

SCOUT: a reliable sample robot for a compact in-house system

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The determination of protein structures from expression to the final structural model is a highly complex and often very time consuming process with a number of tedious, often empirical trial-and-error steps involved. Efficient usage of time and resources has proven to be the key factor to success in a typically very competitive environment. In order to significantly reduce the effort and cost associated with structure determination and to increase productivity, standardization of the process with eliminating the manual handling of samples, and subsequent automation of as many steps as possible has been recognized as crucial.

Here we present SCOUT, a new automated cryo-cooled sample changing system, which is designed to bring protein structure determination a significant step further along this way. SCOUT is the most advanced robotic solution for automated crystal screening and data collection at home laboratories. The system's hardware is fully integrated into a standard small foot-print enclosure, making this combination the most compact high-throughput pipeline available.

- SCOUT greatly facilitates your preparation for a synchrotron trip and can make the difference between a successful trip and a complete failure.
- SCOUT is fully compatible with the KAPPA goniometer and the ISX stage for plate screening. Our development has emphasized safety aspects, reliability and ease-of-use of the entire solution.

More details will be presented during this presentation.

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