European Network for Business and Industrial Statistics

Contribution ID: **171**   Type: **not specified**

Practical Applications of Multivariate Analytics in the Process Industry

Monday, 11 September 2023 15:40 (30 minutes)

Over the last 30 years processing industries such as refining, chemicals and life sciences have been using data driven models to achieve economic and environmental goals through optimization. Some of these applications include advanced process control, real-time optimization and univariate statistical process monitoring. Although these methods are successful for many applications, there are a subset of use cases where the complexity of the data and the nature of the process require more advanced modelling techniques.

Other industries like banking, commerce and medicine have seen major breakthroughs in recent years thanks to the application of artificial intelligence and machine learning. Some of the applications include predicting consumer behaviour, classifying health conditions or improving user experiences. Can these approaches also be applied in the process industry and what other techniques are available to drive profitability and sustainability?

In this presentation Aspen Technology, the leader in industrial AI for over 40 years, will unpack how and where artificial intelligence and multivariate techniques are applied to batch processing in life sciences and speciality chemicals. Learn from practical examples how multivariate analysis and optimization enable decision-making by leveraging the causal relationships in systems and how this approach may translate to other industries.

Classification

Mainly application

Keywords

Multivariate Analytics, Batch Processing, Industrial AI

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Session Classification: INVITED Software