

## New installation of LT2 MALDI-TOF at DKFZ, Germany

[SAI](#) have recently installed one of their market leading [benchtop MALDI-TOF instruments, the LT2](#), at [DKFZ, the German Cancer Research Centre based in Heidelberg](#). [DKFZ](#) is the largest biomedical research institute in Germany and a member of the Helmholtz Association of National Research Centres. It has over 3200 staff including over 1400 scientists ( as of January 2023 ) working in six major cancer research programs.



SAI LT2 ©Martina Benešová-Schäfer /DKFZ



DKFZ © N Long/ SAI



Martina Benešová-Schäfer © Jung/DKFZ

[Our customer, nuclear chemist and radiopharmacist, Dr Martina Benešová-Schäfer](#), who took delivery of the instrument at the end of February, heads up a Research Group which was jointly established by [DKFZ](#) and Bayer within their strategic alliance. Her group mainly focuses on the physical, physicochemical, radiochemical and radiobiological properties of various radionuclides, the design and development of novel theranostic radiopharmaceuticals and the optimization of systemic targeted radionuclide therapies for improved cancer management.

During her doctoral studies at [DKFZ](#), [Dr Benešová-Schäfer](#) co-developed [the recently FDA approved radiopharmaceutical drug PSMA-617 \(Pluvicto®\) used for the treatment of metastatic hormone and chemotherapy resistant prostate cancer, \(now also EMA approved\)](#). In between times, and as part of her postdoctoral studies, she also worked at two prestigious scientific institutions in Switzerland, namely, the Paul Scherrer Institute (PSI) in Villigen and the Swiss Federal Institute of Technology (ETH) in Zürich.

Regarding the installation of the [SAI LT2 MALDI-TOF](#), [Dr Benešová-Schäfer](#) said: “Our group was very excited about the planned delivery of the [LT2](#), and we are very satisfied with the system, its quality, and the overall installation and training process. It is a delight to deal with an efficient company that does what is required, when it is required.”

On the intended use for the [LT2](#), she continued : “Our research includes both classical organic and solid-phase peptide-like synthesis. [MALDI-TOF](#) is required to measure regularly the efficiency of virtually every single conjugation/reaction step, control the outcome of overall synthesis, setup proper purification methods and finally confirm the entity of the desired product. Such quality control is indispensable for the development of new ligands and pharmaceuticals as well as mandatory for publication in highly ranked international journals. Last but not least, the [LT2](#) will not only support the research of our group, but also of other divisions, focusing on molecular imaging or medical physics in radiobiology.”

March 2023