Active Counting Mode (ACM™)

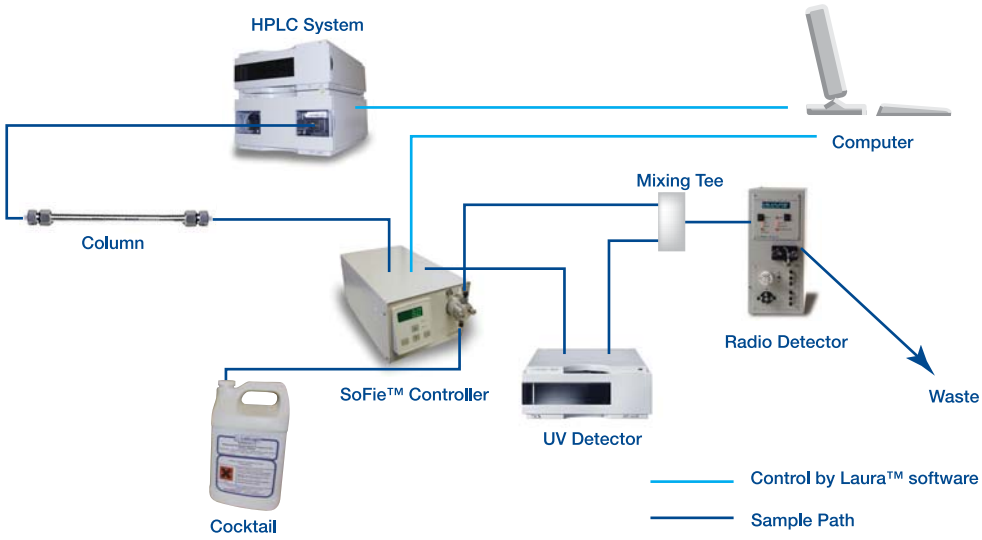
LabLogic

What is ACM?

Radio flow detection has traditionally used a variety of static parameters that are applied to the entire run. Using Active Counting Mode we are now able to alter the detection characteristics according to a simplified heterodyne model. This allows the system to actively monitor and adjust run conditions in real time, applying the most appropriate settings dynamically, providing unrivalled limits of detection whilst keeping run duration the same as in a conventional radiochromatographic environment.

This enables us to make the most of the limited counts available in the low level samples modern radiochromatographers have to deal with. Active Counting Mode is particularly relevant to the new UPLC, Fast LC, Rapid Resolution LC techniques as the ACM system provides superb peak shape and definition

System Schematic



System Schematics HPLC, SoFie™ Control Module, Radiochemical Detector, PC

What can we expect from Active Counting Mode?

ACM increases sensitivity and peak definition when compared to conventional radio flow detection. Increases in limit of detection are in the range of 5 to 17 fold depending on the sample and other chromatographic conditions.

ACM optimizes the peak width and overall peak shape making it ideal for the new LC techniques with very narrow peak profiles as well as improving overall resolution making peaks easier to identify.

ACM replaces the need for the sample to be fraction collected and counted off-line, this not only saves time by making the process automatic but also eliminates the possibility of loss of volatile metabolites due to sample processing.

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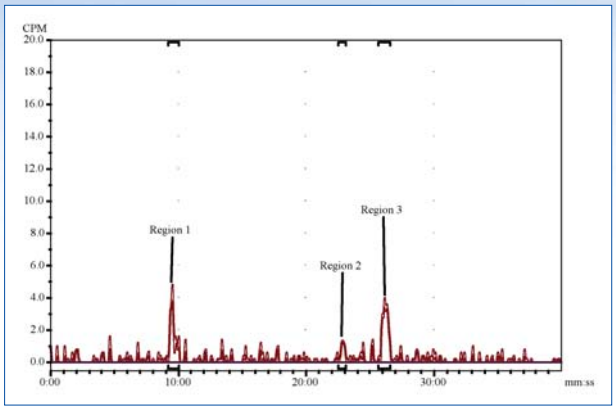
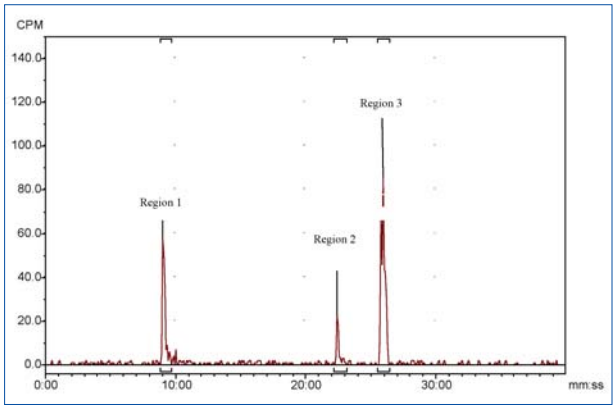
Standard radio flow chromatogram



Same sample using Active Counting Mode



ACM Provides

- In-line radio flow through peak identification previously only achieved with fraction collection and LSC counting.
- Optimized counting parameters adjusted in real time.
- Increased throughput providing greater laboratory efficiency.
- Accurate counting of low radioactivity samples.
- Eliminates off-line collection, preparation and recounting.
- Single point of control for your complete radiochromatography system.
- GxP compliant Laura software package.

LabLogic Systems Limited . Paradigm House . 3 Melbourne Avenue . Broomhill . Sheffield . England S10 2QJ . UK

t. +44 (0) 114 266 7267 f. +44 (0) 114 266 3944 w. www.lablogic.com e. consumables@lablogic.com