

**DEPARTMENT OF MEDICINAL CHEMISTRY
MASS SPECTROMETRY CENTER - INSTRUMENTATION**

**Bruker AutoFlex II - Matrix-Assisted LASER Desorption Ionization
Time of Flight Mass Spectrometer (MALDI-TOF)MS**

Manufacturer: Bruker Daltonics, Billerica, MA, USA

Mass range: Linear: > 132kDa [Bovine Albumin (2MH⁺)]
Reflectron: > 6,000Da

Resolution: Linear: > 4,000 (FWHM)* @ *m/z* 2,465.2 [ACTH (18-39)]
Reflectron: >18,000 (FWHM) @ *m/z* 3,147 (Somatostatin 28)

Sensitivity: Linear: S/N>10:1 for 1 fmole at *m/z* 1,570.68 (Glu-Fib)
Reflectron: S/N>10:1 for 1 fmole at *m/z* 1,570.68 (Glu-Fib)

Mass Accuracy: Linear: <100 ppm
Reflectron: < 10 ppm

Ionization (±eV): Matrix Assisted LASER Desorption (MALDI) - 337nm Nitrogen laser

Detectors: Two Micro Channel Plates (MCP), Linear and Reflectron,
2 GHz time-to-digital converter (TDC)

Inlet System: SCOUT MTP Microtiter Plate Ion Source with Observation Optics

Data System (DS):
Hardware: HP workstation XP 6000, 2 GHz dual-Xeon processor, 1GByte RAM
Software: Microsoft Windows 2000 (v5.0); Bruker Compass 1.0, FlexControl and
Flex Analysis 2.0 and license, ClinProTools 2.0
GUI Integrated vacuum measurement and control unit

Acquisition Date: 2004

Funding: Departments of Biochemistry, Chemistry, Medicinal Chemistry,
Periodontics and Oral Biology, Medicine (Infectious Diseases)
Center for Ecogenetics and Environmental Health (CEEH)
School of Pharmacy and its Drug Metabolism/Disposition &
Pharmacogenomics Research Program (DMDPR)
University of Washington Mass Spectrometry Center

Predominant Uses:

Characterization of biopolymers (proteins, protein digests and oligonucleotides);
peptide sequencing using post source decay (PSD) techniques.

*FWHM = full width at half height