

# General fractionation of *Hypericum perforatum* extract on Bench scale FCPC® equipped with 1L rotor

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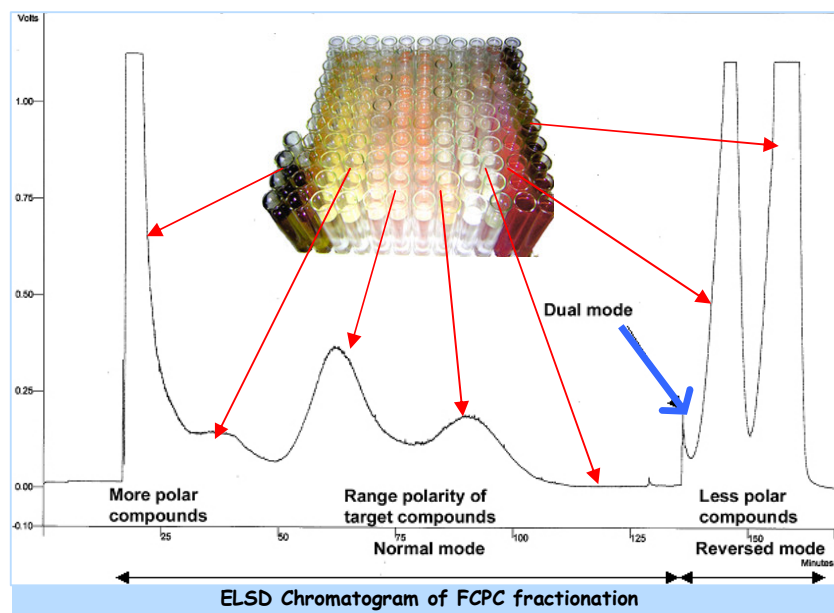
## Introduction

*Hypericum perforatum* L. is a herbaceous perennial plant, belonging to Hypericaceae family. It is a well know medicinal plant since the antiquity and was recognized as “St. John’s Wort” in Anglo-Saxon folk medicine. The extract of aerial part in blossom had a high reputation as an anti-inflammatory, anti depressive and healing agent. Nowadays the use of *Hypericum* extracts is concerned mainly with antidepressive applications.



Bench scale FCPC® equipped with 1L rotor is used to fractionated commercial extract of *Hypericum perforatum* in order to isolate active compound as hypericin, pseudo hypericin, hyperforin. 3 grammes of this extract which contains 0.3% in weight of hypericin is injected. Detection is done with ELSD detector PL-ELS 2100 from Polymer laboratories.

## Results



Parameters	
Flow-rate	20 ml/mn
Rotation speed	1000 rpm
Solvent system	Hept/AcOEt/MeOH/W
Quantity injected	3 gr

Results	
Separation time	115 mn
Solvent consumption	2,3 L

## Conclusions

Light Scattering detector allows high detection level on preparative CPC as baseline is sometimes noisy with UV due to cloudy mobile phase or emulsion. In this case, the fractionation is focused on hypericin and pseudo hypericin compound, and solvent system is chosen according to their polarity. Moreover, the dual mode, which allows working in normal and reversed mode in one step, permit to recover the integrity of the crude complex extract from high to low polar compounds.

