

JSMC/ILRS course: Metabolomics using high-resolution LC-MS/MS for natural product research

We will learn how LC-MS can be used to measure the metabolic profile of biological samples and gain hands-on training with specialized software to analyze the raw data. This workshop will cover both the theoretical background as well as practical aspects of sample processing, data analysis, and data interpretation. Our focus is on the analysis of stable natural products rather than central metabolic pathways. At the end of this two-day introduction, the attendants will be able to plan their own metabolomics studies and know how to analyze their data. The hands-on use of LC-MS instruments is not part of the curriculum.

The number of participants will be **limited to eight** in order to assure a workshop environment suitable for “hand-to-hand” exercises. Students should ideally have a basic knowledge of or interest in mass spectrometry.

Topics

- Theoretical basics of LC-MS/MS and metabolomics
- LC-MS: Experimental design and sample preparation
- Metabolomics software
 - mzMine and SIRIUS
 - Molecular networking using GNPS
 - Open-source tools for file conversion and further analyses.

Date and Time

January 20, 2022 - January 21, 2022 // 09:00 - 17:00

Location

Location: SR Alexander Fleming, Leibniz-HKI

Leader

[Gerald Lackner](#)

Involved ILRS Members

[Mahmudul Hasan](#)[Mark Ellerhorst](#)

