitenloh 5, Münchwilen, CH-4333

Jean-philippe.krieger@syngenta.com

Flow chemistry, when combined with effective automation and control, has the potential to rapidly generate substantial amounts of data. This enables accelerated process development through kinetic profiling, design of experiments, and self-optimization. To ensure transferability and scalability, it is essential to establish suitable workflows.



This lecture will focus on establishing the tools and workflows necessary to develop scalable, predictable, and transferable continuous processes. Emphasis will be placed on the importance of data quality, and automation concepts will be introduced. Additionally, the strengths, limitations, and complementarity of online and inline techniques will be explored.