

CHROMATOGRAPHY

1. GAS CHROMATOGRAPHY



2. GAS CHROMATOGRAPHY - MASS SPECTROMETRY

GAS
CHR

Branch

Model

Config
uration

Applica
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- compounds
- Quantification of purity and impurities

G
C
-
M
S

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3. PYROLYSIS GAS CHROMATOGRAPHY - MASS SPECTROMETRY



4. AUTOMATED THERMAL DESORPTION GAS CHROMATOGRAPHY - MASS SPECTROMETRY

PYROLYSIS GAS
CHR
- MA
SPEC

Branch

Model

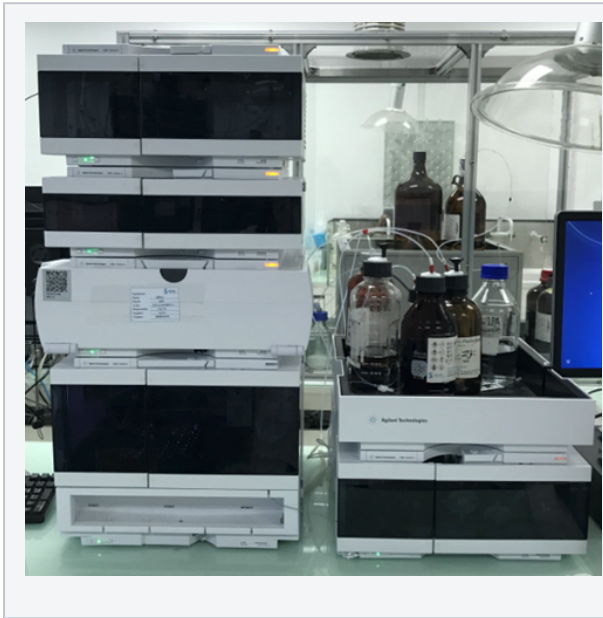
Config
uration



- Injection System: Multi-Shot Pyrolyzer
- Detector: FID, 5975C MS (EI & CI)

	Applica tion categor ies Chemical structure identification of polymers and additives
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5. LIQUID CHROMATOGRAPHY



6. ULTRA HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

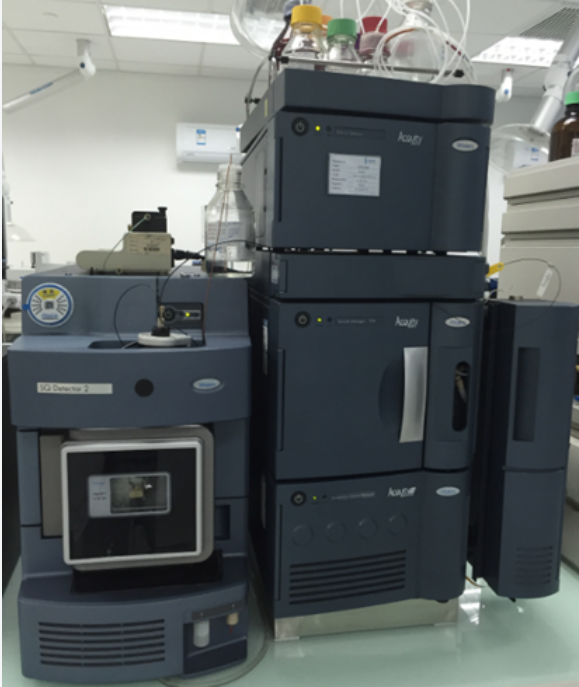
LIQUID CHROMATOGRAPHY										
Brand										
Model										
Configuration										
Application categories										
		ULTRA HIGH PERFORMANCE LIQUID CHROMATOGRAPHY <table><tr><td>Brand</td><td>Waters</td></tr><tr><td>Model</td><td>H-Class</td></tr><tr><td>Configuration</td><td> • C • C • A • L </td></tr><tr><td>Application categories</td><td> • C • C • C • C </td></tr></table>	Brand	Waters	Model	H-Class	Configuration	• C • C • A • L	Application categories	• C • C • C • C
Brand	Waters									
Model	H-Class									
Configuration	• C • C • A • L									
Application categories	• C • C • C • C									

7. ULTRA HIGH PERFORMANCE LIQUID CHROMATOGRAPHY-MASS SPECTROMETRY

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8. ULTRA PERFORMANCE CONVERGENCE CHROMATOGRAPHY - MASS SPECTROMETRY

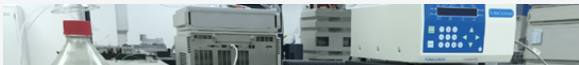
ULTRA HIGH PERFORMANCE LIQUID CHROMATOGRAPHY- MASS SPECTROMETRY		
Brand	Waters	UI PI C C - M SI
		Br

	Model		Model
	Configuration		Configuration
	Applications		Applications

- Identification and quantification of trace (part-per-billion – part-per trillion) levels of compounds in complex sample matrices

9. ULTRA HIGH PERFORMANCE LIQUID CHROMATOGRAPHY - HIGH RESOLUTION MASS SPECTROMETRY

10. GEL PERMEATION CHROMATOGRAPHY

	ULTRA HIGH PERFORMANCE LIQUID CHROMATOGRAPHY - HIGH RESOLUTION MASS SPECTROMETRY		GLC
			Br
			Model
			Configuration
	Brand	Waters	Configuration
	Model	H-Class Xevo G2XS Q-ToF	
	Configuration	• Ion source: ESI, ASAP, APCI, APPI • Mass detector: Single Quadrupole + Time-of-flight • Scan range: 50 -140,000 Da m/z	
			



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11. ION CHROMATOGRAPHY



ION CHROMATOGRAPHY

Brand

Dionex &
ThermoFisher

Model

ICS1000, ICS3000,
Intergrion

**Config
uration**

- Gradient quarterly pump
- Autosampler with 100-position tray
- Eluent generator
- Conductive detector

**Applic
ation
catego
ries**

- Determination of Anions: halogen ions, SO₄²⁻, PO₄³⁻, NO₃⁻, ...
- Cations: Amine series, Na, K, Li, Mg, Ca, ...