## Lecture Title:

## Cartridge-based Automated Synthesis – A New Tool for the Synthetic Chemist

**Abstract:** New automated laboratory systems can be extremely powerful tools, with numerous impressive examples of self-assembled automated systems and processes being reported in drug discovery and development in recent years. However, many of these systems are bespoke and unique to the end-user organisation that built them. Therefore, these technologies are not readily accessible to the wider community. Also, there is a tendency towards high complexity with many of these systems, and thus they are only operable by a small number of people with a highly specialized skill set. As such, the vast majority of chemists have so far been unable to profit routinely from automated technologies.

Synple Chem aims to address the needs of the broader chemistry community by providing an enabling technology for automating synthetic chemistry that is extremely easy to use and requires only a few minutes of training in its operation. The automated synthesizers use reagent cartridges, which contain all the materials needs to do the individual reactions and subsequent purifications, as well as the digital information for the reaction sequence



**About the speaker:** Benedikt M. Wanner studied chemistry at the university of Würzburg in Germany and obtained his Masters degree in chemistry from ETH Zürich, Switzerland. He graduated from ETH Zürich in the group of Professor Jeffrey Bode and has started developing Synple Chem's technology during the time as a PhD student. For this business idea he was awarded with the ETH pioneer fellowship for the development of the idea into a viable product. Since the company was founded in 2016 he is serving as CEO and Co-founder of Synple Chem.