C–H Functionalization - From Academic Collaborations to Industry Applications

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Synthesis is a key driver for innovative medicinal chemistry and often remains the rate-limiting step towards accessing the vast small molecule chemical space. C–H functionalization methodologies applied to the late-stage diversification of complex molecules can rapidly explore novel analogs and has therefore the potential to significantly accelerate the identification of drug candidates. In this presentation, we will explore how different types of collaborations, such as between academia and industry, can catalyse the development of C–H functionalization reactions relevant to small molecule drug discovery, culminating in the application of a late-stage oxidation protocol to a phosphodiesterase 2 inhibitor project that resulted in a significantly reduced cycle time.