

APPLICATION OF ENZYMES IN CARBOHYDRATE CHEMISTRY

Sabine L. Flitsch

University of Manchester, United Kingdom sabine.flitsch@manchester.ac.uk

Carbohydrate active enzymes are well established tools for the synthesis and analysis of carbohydrates and glycoconjugates. When used for analytical purposes, their exquisite selectivity is highly valued. When used in synthesis, however, a much broader substrate tolerance can be useful, in particular for the generation of non-natural targets. Multiple protein engineering tools now provide us with opportunities to expand the scope of enzyme catalysis. This presentation will show how such biocatalysis have been applied the synthesis of a number of non-natural targets, including imino-sugars, oligosaccharides and glycoproteins.