

MissingLink – LCxGC



General

Comprehensive 2D chromatography is a powerful analytical technique capable of delivering more information in a shorter time than any other standard chromatographic methods. Technical complexity of the 2D systems has however slowed down its widespread acceptance. One of the possible ways to make the 2D systems friendlier to a user, is to build a completely integrated interface, which would be capable of on-line sample handling, configuring, controlling instruments, and collecting the results.

ATAS GL has made such an interface based on OPTIC 3 injection system. Called "MissingLink", the interface serves its purposes. It offers the easy-to-use, intuitive hardware interface designed to facilitate the on-line LC fractions transfer and their subsequent GC analysis. Second, it is a practical software integrating tool allowing the user to set up the system in no-time.

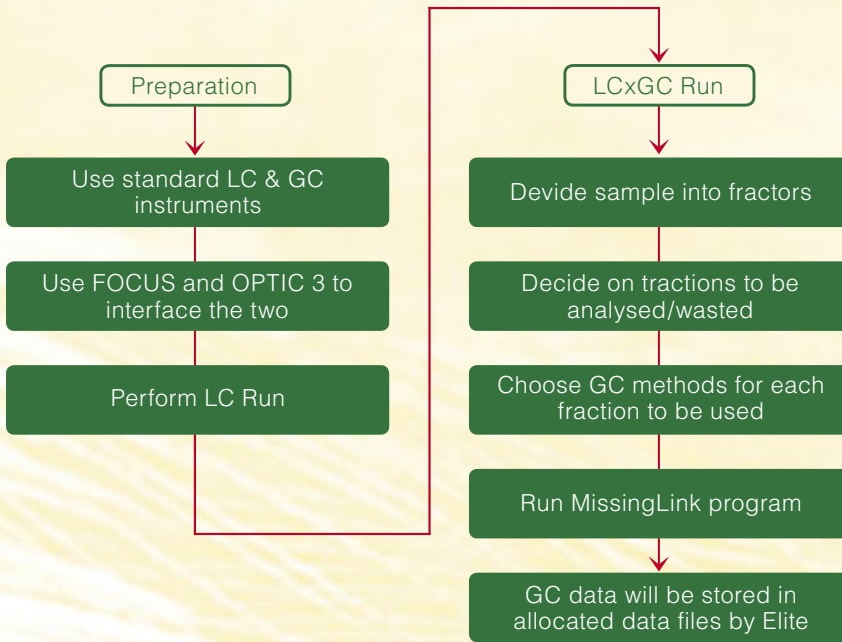
LCxGC system

To make the LCxGC system easy to use, you need the following set:

- Standard GC with FID or other detector of any known brand
- Standard HPLC (Shimadzu, Agilent, GL Sciences, Waters)
- ATAS GL OPTIC 3 injector
- ATAS GL FOCUS robotic system with PAL Dilutor syringe
- EZChrom Elite Data System
- MissingLink Software

This set of instrumentation and software offers you an unprecedented flexibility with respect to the hardware use – any logical automated combination of the instruments from the above list is possible. The re-configuration is done in a matter of minutes.

Automated LCxGC run



Software Interface

Fraction Number	Start (sec)	Stop (sec)	Analyse/Waste	OPTIC 3/GC Method	LC Method	Data File
1	0	60	Waste		LC_inject.met	
2	60	90	Analyse	OpticFocusGC_1.met	LCMissingLink.met	Default_F002.dat
3	90	120	Analyse	OpticFocusGC_1.met	LCMissingLink.met	Default_F003.dat
4	120	150	Analyse	OpticFocusGC_1.met	LCMissingLink.met	Default_F004.dat
5	150	180	Analyse	OpticFocusGC_1.met	LCMissingLink.met	Default_F005.dat
6	180	210	Analyse	OpticFocusGC_1.met	LCMissingLink.met	Default_F006.dat
7	210	240	Analyse	OpticFocusGC_1.met	LCMissingLink.met	Default_F007.dat
8	240	480	Waste		LCMissingLink.met	
9	480	510	Analyse	OpticFocusGC.met	LCMissingLink.met	Default_F009.dat
10	510	540	Analyse	OpticFocusGC.met	LCMissingLink.met	Default_F010.dat
11	540	570	Analyse	OpticFocusGC.met	LCMissingLink.met	Default_F011.dat
12	570	600	Analyse	OpticFocusGC.met	LCMissingLink.met	Default_F012.dat
13	600	720	Waste		LCMissingLink.met	

LCxGC Hardware

