## High Performance Liquid Chromatography (HPLC) – with Photodiode

## Array Detector (PAD) & Fluorescence (FLR) Detector

Brand: Waters Corporation, USA

Model: alliance

High Performance Liquid Chromatography (HPLC) provides separation and qualitatively/quantitatively determination on samples which widely applied in environmental, pharmaceutical, and biochemical analysis. The compounds subjected to analysis are soluble in aqueous phases or eluents, and the separation is based on their polarities by Normal-phrase or Reversed-Phase chromatography in general.

The HPLC system at ENVF is equipped with quaternary pumps, four eluting chambers, automatic sample injection device holding up to 120 vials, temperature-controlled column compartment, degassing system and dual detectors: multi-wavelength fluorescence (suitable for detection of fluorescing substances) and diode-array detectors (having absorbance in UV/Vis wavelength). The system is controlled byEmpower3<sup>TM</sup> software and work station for simultaneous 2D or 3D operation.

Applications :- HPLC serves wide range of applications in environmental, pharmaceutical and biochemical analysis. It can be used for the determination of organic pollutants in aerosol and water samples, chiral Separation, quantitation of carcinogens in commercial products etc.



Waters model alliance HPLC System