

## Mass directed auto purification system (preparative LC-MS)

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

### **Brand**

Waters

### **Type**



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### **Organisation**

Agrotechnology & Food Sciences Group

### **Department**

Food Chemistry

### **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)