

University of Applied Sciences and Arts Northwestern Switzerland



## **3-Day Course:**

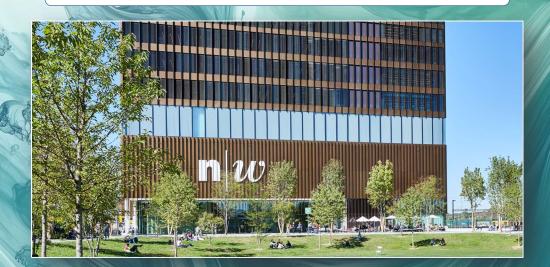
## Continuous Chromatography for mAbs, Oligonucleotides & Peptides

### Lectures & Workshops

- Introduction to continuous chromatography for biomolecules
- Theory of multi-column chromatography
- Design of multi-column chromatography processes
- Hands-on training using twin-column equipment for capture and polishing applications (MCSGP & CaptureSMB)
- Process performance evaluation and scale-up
- Introduction to process modelling

### Institute for Pharma Technology, FHNW, Switzerland

9<sup>th</sup> – 11<sup>th</sup> September 2025



# More Info & Registration



#### Webiste Link: www.fhnw.ch/ccb

Course Director: Prof. Dr. Thomas Villiger - thomas.villiger@fhnw.ch

Price: CHF 3000

#### **Course Leaders:**



Massimo Morbidelli, Ph.D., Professor of Chemical Reaction and Separation Technologies in the Department of Chemistry, Politecnico di Milano.



**Thomas Müller-Späth,** Ph.D., CEO at YMC ChromaCon in Zurich

### Equipment: Contichrom CUBE







## Full Program Info (Sept 9<sup>th</sup> – 11<sup>th</sup> 2025)



	Activity	Time (hrs)	Торіс	Instructor
Day 1	Lecture 1	0.75	Production of Bio-therapeutics	Massimo Morbidelli
	Lecture 2	1	Fundamentals of Large-molecule Chromatography	Massimo Morbidelli
	Lab Workshop 1	1.5	Contichrom CUBE & Batch Chromatography	ChromaCon Team
	Lunch	1		
	Lecture 3	0.75	Continuous Countercurrent Chromatography	Massimo Morbidelli
	Lecture 4	0.75	Affinity (Capture) Chromatography	Massimo Morbidelli
	Lab Workshop 2	2	CaptureSMB Design	ChromaCon Team
	Lecture 5	1	Evaluation of Continuous Chromatography	Thomas Müller-Späth
	Evening Program		Reception	
Day 2	Lecture 6	1	Bind and Elute Polishing Chromatography	Massimo Morbidelli
	Lab Workshop 3	1	Linear Gradient Chromatography	ChromaCon Team
	Lunch	1		
	Lab Workshop 4	0.5	Evaluation Center Introduction	ChromaCon Team
	Lab Workshop 5	1	Evaluation of Batch and CaptureSMB Results	ChromaCon Team
	Group presentation	0.5	CaptureSMB Results & Dicussion	Thomas Müller-Späth
	Lab Workshop 6	1	MCSGP Design	ChromaCon Team
	Evening Program		Social program + Dinner	
Day 3	Lecture 7	1.5	Integrated Continuous Manufacturing and Process Digitalizaiton	Thomas Müller-Späth
	Lecture 8	1.25	Modelling and Simulations	Thomas Müller-Späth
	Lunch	1		
	Lab Workshop 7	1	Evaluation of MCSGP	ChromaCon Team
	Group presentation	0.5	MCSGP Results & Discussion	Thomas Müller-Späth
	Lecture 9	1.5	Scale-Up of Continuous Chromatography	Thomas Müller-Späth
	Lecture 10	1.5	N-Rich, a process for impurity isolation	Thomas Müller-Späth
	Course Review	0.5	Wrap-up	Thomas Müller-Späth
	Finish	0.5	Guided lab tour (optional)	ChromaCon Team