HPLC Technical Training

Module Name: Introduction to HPLC

Time Allocated: **1.5 - 2 hours**
Intended Audience: **This module assumes no previous liquid chromatography knowledge**

Content Covers:

- All modes of LC, and instrument components
- Basics of chromatography
- Resolution, capacity and selectivity factors
- Definition of theoretical plates and relationship to flow
- Calculation of theoretical plates
- Chemistry of the stationary phases
- Various pump designs and how they work
- Importance of fittings and explanation of different types
- Discussion of main detector types

At the completion of this seminar, attendees should be able to:

- Explain in simple terms, the basic concept of chromatography
- Understand the various liquid chromatography modes including normal and reverse phase, ion pairing and ion chromatography, and SEC
- Calculate resolution of two partially resolved peaks
- Calculate system theoretical plates and understand the relationship to resolution
- Understand various manufacturers fittings and pumps
- Know the most appropriate detector to use for the application type and how it works