

MALDI Imaging Lab at the University of Bremen becomes DFG National Core Facility

Recognition of Bremen mass spectrometry on the national level: The Bremen core facility MALDI Imaging Lab was awarded by the German Research Foundation (DFG). The call for the funding of up to 450,000 euro in the next three years attracted wide national attention with 42 proposals submitted from core facilities providing access to various techniques used in different fields of science. Ten of them were selected for funding, and among them the project MALDI-MULTI of MALDI Imaging Lab, founded in 2011 as an interdisciplinary lab at both Department of Biochemistry and Center for Industrial Mathematics of the University of Bremen.

Theodore Alexandrov and Kathrin Maedler, the co-heads of MALDI Imaging Lab, are excited to receive this funding that opens opportunities for providing access to the promising analytical technique to both research and industrial groups from Germany. MALDI imaging mass spectrometry (MALDI-imaging) is a high-throughput spatially-resolved analytical technique for analysis of biological and plant tissues. In one experiment, MALDI-imaging can reveal spatial localization of hundreds of molecular species such as proteins, lipids, or metabolites.

MALDI Imaging Lab is equipped with autoflex speed™ and ImagePrep™, the newest MALDI-imaging instrumentation from Bruker Daltonics (Bremen, Germany). Bruker Daltonics is the key partner of MALDI Imaging Lab that ensures the best possible quality of experiments and the first-hand expertise in operating the advanced instrumentation.

The applications include histological analysis of tumor sections, localization of drugs and their metabolites in tissues, as well as finding new biomarkers, the molecules which can be used as indicators of a specific disease. MALDI Imaging Lab offers to perform MALDI-imaging experiments on different types of samples. After the experiments are carried out, a user receives the data as well as results of data analysis performed using our own mathematical algorithms implemented in special software SCiLS Lab (SCiLS, Bremen, Germany). The service of MALDI Imaging Lab is offered to both research teams and companies and is a unique core facility in Germany in the field of imaging mass spectrometry, and in particular, MALDI-imaging.

The award of the German Research Foundation will establish the reputation of MALDI-imaging on the national level and will make this promising analytical technique available for new users.

More information

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University of Bremen press release (in German): <http://goo.gl/NS3fd>

DFG press release (in English):
http://www.dfg.de/en/service/press/press_releases/2013/press_release_no_10/index.html