

“Glycosylation reactions” – from biocatalysis to medical applications

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Glycosyltransferases are responsible for the biosynthesis of a wide range of glycoconjugates, ranging from polysaccharides and glycoproteins to glycolipids and glycosylated metabolites. These enzymes are pivotal in determining the poly- and oligosaccharide structures that are found in cells, tissues and organisms by controlling sequence, regio- and stereo-chemistry of glycosidic bonds. Therefore, it is important to understand the specificity of glycosyltransferases that are expressed in a biological system. We have investigated the use of glycoarrays (<http://www.glycoarrays.org.uk/>) as tools for studying glycosyltransferases, using mass spectrometry as a label-free readout method.

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