



Date: July 01-04, 2014

Location: Max-Planck-Institute of Molecular Plant Physiology, Potsdam, Germany

Goal: Metabolite profiling is a fast growing technology and is useful for phenotyping and diagnostic analyses of plants. This course aims to provide an opportunity to understand basics of metabolite profiling of primary and secondary metabolites by gas chromatography-mass spectrometry (GC-MS) and liquid chromatography (LC)-MS, respectively, through lectures and practice of chromatogram evaluation.

Course Coordinators: Toshihiro Obata, Alisdair R Fernie

Trainers: Toshihiro Obata, Takayuki Tohge

Suggested Program:

Tuesday 1 st , morning:	basics of metabolite profiling and GC-MS analysis;
Tuesday 1 st , afternoon:	experimental design and sampling strategy; demonstration of sampling, extraction and derivatization procedures
Wednesday 2 nd , morning:	sample injection (GC/LC-MS); facility tour (greenhouse and machine park)
Wednesday 2 nd , afternoon:	chromatogram evaluation using "TagFinder" software; chromatogram evaluation (hands-on session)
Thursday 3 rd , morning:	basics of LC-MS analysis; chromatogram evaluation for LC-MS
Thursday 3 rd , afternoon:	chromatogram evaluation (hands-on session)
Friday 4 th , morning:	statistic analysis and biological interpretation
Friday 4 th , afternoon:	metabolic flux analysis; general discussion; closing (drinks and snacks)

Social Event: Thursday 3rd, excursion and dinner in Potsdam (afternoon/evening).

Accommodation: Each participant is responsible for her/his accommodation. Some suggestions:

Walking distance to MPIMP – Land Hotel Potsdam, ~70 € per night (www.landhotel-potsdam.de)

Bus distance (10min) – Apartmenthotel Kaiser Friedrich, ~50 € per night (www.akf-potsdam.de)

Bus distance (30min) – Altstadt Hotel, ~60 € per night (<http://altstadt-hotel-potsdam.de>)

Note: any hotel close to Hotel Voltaire and Altstadt hotel have good access to MPIMP.

Selection criteria: inscription order

Registration: Please register by sending an email to Carla Pinheiro (pinheiro@itqb.unl.pt) until April 1st (Name & Institution)