Startup from the University of Stuttgart wins Innovation Award 2018
Swabian Instruments develops high-precision measuring devices

Two graduates from the University of Stuttgart were successful at the Innovation Award 2018 awarded by the State of Baden-Württemberg with their new startup Swabian Instruments, based in Schwieberdingen. They were awarded a prize of 15,000 euros. Swabian Instruments develop high-precision measuring devices, which are used for example in microscopy and in new quantum technologies. Their clients include large research institutions from around the world, including the Max Planck Institute and the Massachusetts Institute of Technology (MIT).

Minister of Economic Affairs, Labor and Housing in the state of Baden-Württemberg Dr. Nicole Hoffmeister-Kraut praised the young company for developing and marketing these new technologies. “With the Innovation Award, we want to honor the inventiveness and creativity of medium-sized companies and increase the profile of the clever minds who are boosting our economy here in the southwest”, she said. The CEO of Swabian Instruments, Dr. Helmut Fedder, was grateful for the award. “We’re very happy as a young and small startup to have won this prestigious award. We’re convinced that with our excellent technology we will grow from a high-tech startup from Baden-Württemberg which operates internationally into a strong mid-sized company.”

Fedder and his colleague Dr. Michael Schlagmüller are former doctoral students from the working group on quantum technology and quantum sensor technology led by Professor Jörg Wrachtrup and Professor Tilman Pfau from the University of Stuttgart. Fedder: “The Center for
Integrated Quantum Science and Technology in Baden-Württemberg (IQST) was the perfect platform for us to be able to get off to such a good start. Taking part in the IQST are 27 institutions from the universities of Stuttgart and Ulm as well as the Max-Planck Institute for Solid State Research. Leading researchers from the field of physics and other disciplines work hand in hand and in direct cooperation with industry to tackle the challenges of the future, based on the principles of quantum physics.

With an EXIST startup scholarship from the Federal Ministry for Economic Affairs and Energy and supported by the Technology Transfer Initiative (TTI) GmbH at the University of Stuttgart, they then founded the startup Swabian Instruments in 2016 because they themselves were faced with a problem, in that researchers needed certain computer programs in order to record and evaluate measurement data. The job of adapting this data to the respective measuring task takes up around 30 percent of scientists’ working time on average. This was too much wasted time as far as Fedder and Schlagmüller were concerned. They solved the problem by developing the Time Tagger series. These measuring devices transport the measuring signals to a computer in fully digitized form and in a format which is compressed without any loss. The solution is flexible, scalable and very cost-effective. The Max Planck Institute for example uses the Time Tagger for high-precision microscopy on individual molecules. Research institutions around the world use the extremely precise measuring device to achieve quicker and more efficient results in researching the field of new quantum technologies.

The Innovation Award of the State of Baden-Württemberg is given to small and medium-sized businesses based in the state which operate in the field of industry, crafts as well as technological services, for example for achievements in developing new products, procedures and technological services or for applying modern technologies to products, production or services.

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Caption:
The award being given to Dr. Michael Schlagmüller (center) and Dr. Helmut Fedder (right) from Swabian Instruments by Minister of Economic Affairs Dr. Nicole Hoffmeister-Kraut (left)

Photo: Tom Maurer