# Developing LC-MS/MS Methods Using a Virtual Liquid Chromatography Method Development Tool

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The development and optimization of Liquid Chromatography (LC) separations can be time consuming and costly, often requiring a number of steps including literature research, column selection, method scouting, method development, and method optimization. In an effort to eliminate these steps, an instrument-free, software modeling tool was developed that gives users the ability to select compounds from a database and instantly model a separation on different column phases. Optimization of the chromatogram model can be performed while maintaining critical pair separations by adjusting parameters such as instrument/system effects (e.g., dwell volume and extra column volume), mobile phase preferences, number of gradient steps, and more. The first version contains an initial library of approximately 250 Drugs of Abuse (DoA) with plans to expand by adding additional compounds, more libraries, and even more utility.

The modeler delivers a fast, no-cost starting point for LC method developers, novice and expert, who either lack the expertise, or the time, to develop or optimize separations quickly and accurately. This novel, virtual method development software can improve turnaround time, increase throughput to existing methods, and offer an on-demand consultative user experience.

In this seminar, you will learn how to use Restek's free Pro EZLC Chromatogram Modeler in order to develop and optimize LC-MS/MS methods before even setting foot in the lab.

## Biography Mr Cyrille Lamboley

Chemical Engineer specialized in Analytical Chemistry – Liquid Chromatography & Sample Preparation

### SKILLS

- Sales: Sales Management (dealing with different personalities, convincing and motivating, human leadership) & Customer Account Management in the field (customer-focus, prospection, follow-up, ability to communicate et negotiate).
- Techniques: Sample Preparation, Automation, Liquid Chromatography, Mass Spectrometry and other analytical techniques.
- Markets: Creation, implementation and monitoring of specific marketing activities.
  Knowledge of markets related to analytical chemistry / liquid chromatography.

#### PROFESSIONAL EXPERIENCE

### 2018 (November) – Today | RESTEK CORPORATION

LC & Sample Prep Specialist

- Support laboratories and analytical scientists in their daily analytical issues via Technical Support and Troubleshooting
- Technical support to sales team
- Find new analysis opportunities / hot topics to come in terms of LC & Sample Preparation
- Give technical presentations/seminars/trainings on customer site, during congresses, forums, tradeshows and in scientific societies
- Member of AFSEP (Club de Chromatographie Lyonnais)

### 2012 (March) – 2018 (October) | BIOTAGE AB

### Analytical Division

- Analytical Division: Sample preparation, automation & evaporation
- Different positions in the company during these 6 years up to European Sales Manager for the Analytical Division

Workshops, demonstrations, seminars and trainings

2007 (July) – 2012 (February) | WATERS Corporation Consumables Division

- Consumables Division: Sample preparation and LC Columns
- Workshops, demonstrations, seminars and trainings

### BACKGROUND

2001 (September) - 2004 (November) | ECOLE EUROPEENNE DE CHIMIE, POLYMERES ET MATERIAUX (ECPM) – Strasbourg

Chemical Engineer European Diploma, specialized in Analytical Chemistry and Management

#### HOBBIES

- Practicing Basketball and coaching U15
- Music and going out in the nature with family (married with 3 children)
- Volunteer for Téléthon