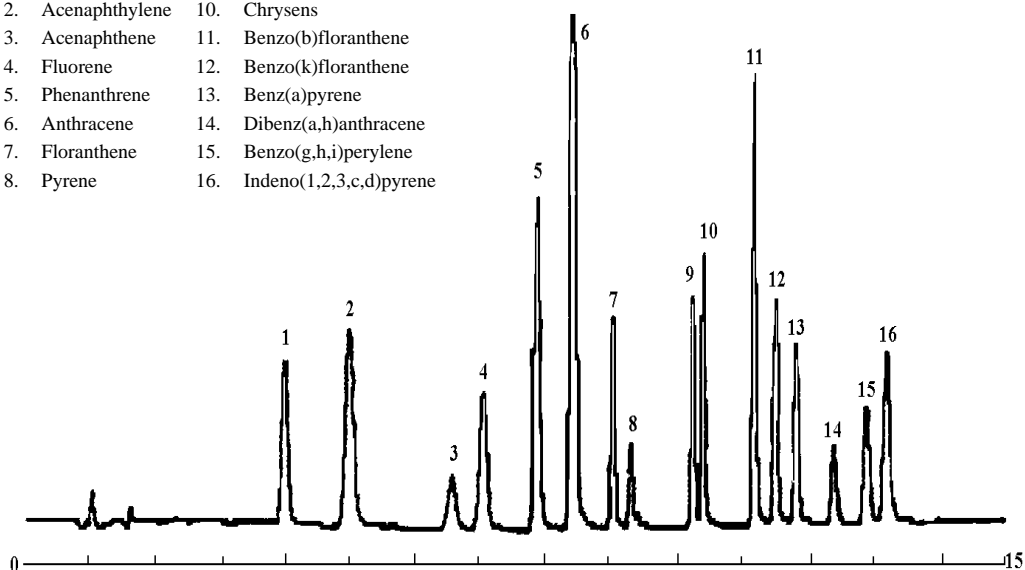


'...determination of PAHs by gradient separation...'

Determination of PAHs by Gradient Separation and UV Detection

- | | |
|-------------------|-----------------------------|
| 1. Naphthalene | 9. Benz(a)anthracene |
| 2. Acenaphthylene | 10. Chrysens |
| 3. Acenaphthene | 11. Benzo(b)floranthene |
| 4. Fluorene | 12. Benzo(k)floranthene |
| 5. Phenanthrene | 13. Benz(a)pyrene |
| 6. Anthracene | 14. Dibenz(a,h)anthracene |
| 7. Floranthene | 15. Benzo(g,h,i)perylene |
| 8. Pyrene | 16. Indeno(1,2,3,c,d)pyrene |



Sample

16 PAHs according to US EPA Priority Pollutant List.

Conditions

Column: Vydac 201TP C18 Column
5 μ M
(150 x 4.6 mm ID)
Mobile Phase: Solvent A: Water,
Solvent B: Acetonitrile
Gradient: 50% B for 3 min, linear to
100% B in 7 min.
Flow Rate: 1.5 ml/min
Injection Vol: 10 μ l
Temperature: Ambient
Detection: 254 nm

PAHs

This application illustrates the use of the low pressure quaternary solvent delivery system developed by GBC for the burgeoning environmental marketplace. Around the world dated environmental applications, which rely heavily on labor intensive extractions and expensive equipment and sample, are being replaced by simple HPLC methods. This change has already occurred in Europe and is rapidly becoming acceptable in the US.

This application is particularly useful in laboratories where cost reduction and reduction in the level of expertise required to perform analyses, is important.



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Key Features

- Sensitivity
- Cost savings
- Selectivity
- Limited technical expertise required
- Gradient performance
- Precision and accuracy of mixing
- Excellent flow characteristics
- Excellent chromatography

Relevant Industries

- Commercial environmental laboratories
- EPA laboratories
- Power plants
- Light electronics manufacture
- Wastewater treatment
- Effluent monitoring
- Air quality monitoring
- Drinking water analysis

GBC HPLC Instrumentation

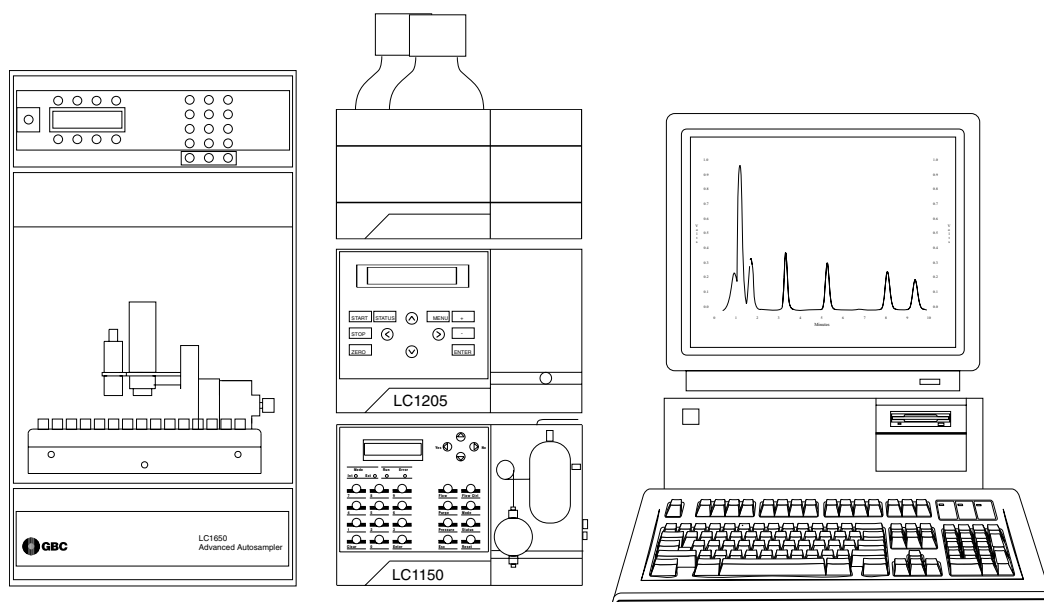
LC1150 Quaternary Gradient HPLC Pump

LC1205 Programmable UV/Vis Detector

LC1445 System Organiser

LC1650 Advanced Autosampler

WinChrom Chromatography Data
Management System



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