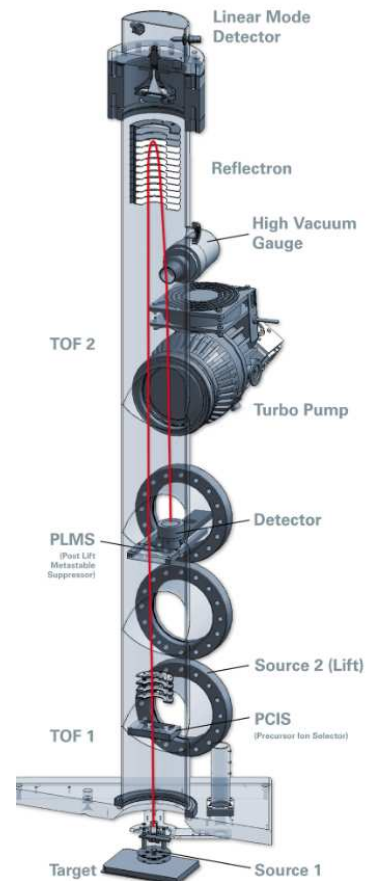


Equipment Overview

Mass Spectrometer Autoflex speed™ MALDI TOF/TOF

<https://www.bruker.com/products/mass-spectrometry-and-separations/maldi-toftof/autoflex/overview.html>



Matrix-Assisted Laser Desorption/Ionization (MALDI) stands as one of the most powerful techniques invented for investigating:

- 1. Biopolymers (such as peptides, proteins, glycans and oligonucleotides)**
- 2. Synthetic polymers**
- 3. Organic molecules (>500 Da), especially in mixtures and crude samples**

4. **MALDI Imaging. Distribution of proteins, lipid, small molecules and etc. in tissue sections.** Results are shown as color coded intensity plots and can be overlaid to an image of the investigated sample
5. **TLC MALDI. Measurements directly from a thin layer chromatography (TLC)**
6. **Microorganism and Fungi identification and classification**
7. **Detailed sample characterization by MS/MS. Top down proteomics.**

8. **Optimized software packages for arranging of protein, peptide, glycan and polymer analysis workflows.**
Microorganism and Fungi identification
 - a. **ProteinScape™ 4.0 Workstation data system with installed ProteinScape 4.0 software for Data Mining and Warehousing Database for Proteomics and Glycoanalysis(GlycoQuest)**
 - b. **Polymerix software provides sophisticated tools for analysis of homopolymer and copolymer composition and deconvolution of homopolymer and copolymer mixtures, including computation of the standard polymer metrics: Mn, Mw, Mz, PD, DPn, DPw, DPz values.**
 - c. **The MALDI Biotyper (a bioinformatics package for based on MALDI-TOF MS analysis profile spectra of Microorganism and Fungi .)**

9. **SCiLS Lab is the advanced software for statistical analysis of MALDI imaging data.**