

Lunch and Learn



Wednesday, March 23rd

12:30 - 1:30 PM

Marriott Grand Ballroom: Section 8

Enabling Process Compression Through Chromatographic Clarification for High Titer Cell Culture Reactors

David Chau, PhD (3M), *Global Application Engineer Specialist*

Matt Zustiak, PhD (ThermoFisher), *R&D Director*

In this lunch and learn seminar, we will explore a workflow featuring two best in class single-use technologies to enable the future of bioprocessing by promoting process compression and intensification. As upstream technologies continue to intensify to result in higher cell densities and ultimately higher titer, novel bioprocessing purification solutions have emerged to overcome the higher contaminant and impurities level. Specifically, we will demonstrate how a next-gen single use bioreactor (S.U.B) will allow us to achieve process compression by offering high turn-down ratio for seed-train efficiency and flexibility. This combined with a novel single use chromatographic clarification solution will enable highly intensified and robust biopharmaceutical purification processes of the future.

We will additionally explore several case studies to illustrate the benefits of deploying a chromatographic clarification approach compared to an industry standard approach of using 2-stages of depth filtration. Based on the performance data, the comparison was made at a 5,000L scale to illustrate the facility-fit feasibility as well as higher efficiency through higher product yield.



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