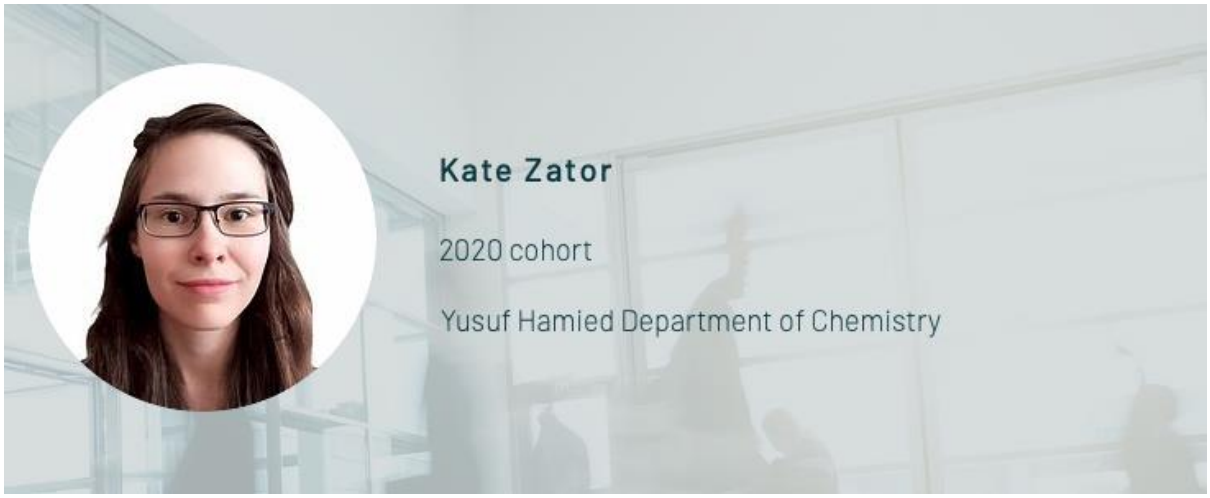
UNIVERSITY OF CAMBRIDGE

SynTech
Automated Chemical Synthesis



Having finished my MSci in Natural Sciences (Chemistry) from the University of Cambridge, I joined the SynTech CDT and Prof. Hunter's Group to continue work I started in my Master's year on the Surface Site Interaction Points (SSIPs) and their use in prediction of molecular properties. In particular, we focus on how the Functional Group Interaction Profiles (FGIPs) can be used in a biological setting to predict binding energies in a protein-ligand complex setting. By using DFT calculations, data-driven analysis, high-performance molecular simulation tool-kits, and chemical intuition, which will produce a predictive tool for small molecule testing fitting within the dichotomy of high-throughput and high accuracy present currently in the drug discovery field.

I decided on SynTech as it combines theoretical knowledge, artificial intelligence with synthesis and automation to produce comprehensive and multifaceted tools to move chemistry research forward, as well as provides a range of courses to help us branch out on the way to becoming modern chemists.