

Mass directed auto purification system (preparative LC-MS)

<https://search.labfacilities.wur.nl/SearchDetail.aspx?deviceid=76ee940d-85d2-4c9d-9b02-15a51223562b>

Brand

Waters

Type



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Organisation

Agrotechnology and Food Sciences

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Description

The Waters Auto Purification HPLC/MS system (preparative LC-MS) provides users with the flexibility of using automated high-throughput runs for selective mass-directed fractionation. The configuration enables easy scale-up from:

- analytical chromatography (micrograms)
- semi-preparative chromatography (milligrams)
- preparative chromatography (gram quantities)

In addition, a collection of columns (variety of sizes and chemistries) is available. The machine automates the collection of fractions detected by MS and or UV-VIS, tracks samples and fractions, and then presents the data in an easy-to-view format. The software can trigger collection using a variety of detector signals including:

- PDA (UV/Visible)
- Evaporative Light Scattering (ELSD)
- MS
- analog detectors

Applications

This system can be used for fast and mass directed purification of natural products extracts and new molecular entities important to food, pharmaceutical, agrichemical and other industries:

- Primary metabolites
- Secondary metabolites: phytonutrients and a broad range of other secondary metabolites
- Oligosaccharides
- (Bio-active) peptides

Complementary Techniques

- Grace Reveleris Flash system (designed to collect fractions of crude mixtures, using evaporative light scattering (ELSD) and UV detection)
- MALDI-TOF MS (for further analysis of the isolated fractions)