

A Multitude of Separation Techniques Hyphenated to MS for Biopharmaceutical Characterization – Case Studies from a Development Lab

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A broad range of separation techniques are now routinely combined with mass spectrometry for in-depth biopharmaceutical characterization. Simultaneously, MS software tools have evolved to support storage, processing and reporting of the expanding MS data oceans. Here recent progress, challenges, and learnings from MS-based workflows at Symphogen will be present and illustrated through case-studies.

Additionally, an overview of the technological highlights of a novel monodisperse ion-exchange technology for both strong cation and anion exchanger will be presented. Applications for high-resolution charge profiling of biopharmaceutical modalities including charge variant analysis of monoclonal antibodies and recombinant proteins, and the determination of full and empty AAV viral vectors will be described.

Biography

Dan Bach Kristensen

Dan Bach Kristensen holds a Ph.D. in biology and B.Sc. degree in chemistry. Dan is specialized in protein chemistry and mass spectrometry, which he initially applied in the field of proteome research in Japan and later in Denmark. For the last 19 years Dan has been working with analytical development in the biopharmaceutical industry, on projects ranging from early discovery to product registration. Clinical indications include bleeding disorders, neutropenia, autoimmune diseases and oncology. Dan currently works as a Principal Scientist at Symphogen, a part of Servier, which specializes in the development of antibodies, antibody formats and antibody mixtures for the treatment of cancer and neuro inflammatory diseases.

Biography

Christof Mitterer

Christof currently holds the position as Global Product Manager for BioLC Columns and Consumables within the columns and consumables business unit at Thermo Fisher Scientific. Before that, Christof was responsible for business development at PharmaFluidics, the Belgian company of silicon wafer based μ PAC columns, which was acquired by Thermo Fisher Scientific in 2021. Prior to joining PharmaFluidics, Christof started his professional career in 2015 as a sales representative for columns and consumables products within Thermo Fisher Scientific, covering South-East Germany and Austria. Christof holds a Master of Science in Biochemistry from the Technical University of Munich.