

Guideline for MS Orders

- Only use the current order form available from the MS Homepage. The order form should be carefully and completely filled out (Two copies are required!).

The more information we have, the more successful the measurement will be! In difficult cases, preliminary discussions with the MS team supported by specialized literature about the class of the compound will be helpful.

- The desired/appropriate ionization method can be proposed. If not, the MS team will select an appropriate ionization method (see order form).
- If the desired signal or isotope pattern is not given in the mass spectra, the reason could be an unsuitable ionization technique. In this case, the sample will be examined with alternative ionization modes, which will lead to longer processing times. Finally, an unsuccessful measurement can be due to problems with the sample itself.
- The sample should be present in pure substance.
- For oxygen- and/or moisture-sensitive samples, the date for the measurement should be arranged in a preliminary discussion.
- A small amount of the sample must be provided in a tightly closed vial free from impurities such as grease, plasticizers, surfactants and inorganic salts.
Light sensitive samples should be provided in vials made of amber glass.
- The vial must be marked with a permanent marker in a clear, visible and legible manner. The sample name should be consistent with the inscribed name on the order form.
- For ESI measurements, the solubility of the sample in acetonitrile, methanol, water and isopropanol has to be evaluated. Solubilizers can be used, upon request.

- Determining the exact mass by high-resolution (HRMS) EI measurement involves considerable work and must be approved by the working group leader.
- Next to the total mass, the theoretical mass of the cation and/or anion in ionic compounds has to be specified separately.

GC MS Measurement

- GC MS measurements can be performed only after an appointment with the MS team as the equipment will be primarily used for teaching purposes.
- Only low resolution mass spectra can be recorded by the GC-MS system (until max. 650 m/z). Determining the exact mass is not possible!
- GC MS measurements are primarily for the analysis of mixtures. Therefore, the sample has to be soluble in an appropriate solvent like methylene chloride, hexane, nonane or isooctane. (Acetone, chloroforme and diethylether are not suitable solvents!)
- The samples should be free of minerals, water, inorganic acids and strong alkalines.
- The concentration of the sample should be in a range of ~ 0.5 mg/mL. The MS team can provide appropriate vials, upon request.

Finally:

Positive Feedback inspires us. Negative experiences should be discussed with the MS team – please discuss directly with the MS team and not via third person!

We will strive to provide the best results possible with our equipment. We are always interested in working with our customers to improve our capabilities.