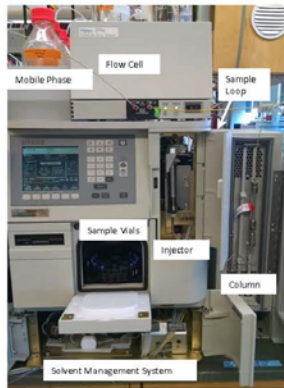


LC/MS Demo by Julie Bliss

for the full presentation, see:

[http://www.ecs.umass.edu/cee/reckhow/courses/772/Labs/LC-MS Bliss Slides.pdf](http://www.ecs.umass.edu/cee/reckhow/courses/772/Labs/LC-MS%20Bliss%20Slides.pdf)

Liquid Chromatograph



- 1) Samples are prepared and injected into vials.
- 2) Samples are injected through sample loop.
- 3) Solvent management system takes solvent and mobile phase to column (C18).
- 4) Gradient elution starts.
- 5) Flow cell cables direct analytes to Mass Spec.

For Alliance HPLC info see:

<http://www.ecs.umass.edu/eve/facilities/equipment/Allianceresources.html>

Tandem Mass Spectrometer



- 1) Sample and mobile phase is directed from LC to probe. Both travel into capillary to the probe tip where the solution is sprayed from nebulizer gas (N_2).
- 2) Charged solution moves to quadrupoles and collision cell where fragments are filtered and segmented.
- 3) Desolvation gas (N_2) evaporates analyte from sample throughout.
- 4) The chromatogram and mass spectra are created and analyzed.

for Quattro Micro information, see:

<http://www.ecs.umass.edu/eve/facilities/equipment/Quattromicroresources.htm>