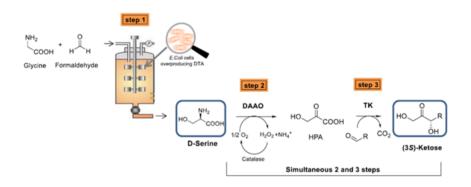
Biocatalysis, a Necessary Tool for Synthetic Chemist – a Focus on Industrial Applications

Juliette Martin

Protéus by Seqens, 70 Allée Graham Bell, 3035 Nîmes, France Juliette.martin@segens.com

Protéus by SEQENS is a pioneer in biotechnology field, specialized in the discovery, engineering and production of enzymes for industrial applications, as well as in the development of innovative bioprocesses involving these enzymes. Protéus by SEQENS is part of the SEQENS Group, an integrated global leader in pharmaceutical solutions and specialty ingredients producing high-value complex molecules.

Enzymes enable unique and specific functionalization difficult to achieve by conventional chemical processes within competitiveness. Taking advantage of this attribute, we will demonstrate their potential through several examples showing the high selectivity and specificity of these enzymes as well as their potential industrial applications. For instance, non-natural aminoacids synthesis¹ without protection/deprotection steps, we will also present an example of regioselective acylation within high specificity.² Finally, biocatalysis can be a true alternative for precious metal replacement.



¹ L. Hecquet & al, Org. Process Res. Dev. 2020, 24, 5, 769–775

² WO2012013765