

### Collect more SFC fractions with HPLC-like convenience

- Collect up to 24 fractions at atmospheric pressure
- Use standard glass collection tubes
- Recover greater than 90% sample
- Use no fume hood space
- Connect to any commercial SFC system
- Extend application of SFC through HPLC-like convenience and high fraction count



Modular SFC's patented CFC Centrifugal Fraction Collectors deliver HPLC-like convenience to SFC isolation and purification. These novel instruments overcome the past complexities and limitations of collecting multiple SFC fractions, and thus allow chromatographers to readily migrate HPLC methods and take advantage of the inherent benefits of SFC for new applications.

The compact, benchtop CFC Series Fraction Collectors for SFC are compatible with any SFC system.

#### Collect Multiple Fractions at Atmospheric Pressure

The CFC Series collects up to 24 samples in standard glass tubes, just like an HPLC



fraction collector. Fractions are collected at atmospheric pressure, eliminating the complexity and pressurized hardware requirements of conventional SFC fraction collectors. The HPLC-like convenience of the CFC series now extends SFC to new applications that were previously considered impractical for SFC.

#### High Recovery/High Productivity

The patented centrifugal technology employed by the CFC series captures non-volatile materials entrained in the gaseous CO<sub>2</sub> eluant stream with greater than 90% recovery. The highly efficient fraction collection methodology results in high yields with greater isolation productivity.

#### Space Saving Design

The compact CFC Series Fraction Collectors can be positioned anywhere on the lab benchtop rather than taking up space in a fume hood. Vapors are directed through an exhaust hose that can be connected to the laboratory vent system.

#### Extending the Application of SFC with High Fraction Counts

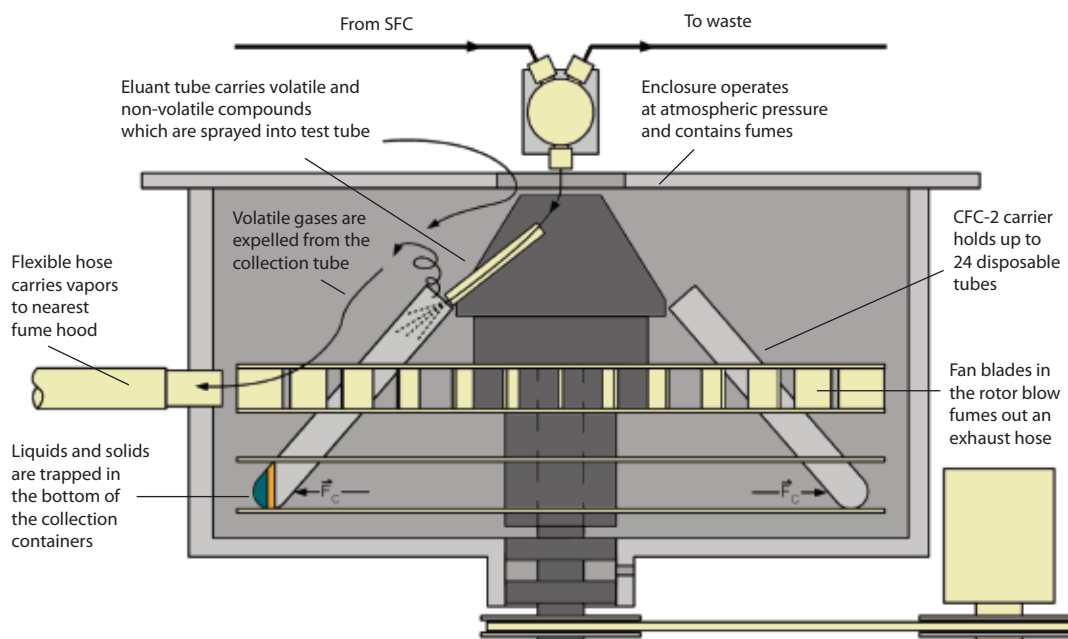
The CFC Fraction Collectors allow broad polarity fractionation by SFC with up to 24 fraction collections without changing the sample collection tubes. This capability simplifies the migration of traditional HPLC applications to SFC for complex mixtures requiring many fractions, or multiple samples requiring only a few fractions each. SFC applications enabled by the CFC Series Fraction Collectors include:

- High purity chiral separations
- Isolation of impurities from reaction products
- Fractionation of natural products and other complex mixtures
- Isolation of metabolites and biomarkers from biological fluids
- Flash SFC

## Patented Centrifugal Technology Provides HPLC-like Convenience

Modular SFC's novel centrifugal technology is based on a centrifuge-like rotor that contains up to 24 disposable fraction collection tubes. Fractions are dispensed to the containers via a flexible eluant tube while the carrier is spinning at 1500 rpm. The centrifugal force causes the highest density components (liquids and solids) to migrate to the bottom of the collection tube while allowing the expanded gaseous components to escape from the opening of the containers. Vapors are directed through an exhaust hose to the nearest fume hood by the fan blades in the rotor.

## Novel Centrifugal SFC Fraction Collection System



## Specifications

Model	CFC-1	CFC-2
Fraction Collection Tubes:	12	24
Tube Volume:	14 ml	37 ml
Fraction Volume:	<7 ml	<25 ml
Liquid CO <sub>2</sub> Flow Rates:	<5 ml/min	<25 ml/min
Sample Recovery:	>90%	>90%
Dimensions (inches)	13W x 8H* x 18D	20W x 9H* x 26D

\* Diverter valve adds 4" to height at rear of both instruments

## Control Options

CFC Fraction Collectors are compatible with any commercially available SFC system. WASTE/COLLECT and NEXT FRACTION inputs on both units are enabled by contact closure outputs on the SFC instrument. The CFC-2 additionally allows internal collection programming by time and peak detection.

## About Modular SFC

Modular SFC is a new instrument design and development company founded in 2007. The company's first products are designed to improve the process of Supercritical Fluid Chromatography (SFC) fraction collection and enable chemists to more readily realize the inherent benefits of SFC. The company received its first SFC fraction collection technology patents in January 2007 and will begin shipment of its commercial CFC Series of benchtop fraction collectors at the beginning of 2008.



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